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**TEACHERS AND CHILDREN LEARNING TOGETHER:
DEVELOPING A COMMUNITY OF LEARNERS
IN A PRIMARY CLASSROOM**

**A thesis presented in fulfilment of the requirements for the degree of
Doctor of Philosophy in Education
at Massey University**

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My thesis is dedicated to Olivia

Born 25 May 2006

ABSTRACT

This study investigates the development of a community of learners by observing the changes in teachers' and children's participation in four Year 3 / 4 classrooms. The study also explores the teachers' and children's perspectives of learning and teaching and the impact of these on the development of a community of learners. Factors enabling and constraining this developmental process are also identified. These research foci respond to a synthesis of research revealing the importance of teachers and children learning together in cohesive learning communities (Alton-Lee, 2003); a sociocultural approach that is uncommon in New Zealand primary classrooms.

Sociocultural theory also informs the generation, analysis and presentation of data. Participant observations, sustained conversations and interviews with the teachers and target children were used to generate data across three cycles of collaborative action research over one school year. Analyses of these data were made by observing the teachers' and the children's transformation of participation through Rogoff's (2003) personal, interpersonal and institutional lenses. The results of this analysis process are presented according to the lens through which the transformation was observed.

The findings showed a community of learners as comprising reciprocal connections across cognitive, social, emotional, spiritual and physical dimensions. Transformations of the teachers' and the children's participation in these five reciprocal connections were observed as evidence that a community of learners was developing. These new forms of participation in the classroom shaped, and were shaped by, new identities as learners and teachers, new perspectives about learning and teaching, as well as new culturally authorised values and practices for learning together. Multiple factors constrained the development of a community of learners. The most pervasive constraint was the persistence of teachers' and children's traditional perspectives that prevented understanding of the reciprocity and responsivity of shared activity. A range of factors also enabled the development of a community of learners. The opportunity for professional dialogue in this collaborative action research most enabled the teachers' to develop a community of learners in the classroom: the opportunity for guided participation with teachers and peers in shared classroom activity most enabled the children to learn together.

These findings reveal the demanding, complex and mutually constituting nature of developing a community of learners in a primary classroom. The transformation of participation observed in this study provides evidence of the positive contributions sociocultural theory can make to both teachers' and to children's learning. Implications based on these findings are considered for teachers, children, researchers and education providers who together share responsibility for developing and sustaining a community of learners as accepted instructional practice in primary classrooms.

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Does the road wind up-hill all the way?
Yes, to the very end.
Will the day's journey take the whole long day?
From morn to night, my friend.
(Christina Rossetti)

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Our institutions...are largely based on the assumption that learning is an individual process, that it has a beginning and an end, that it is best separated from the rest of our activities, and that it is the result of teaching. (Wenger, 1998, p. 3)

1.1 INTRODUCTION

As Wenger (1998) argued, learning and teaching in classrooms has largely rested upon long held assumptions about how children learn. In the light of recent sociocultural theory and research (Rogoff, 2003), it is timely to question these assumptions and to consider new ways of thinking about learning and teaching in the primary classroom. The main purpose of this study is to investigate the development of a sociocultural instructional model, called a community of learners, in primary classroom settings. This study, *Teachers and children learning together: Developing a community of learners in a primary classroom*, examines the transformations in teachers' and children's participation in four Year 3 / 4 classrooms as the teachers sought to develop collaborative practices.

Action research methodology is used to respond to the reflective and transformative elements of developing a community of learners. This methodology is acknowledged in the literature as a field of research in which teachers and researchers can inquire together in the context of the classroom (Altrichter, Kemmis, McTaggart & Zuber-Skerritt, 2002; McNiff & Whitehead, 2002). For the purposes of this study, collaborative action research provides a means to reflect together about the teachers' practices and sociocultural theory, jointly plan new forms of action, while also observing, participating in and documenting these transformational processes.

This chapter identifies the aims of this study and the contextual issues surrounding the development of a community of learners. Theoretical justifications for developing a community of learners in a primary classroom are presented, followed by an explanation of how my personal history has shaped this study.

1.2 RESEARCH AIMS AND CONTEXT

This study aims to explore the process of developing a community of learners in four Year 3 / 4 classrooms within one New Zealand state primary school. Specific attention is drawn to understanding the changes that occur in teachers' and children's participation in learning and teaching activity as a community of learners develops. The study also investigates the impact of teachers' and children's perspectives of learning and teaching on the development of a community of learners, as well as the factors that constrain or enable this developmental process. These aims respond to a variety of contextual issues surrounding learning and teaching in primary classrooms, as well as to gaps in our understanding about how sociocultural approaches might develop in these settings.

Learning in New Zealand primary schools is largely based on a set of rituals which bear little relation to a sociocultural theory of learning. Typically, the activities of teachers and children are separated in classrooms (Nuthall, 1999). Teachers as knowledge holders are authorised to control and to make decisions about children's learning, and children, as passive consumers, are required to perform set tasks. As seen in Figure 1.1, which adapts an illustration used by Rogoff (1997), dominant theories cast learning as a one-sided process; either learning is seen as a process managed by teachers who transmit information or organise activities (adult-run), or learning occurs through the acquisition of information as children engage in active exploration (children-run). These transmission and acquisition views of learning are both one-sided models of learning "with the world conceived as active in the former and the individual conceived as active in the latter" (p. 266).

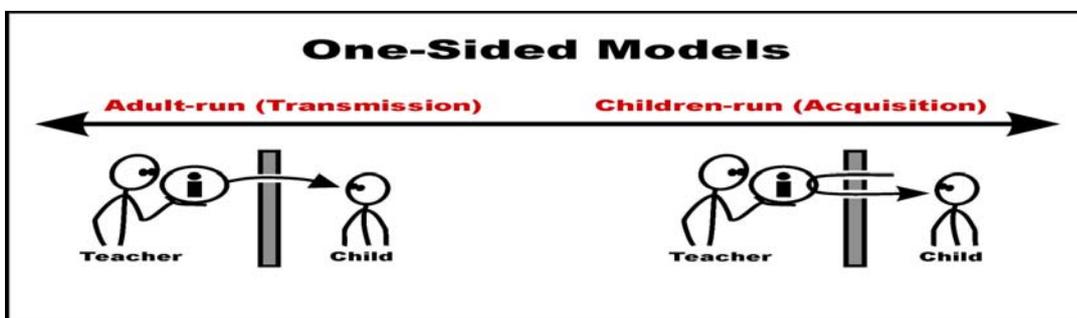


Figure 1.1 An illustration of one-sided instructional models

Contemporary sociocultural scholars question the appropriateness of these traditional one-sided views of learning (Cullen, 2003, Flear, 2002a; Moll, 2002; Rogoff, 2003; Wells & Claxton, 2002). They argue that a boundary between children's learning and the sociocultural world can not exist: teachers' and children's participation is inseparable from the sociocultural activity. As discussed in the following chapter, sociocultural perspectives emphasise learning as a process of transformation of participation (Rogoff, Matusov & White, 1996). A community of learners reflects this fundamental sociocultural premise by casting teachers and children as learners who both "contribute support and direction in shared endeavors" (p. 389).

In contrast to the United Kingdom and the United States, where teacher autonomy has been reduced (Askew & Lodge, 2001), New Zealand educational policies are encouraging primary teachers to develop new ways of learning and teaching. For instance, *The New Zealand Curriculum (draft)* (Ministry of Education, 2006) is charged with revising the primary school curriculum to give teachers greater autonomy to make curriculum decisions. The "key competencies" of this new curriculum including: thinking, using language, symbols and text, relating to others, managing self, and participating and contributing, are consistent with sociocultural views of learning. Furthermore, the draft curriculum is advocating for values such as diversity, community, respect and care to become "evident in the philosophy, organisation, and relationships of the...classroom" (Ministry of Education, 2005, p. 1). These policy initiatives provide fertile ground for teachers to question their taken-for-granted practices and the perspectives that underpin them, and to move towards developing their classrooms as learning communities (Alton-Lee, 2005).

The context for this study also includes a world-wide movement to democratise the classroom (Apple & Beane, 1995; Wood, 1998). Isolated examples of democratic pedagogies have developed where classroom roles and responsibilities are shared, such as negotiating the curriculum (Apple & Beane, 1999) or using creative problem solving (Sewell, Fuller, Murphy & Funnell, 2002). Evidence shows, however, that despite this democratic movement, traditional one-sided instructional models still remain deeply entrenched in the classroom (Brookfield & Preskill, 1999; Daveson-Galle, 1999; Gerzon, 1997; Holdsworth, 1999; Mintrop, 2004; Selwyn, 2000; Yeager,

1998). These findings suggest that teaching practices are resistant to change, and that sustained support is required for successful reforms.

1.3 JUSTIFICATION FOR THIS RESEARCH

Wells and Claxton (2002) argued that by looking at the best of current theory we can rethink the activity that constitutes education in the primary school sector. Sociocultural theory provides a compelling argument for reconceptualising teaching and learning interactions in these classrooms. If learning is embedded in social, cultural and historical contexts, then educational researchers need to look at ways to remove the boundary that has long separated teachers and children, and to find ways to develop new pedagogical relationships in which teachers and children learn together. Such reforms are beginning to happen in Australia and New Zealand's early childhood curriculum where sociocultural theories provide a coherent philosophy for learning and teaching (Cullen, 2003; Edwards, 2003; Fleer, 2002a). However, the situation is very different in New Zealand's primary education where little is known about a sociocultural approach to learning, or how to develop one.

Despite findings from a synthesis of research revealing the achievements made possible for diverse learners in caring, inclusive and cohesive learning communities, these sociocultural practices remain largely uncommon in New Zealand's primary classrooms (Alton-Lee, 2003, 2005; Bishop & Glynn, 1999; Nuthall, 1999). The development of a community of learners in primary settings has been researched in other parts of the world (e.g. Rogoff, Bartlett & Turkanis, 2001; Elbers & Streefland, 2000a) however, very little research has been directed toward understanding how teachers in New Zealand's primary schools, where policies will impact differently, might develop sociocultural practices. Gaps also exist in our understanding about the challenges teachers and children might face as they seek to move across educational paradigms. Furthermore, little is known about how teachers and children might best be supported to change their traditional practices. Given "the deep-rooted conservatism that pervades thinking about education" (Wells, 2000, p.52), it is hypothesised that introducing sociocultural ideas to primary school teachers, and developing practices consistent with these ideas, will be difficult (Brophy, 2002; Konzal, 2001). Nevertheless, by identifying these tensions of perspective and practice,

the primary sector is better positioned to understand and to sustain sociocultural reforms.

Further justifying this study is the importance of listening to children's perspectives of their school experiences, and the meanings *they* attach to them, rather than to adults' perceptions of them (Carr, 2000; Christenson & James, 2000; Dockett & Perry, 2003; Graue & Walsh, 1998; James & Prout, 1997; Lewis & Lindsay, 2000; Mayall, 2000; Rudduck & Flutter, 2000; Smith & Taylor, 2000; Woodhead & Faulkner, 2000). It has been argued that children want opportunities to be curious, self-expressive and involved with others (Strong, Silver & Robinson, 1995). Research has also shown that children need teachers to be interested in their ideas, to be fair, and to involve them in learning (Johnston & Nicholls, 1995; Sergiovanni, 1994). Furthermore, '*teachers need to give courage*' (Sophie, personal communication, August 18, 2001) to support children to take on the challenges inherent in learning in the classroom. Yet, schools provide few opportunities for these kinds of interpersonal relationships (Holdsworth, 2000; Osterman, 2000). Indeed, Eisner (2002) argued that supportive and caring conversations are the rarest feature of classroom life. The present study responds to these findings by seeking to develop conditions which children value for learning.

While listening to children's perspectives is essential to educational research, the importance of building on teachers' perspectives in educational research is also well documented (Cochran-Smith & Lytle, 1999a; Day, 1998; Elliott, 1997; Fullan, 2000; Hargreaves, Earl, Moore & Manning, 2001; Putnam & Borko, 1997; Zeichner, 1994a). By using a collaborative action research design, the teachers' perspectives about how learning happens and what they understand teaching to be, is made central to the study and seen as starting points in the complex processes of reform. My participation with the teachers in this methodology enables me to support their inquiries as they seek to develop their professional practice. In our own "community of practice" (Wenger, 1998), teachers and I can co-construct new understandings about the development of a community of learners.

1.4 MY PERSONAL HISTORY

As a qualitative researcher, I have values and biases leaving me incapable of neutrality (Rubin & Rubin, 1995). Because I am part of the context I seek to study, it is imperative to engage in reflexive critique to make explicit my role, interests and biases as factors shaping the study. This section critically reflects on aspects of my personal history enabling the reader to connect my interest in developing a community of learners, to that which came before. With these personal experiences and values, I cannot pretend to be what Putnam and Borko (2000) termed the detached observer.

I am a New Zealand European woman who grew up in the 1950s and 1960s in a middle class Christian family. My early childhood experiences with my mother, who had been a kindergarten teacher and teacher educator in the 1940s, shaped my passion for teaching as well as my concern to connect deeply with children's minds and hearts. My own experiences of motherhood in the 1980s and 1990s were instrumental in shaping my belief that children are competent people when they participate with adults who care about and believe in them (Connolly, 1997; Smith & Taylor, 2000). As each of my three children started school, I witnessed and felt their personal suffering of leaving who they were at the classroom door (Bishop & Glynn, 1999). I began to question the taken-for-granted practices of school learning which seemed to disconnect them from their everyday lives.

In the 1990s, this time as a primary school teacher, I stumbled unknowingly into teaching in a community of learners. One summer day Cam, wearing black, announced to the class that he felt hot, a comment that triggered an inquiry into why black clothes made people feel hot. We shared our knowledge of colour, heat and light, asked questions to experts and designed experiments to help us in our shared inquiry. In so doing, I began to let go of covering the curriculum I had planned, to enable the children, and me, to learn about something that genuinely intrigued us. In our inquiry we co-constructed new understandings about the rapid absorption and radiation of heat energy in black fabric. More importantly however, I was beginning to recognise a new way of teaching; the children and I were learning together. This was a deeply satisfying and transforming experience early in my teaching career that led me to value shared activity in the classroom.

Finally, as a university lecturer in Social Studies education, I learned about sociocultural theory. Rogoff et al's (1996) article, *Models of teaching and learning: Participation in a community of learners*, was inspirational in leading me to think about a suitable pedagogy for Social Studies. I reasoned that if children were to meet the aim of Social Studies, "to participate in a changing society as informed, confident and responsible citizens" (Ministry of Education, 1997, p. 8), then they needed opportunities to take on real roles and responsibilities in their primary classrooms designed as a learning community (Sewell, 2001). Wells (2000) made a similar point when he argued that learning in a community of learners enabled children to "participate fully and democratically as informed, critical, and responsible members of the many overlapping communities...[of] contemporary society" (p. 60). The Italian early childhood Reggio Emilia classrooms are also known as communities: a place for children, viewed as competent citizens, to learn together about the real world and about possible worlds of the imagination (Dahlberg & Moss, 2006).

1.5 THESIS OVERVIEW

Chapter One has established the foundations upon which this study builds by providing theoretical, methodological and personal factors that justify my interest in developing a community of learners. The thesis continues in the following sequence. Chapter Two reviews the foundations of sociocultural theory as well as research focused on developing a sociocultural approach to learning in primary classrooms. Chapter Three discusses the qualitative methodology of collaborative action research, followed by an explanation, in Chapter Four, of the methods used to generate and analyse data in this study. Chapters Five, Six and Seven present the results of developing a community of learners across the four classrooms. In Chapter Eight, these results are discussed in relation to the literature. Chapter Nine completes this thesis by presenting the conclusions and implications for practice as well as recommendations for future research.

CHAPTER TWO

REVIEW OF THE LITERATURE

2.1 INTRODUCTION

This chapter reviews theoretical and research-based literature in relation to developing a community of learners in a primary classroom. The review first explores the historical foundations and contemporary nature of sociocultural theory and practice. The nature of learning is then examined in everyday settings and in the context of a classroom. The diverse ways in which a community of learners is conceptualised is considered before reviewing a range of ways in which teachers have sought to develop their classrooms as learning communities. Also reviewed are the research findings in relation to the outcomes of these sociocultural practices. Finally, critical issues arising from this literature review are considered and implications drawn for the conceptual and methodological features of this study.

2.2 THE ROOTS OF SOCIOCULTURAL THEORY

The roots of sociocultural theory originate in the works of Vygotsky, Piaget and Dewey. Vygotsky's sociocultural (or sociohistorical) theory continues to provoke debate about the social, cultural and historical dimensions of learning (e.g., Glassman, 2001; Moll, 2002; Rogoff, 1998; Wells, 2001a; Wink & Putney, 2002). Piaget's writings about the importance of the social environment for learning have also contributed to this debate, as has Dewey's concern for education as experience in democratic activity. Despite differences between these theorists, there are key points of convergence which continue to influence researchers and educators as they seek to envision and enact sociocultural theory and practice.

2.2.1 The legacy of Vygotsky

Two basic themes throughout Vygotsky's (1978) writing have relevance for this research. His first claim concerns the primacy of social dimensions of consciousness where the social and cultural world become *internalised*. His second claim concerns the *mediation* of human activity through language and other cultural tools. These two

fundamental themes point out that learning and development is more than an individual construction, rather it is a social, cultural and historical process (Cobb & Yackel, 1996) in which new understandings are co-constructed (Valsiner, 1988). From a Vygotskian perspective, learning is a social relationship in which cultural tools, developed by previous generations, are used to participate in community activities.

Vygotsky (1981) explained the interdependence of individual social, cultural and historical processes when he argued that “any function in the child’s cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people...and then within the child” (p. 57). Thus a child’s new capacities are the internalisation of earlier social interaction with adults or more competent peers where “external or communicative speech...turns ‘inward’ to become the basis of inner speech” (Vygotsky, 1978, p. 57). The point at which external experiences are transferred to the individual is the zone of proximal development. This “construction zone” (Newman, Griffin & Cole, 1989) represents the interdependence of teaching and learning processes in which “we can transcend our solo limitations, and expand the range of what we can learn” (Wells & Claxton, 2002, p. 5). A window of potential learning is thus created between actual development as seen in independent activity and potential development as determined in collaboration with more capable peers or adults.

Also important in explaining how learning happens, is the mediational role of cultural tools and artifacts, including written and spoken language, number systems, maps, theories, artworks, graphics and computer software. Influenced by Bakhtin (1986) who viewed understanding as a dialogic quality, Vygotsky gave pre-eminence to the tool of spoken language in face-to-face interaction in which “we manipulate, not only our language, but also our thoughts, which lead us to higher cognitive processes” (Wink & Putney, 2002, p. 61). Language thus mediates our own and others’ thinking. Learning happens as we appropriate these cultural tools to mediate activity with others. It follows that, learning is not bounded by the individual mind; it “extend[s] beyond the skin” (Wertsch, 1991, p. 90) and highlights the inseparability of children from their world.

2.2.2 The early writings of Piaget

Piaget's (1977) view of learning and development reflects some of the ideas expressed in Vygotsky's writing. Piaget's theory is based on the idea that the child builds cognitive structures or schemas through which he or she experiences and understands his or her social environment. Identifying four age-related developmental stages, Piaget outlined principles of assimilation and accommodation as mechanisms to maintain equilibrium from which more sophisticated cognitive structures develop. He argued that development occurred as children worked together to resolve cognitive conflict by adjusting their views to accommodate the discrepancies between their own and others' perspectives (Light & Littleton, 1999). Resolving cognitive conflict was said to overcome egocentricity and lead to development, but only at around seven years of age when the child was capable of engaging in reciprocal interactions.

Some of Piaget's ideas are now universally contested. Donaldson's (1978) research revealed flaws in his stage-like approach to learning. She found that when Piagetian tasks were contextualised, rather than undertaken in a laboratory setting, children were able to perform them at earlier developmental stages than predicted by his theory. Donaldson's work revealed to educators the importance of context in children's learning. Sociocultural theorists now oppose Piaget's age caveat which implied that a young child was unable to benefit from social interaction (Flavell, 1992; Matusov & Hayes, 2000). Piaget's emphasis on maturity as a precondition for learning was also opposed by Vygotsky (1978) who argued that the only "good learning is that which is in advance of development" (p. 89). Rogoff (1998) also noted that Piagetian theory did not consider the cultural aspects of development or the complex co-constructive processes of dialogue. That said, Piaget's view of the active child and the importance of peer interaction did provide influential ideas for sociocultural theorists to consider.

2.2.3 The democratic ideas of Dewey

The democratic ideas of Dewey complement Vygotsky's ideas and provide another source of inspiration for sociocultural theorists. Being particularly interested in the social and democratic environment of the classroom, Dewey (1916) argued it was "truly educative in its effects in the degree in which an individual shares or

participates in some conjoint activity” (p. 26). Rather than prepare children for future democratic citizenship by teaching about roles, rights and responsibilities using autocratic processes, Dewey argued that children would learn through the experience of democratic participation. Instead of teacher authority or exclusion, Dewey (1938) proposed a democratic approach in which the content and method of learning could be mutually decided. To do so enabled adults to guide rather than to control children, to learn with them, and to share control in the group. This relationship is clarified below:

The way is, first, for the teacher to be intelligently aware of the capacities, needs, and past experiences of those under instruction, and, secondly, to allow the suggestions made to develop into a plan ... by means of the further suggestions contributed and organised into a whole by the members of the group. (p. 85)

This section has identified Vygotsky’s perspectives that learning is a mediated activity embedded in social, cultural and historical activity, thus providing a sound foundation upon which contemporary sociocultural theorists continue to build. The roots of sociocultural theory were also traced to Piaget’s emphasis on peer interaction, and to the democratic ideas of Dewey. The present study builds upon this historical foundation by investigating how sociocultural views of learning might be practised in a primary classroom. In so doing, contribution is made to the ongoing debate surrounding sociocultural theory. The following section considers this debate having first outlined the basic tenets of traditional and contemporary theories of learning.

2.3 CONTEMPORARY THEORIES OF LEARNING

Contemporary theories of learning derive from the legacies left by Vygotsky, Piaget and Dewey. A brief explanation of transmission and constructivist theories is made in this section, before reviewing sociocultural theories of learning. Evident in this review are the blurred distinctions between these theories, the danger of choosing one theory of learning over another, and the ongoing debate about their distinctive meanings.

2.3.1 Transmission and constructivist theories of learning

From a transmission view, learning is a solo activity of internalising information. The teacher, as expert, imparts a fixed body of knowledge to students who passively receive and store it. Discourse emphasises one-way lines of communication in response to the teachers' convergent questions. The role of the "frontal teacher" (Brophy, 2002, p. ix) is to either directly transmit information through lecture, demonstration or recitation methods, or to arrange the environment so students will themselves acquire new information. Assessment becomes a means to check how well this new information has been received and retained. This one-sided view of learning reveals the separation of the teacher from the student as illustrated in Figure 1.1 (p. 2) in which external information is imagined to cross a boundary. Either the teacher is responsible for inserting information into the child's mind (adult-run transmission) or children are responsible for gaining the skills or information (children-run acquisition).

From a constructivist perspective, learning is either viewed as a cognitive or as a social activity. Piaget's writings provide the theoretical foundation for a cognitive constructivist perspective which emphasises individual sense-making as new information is related to existing understandings (Packer & Goicoechea, 2000). In this way, knowledge is actively re-organised from the external social and physical world and internalised into new or cognitive schema (Fosnot, 1996). From this perspective, cognitive strategies are taught to students to process information so as to construct new knowledge.

While cognitive constructivists attend to inner cognitive mechanisms for learning, social constructivists attend more to the outer social environment (Marton & Booth, 1997). A social constructivist stance on learning recognises that knowledge is socially, rather than individually constructed. Writers within the social constructivist tradition agree that learning involves negotiating understandings through dialogue or discourse shared by two or more people (Brophy, 2002). Focus is placed upon the social nature of knowing. From this perspective, teaching takes on more equitable power relationships with students in which both bring their expertise to the classroom and share responsibility for initiating and guiding learning, as well as collaborating in dialogue to co-construct shared understandings. Classroom discourse thus expands

from a teacher directed communication to become a two-way conversation, or loops of dialogue (Askew & Lodge, 2001).

After an extensive synthesis of research, 14 learner-centered psychological principles were developed to guide school reform based on both these cognitive and social constructivist views of learning (Alexander & Murphy, 1998). Their dual focus on learners and learning attend to both internal and external factors that influence the construction of meaning. As an integrated set of principles, they challenge traditional ideas about teaching and learning, and promote learning environments that recognise the knowledge, skills, attitudes and beliefs that learners bring to the classroom (Bransford, Brown & Cocking, 1999).

Many versions and interpretations of transmission and constructivist views of learning exist in the literature. For instance, Mayer (1998) distinguished between theories which emphasise learning as *knowledge acquisition*, where students process information transmitted by the teacher (blurring transmission and cognitive constructivism), and theories which emphasise learning as *knowledge construction* where the learner constructs knowledge with others (social constructivism). Other writers use metaphors to distinguish theories of learning, but again there are no clear-cut divisions between them. Sfard (1998) uses an acquisition metaphor to highlight the accumulation or possession of knowledge in an individual mind, be it received, acquired, or constructed (blurring transmission and cognitive constructivism). She distinguishes this view from a participation metaphor which emphasises the mutuality of learners as members of a learning community, the social mediation of knowledge and the cultural embeddedness of knowing (blurring social constructivism and sociocultural theory). More recently, a knowledge-creation metaphor has emerged in the literature that draws on the acquisition and participation metaphors. This third metaphor emphasises the social processes of knowledge creation between people participating in “innovative knowledge communities” to expand and transform ideas (Paavola, Lipponen & Hakkarainen, 2004, p. 558). Sfard (1998) alerts us to the importance of working with a “patchwork of metaphors rather than a unified, homogeneous theory of learning” (p. 12).

2.3.2 Emerging sociocultural theories of learning

There is general agreement among sociocultural scholars that individual development is a social and cultural process that it contributes to and is constituted by sociocultural activities in which people participate (Rogoff, 1998). It follows that individual, social and cultural activities can not be separate entities, that instead “people transform through their ongoing participation in cultural activities, which in turn contribute to changes in their cultural communities” (Rogoff, 2003, p. 37). Learning is thus perceived as a process of participation with others in sociocultural activity, through which individuals change, and social and cultural tools and processes change. These mutually constituting processes point to the importance of understanding learning and development in its sociocultural context. The sociocultural perspectives held by Rogoff (1995, 1997, 1998, 2003) receive particular attention in this review, as it is these that are foundational to the focus and analysis of the present study.

Observations of learning in its sociocultural context are made by using one of three lenses, or foci of analysis (Rogoff, 2003). Each lens, personal, interpersonal and institutional, focuses on one aspect of activity that cannot be studied alone. An individual’s development (personal lens) shapes and is shaped by social interactions (interpersonal lens), and the cultural rituals and traditions (institutional lens). In this way, sociocultural theory shifts our understanding of learning from a focus on individuals to a focus on the active processes of individuals as they participate in shared endeavours in cultural communities. This thesis uses the term lenses to emphasise the different foci of analysis when observing the personal, interpersonal and institutional processes of teachers’ and children’s participation. In Rogoff’s earlier writings, more static terms such as planes of focus (Rogoff, 1995), and planes of analysis (Rogoff, 1997, 1998) were used to represent the same idea that learning and development must be observed as mutually constituting phenomena.

Rogoff (1995) proposed three inseparable learning processes that correspond with personal, interpersonal and institutional lenses: participatory appropriation, guided participation, and apprenticeship. Participatory appropriation, observed through a personal lens, refers to the ways in which individuals change through participation in sociocultural activity which sets them up for later involvement in similar activity. An example of participatory appropriation includes developing statistical skills in the

process of doing research. Guided participation, observed through an interpersonal lens, refers to the various ways through which people take on new roles and responsibilities as they are coached by others in the community. An example of guided participation includes developing writing skills by engaging with the ideas and writings of an accomplished writer. The metaphor of apprenticeship, observed using an institutional lens, focuses on developing mature participation in the taken-for-granted cultural activities of a community. A similar concept, legitimate peripheral participation (Lave & Wenger, 1991) sees a newcomer, such as a novice researcher, observe experienced researchers to become competent in the use of their cultural tools and practices. In later writing, Rogoff (2003) used the term *intent participation* to capture the notion of young children observing and listening with intent to the life and death, work and play activities of their community.

Assessment of learning from a sociocultural perspective focuses on moving “*through understanding rather than to understanding*” (Rogoff, 1998, p. 690). Sociocultural assessment captures a child’s new identities, attitudes and understandings, as well as changes in their interactions with others and the taken-for-granted cultural values and practices of the classroom (Gipps, 2002). Assessment is thus understood in its sociocultural context. Fleer (2002b) argued that it is the complexity of this change in the sociocultural context that so richly informs subsequent teaching and learning activity. Her research using personal, interpersonal and cultural-institutional foci of analysis illustrates how the complexity of children’s participation and transformation therein, can be observed as evidence of learning (Fleer & Richardson, 2004a). These sociocultural writers challenge the view that assessment is only a matter of transformation in the individual child; rather it includes the learning and teaching interactions, contributions to group goals and the taken-for-granted practices of schooling.

Central to a sociocultural approach is the notion of co-constructing learning. Jordan (2003) argued that co-construction required a “wide area of shared meaning” (p. 177) in which the teacher and child are more-or-less equal partners in interactions. They come to understand each other’s thinking in a dialogue without necessarily knowing the endpoint. All parties to this shared activity have an expectation of learning because “the roles of learner and teacher are shared and the expertise and experiences

of all participants are respected” (Askew & Lodge, 2001, p. 13). Jordan’s research distinguished these co-constructive processes from a scaffolding metaphor (Wood, Bruner & Ross, 1976) where experts support the learning of novices. While intersubjectivity is deemed to be a vital component of scaffolding (Berk & Winsler, 1995), Jordan argued that if only the teacher knows the destination, there is less intersubjectivity than with co-construction where the endpoint is unknown. Variation exists in the interpretation of scaffolding. For example, Fleer et al (2006) refer to it as the way adults manage and guide the learning sequence in a child’s ZPD “through adult modelling, through the joint construction of learning by the child and the adult, and through the child working independently” (p. 32).

Of all the cultural tools, dialogue is the most valuable because it not only transmits ideas between individuals but mediates shared understandings. A synthesis of research conducted by Wells (2001a) highlighted the distinction between language as a means of communication, and language as an intellectual activity that generates new understandings. He argued that schooling has emphasised language as a means to communicate, whereupon the formal features of written language have become the focus for learning, rather than using language as a means with which to build knowledge. One of the defining characteristics of a dialogue of knowledge building is the “principle of responsivity...in which a structure of meaning is built up collaboratively over successive turns” (Wells, 2000, p. 72). These ideas led Wells (2002) to suggest that “learning-and-teaching needs to be seen as essentially an enterprise of inquiry that is dialogically co-constructed by teacher and students together” (p. 5).

2.3.3 The contested nature of sociocultural theories

As was the case for constructivist views of learning, diverse interpretations of sociocultural theory are evident in the literature. Boundaries between the views of learning by sociocultural writers and those espoused by social constructivist writers are blurred, with some using the terms interchangeably (e.g. Brophy, 2002; Nuthall, 2002a; Wells, 2002). While both social constructivist and sociocultural writers emphasise the interdependence of the individual and the social context, Rogoff (1998) suggested that writers diverge in their understanding of interdependence. While some writers view the interdependence of the child and the sociocultural

context as an influence on learning (a social influence approach), Rogoff views it as constituting learning (the transformation of participation approach). Thinking, learning and knowledge are not just influenced by social factors, they are social and cultural phenomenon. Gipps (1999) concurred with Rogoff's position by arguing that:

Like constructivists, socioculturalists assume human agency in the process of coming to know, but socioculturalists further argue that meaning derived from interactions is not exclusively a product of the person acting. They view the individual engaged in relational activities with others. (p. 373)

This influence/participation debate centres on the processes through which learning is internalised. Some writers argue that internalisation is a one way transmission process (e.g. Cobb & Yackel, 1996), while others see it as a transformative process (e.g. John-Steiner & Mahn, 1996). Rogoff (1998) adopts the latter position by claiming that “in the process of participation, individuals *change*, and their later involvement in similar events may reflect these changes” (p. 689). Some theorists want to see cognitive and social constructivist theories complement sociocultural theories (Hatano & Wertsch, 2001), while others argue their irreconcilability (Rogoff, 1998).

This thesis uses the term sociocultural theory in full awareness of the ongoing debate regarding tensions between the individual and collective roles in learning, as well as the interchangeable way in which some researchers use the terms. For the purposes of this study, learning is viewed as a transformation of participation which can be observed as personal, interpersonal and institutional processes that mutually constitute each other. The study uses these ideas to develop a dynamic account of the complex processes of developing a community of learners. This section of the review has highlighted the importance of dialogue as a tool to co-construct understanding; sociocultural findings that inform the conceptual and methodological goals of this study.

2.4 LEARNING IN EVERYDAY SETTINGS

Much can be understood about learning and teaching in the classroom by examining the informal pedagogies that have not been explicitly designed for instruction, but which are evident in everyday interaction in community activities (Moll &

Greenberg, 1990; Rogoff, 2003; Tharp & Gallimore, 1998). This section discusses learning within families, businesses and indigenous communities, both past and present, to reveal variations in the way learning could be organised in classrooms.

The first everyday setting for a child's learning is the household. Families provide powerful learning opportunities by engaging children in everyday conversation where attention is shared on authentic and intrinsic activity with trusted and skilled adults (Radziszewska & Rogoff, 1991). Households are also argued to be clustered round funds of knowledge (Moll & Greenberg, 1990) such as gardening, building, repairing cars, plumbing or healing. Their findings have motivated research into how the emotional, social and intellectual resources that exist within these funds of knowledge might be used to inform and enrich learning in the classroom. Tharp and Gallimore (1998) also based their theory of teaching as assisted performance on interactions with more capable members of the household. They argued that through this everyday assistance, or scaffolding, children can be supported to engage in activities that would otherwise be unmanageable, and in so doing, learn the "accumulated wisdom and the cognitive and communication tools of their culture" (p. 93). These researchers point out that as common as assisted performance is in everyday settings, it is uncommon in classrooms.

From the household to a tailoring shop, Lave's (1988) research highlighted the rich vitality of everyday workplaces for learning. Using ethnographic methods, Lave observed beginners learn not just sewing skills, but social skills, self respect and complex mathematical processes as they went about the tailoring activities in the shop. She concluded that working within an everyday community of practice was a rich environment for learning. Learning for these tailors was through legitimate peripheral participation.

Learning in indigenous communities is argued to be embedded in guided participation by more experienced members and in children's intent participation in everyday activities (Rogoff, 2003). These cultural practices and values are distinctly different from Western patterns. For instance, cross-cultural studies identified Mayan parents as being able to simultaneously attend to the multiple activities of their children and collaborate with them in deciding the nature of their activities. These

mutual roles contrast with those of North American parents who could only attend to one child or one event at a time, and who segregate their children from opportunities to observe and to participate in important cultural activities (Rogoff, Mosier, Mistry, & Goncu, 1998). Flear (2002) argued the importance of questioning these “Western practices of interaction as being assumed as the norm” (p. 116) as it is these that give structure to the taken-for-granted practices of Western schooling.

In indigenous Māori communities in New Zealand, Tangaere (1997) noted that interaction patterns were embedded in the activities of the *whānau* (extended family). Members of these communities engaged in *tuakana-teina* in which elders guide children in real economic activity. In this intent participation, children could appropriate intellectual, social, cultural, spiritual, and physical skills and understandings. Their interaction patterns emphasised the importance of *whanaungatanga*, or the establishment of loyal, supportive and responsive relationships. Central to their participation across the full range of activities in these indigenous communities was the process of *ako* which emphasised the mutual exchanges between teachers and learners, where students could be teachers and teachers could be students.

A range of contemporary Māori pedagogies still reflect these traditional practices (Hemara, 2000) and provide the basis for Māori-medium education in *Kōhanga Reo* (pre-schools), *Kura Kaupapa* (primary schools) and secondary schools. Bishop and Glynn (1999) identified the *whānau* interaction patterns in these Māori-medium schools where children can explore culturally relevant experiences and understandings in their native *Te Reo* (Māori language). Pedagogies identified as contributing to successful learning for children within these Māori-medium schools included *ako*, curriculum integration, conversational discourse and power-sharing relationships (Bishop, Berryman & Richardson, 2002). These researchers also identified the importance of classrooms being a “culturally appropriate and responsive context for learning ...[so children can] bring who they are and how they make sense and meaning of the world to the learning interactions” (p. 58). The importance of teacher-student relationships characterised by empathy, care, respect and interest in their lives beyond the classroom was also shown to enhance learning for Māori and Pasifika students (Hawk, Cowley, Hill & Sutherland, 2002).

Resnick's (1987) research differentiated between learning in-school and out-of-school. Her review of the literature identified four general categories of discontinuity between these two settings. She found that learning in everyday settings involved socially shared intellectual work, tool manipulation, contextualised reasoning and situated specific skills, while learning in the classroom involved individual cognition, pure mentation, decontextualised reasoning and generalised competences. In response to these findings, she advocated a new focus for school reform to encompass the features of successful out-of-school functioning. Having examined learning in-school and out-of-school contexts, Bourke (2000) also argued that the rich sources of learning *beyond* the classroom need to be established *in* it.

2.5 LEARNING IN CLASSROOM SETTINGS

While everyday settings have been identified as rich contexts for learning, their collective interaction patterns and cultural practices rarely infiltrate New Zealand primary classrooms. This section reviews literature on the nature of learning and teaching in primary classrooms. Evident in this review is the emphasis on solo experiences that Rogoff (2001) likened to an assembly-line preparation designed in the industrial era of the early twentieth century to transmit information to the masses.

Since the beginning of formal schooling in New Zealand over 150 years ago, classrooms have been deemed official places of learning where teachers have taken charge of learning and teaching decisions. Originally, the goals of education focused on reproducing information and learning the basic skills of reading, writing and arithmetic. To achieve these goals, the classroom emulated factory efficiency where raw materials (students) were shaped by technicians (teachers) into products (learning). Sumpter and Lewis (1949) captured images of Miss Davidson's School in Milton in 1858:

Like a queen, mounting with great dignity to her seat, she could see all that went on among her pupils. If one were misbehaving, her practice was to roll up her strap and throw it...at the culprit, whose part it then was to return it to the teacher, and receive his punishment. She kept also a stick with which she tapped on the head any child whose attention appeared to wander. (p. 85)

Jackson (1990) argued that little has changed in classrooms: that they are still about delay, denial, interruption and social disconnection. Consequently, learning to live in

a classroom is about learning to live in a crowd, where the words and deeds of the weak (students) are judged by those who hold the power (teachers):

School is a place where tests are failed and passed, where amusing things happen, where new insights are stumbled upon, and skills acquired. But it is also a place in which people sit, and listen, and wait, and raise their hands, and pass out paper, and stand in line, and sharpen pencils. (p. 4)

Moll and Greenberg (1990) referred to the decontextualised nature of classrooms as creating zones of underdevelopment. It was in this way that a prominent New Zealand teacher Ashton-Warner (1980) wrote about her experiences of schooling:

It astounds me how little I remember of what went on in the actual classrooms. I could contain in a few chapters what I learnt in all those schools, whereas about what happened outside of them I could go on ad infinitum ...my real school rooms were the country scapes, my desk the saddle of a bike or a horse and my teachers the wilful weathers. (p. 93)

Compared to the rich sites for learning in everyday settings, a narrower range of cultural resources is available in classrooms. Good and Brophy (2000) argued that teachers are the dominant actors in over 80% of classroom communication episodes, yet appear unaware of their dominance. Their findings are supported by Wells (2000) who noted a dearth of dialogue in classrooms; by Jackson (1990) who noted the excessive teacher control over discourse and pedagogical decisions; and by Brufee (1995), who noted that most classroom talk occurred through the teacher rather than through a two-way flow of ideas. Across schooling, teachers tell and students listen “in splendid isolation from each other” (Prawat, 1992a, p. 12).

In recent years, classroom-based research has focused on peer influences in learning, with evidence to suggest that these have a positive impact. For instance, the high degree of intersubjectivity required in sociodramatic play advanced understandings in young children (Stone & Christie, 1996). Adult-child conversation that reflected upon learning was also shown to enhance performance on road crossing skill compared to children who had not engaged in this mutual reflection (Cullen, 1998a). A study identifying the ways in which children made use of peer assistance in a new entrant classroom identified a rich peer life, which largely operated as an “underlife” separate from the official programme (St George & Cullen, 1999). Their work extends that of Nuthall and Alton-Lee (1993) who had earlier identified the peer culture or hidden world of classrooms. These writers also highlighted the

predominance of procedural issues in children's talk, argued to be in response to the dominance of teacher talk about procedures such as paying attention and giving instructions. More recently, research has highlighted increases in individual and collective reasoning skills when children helped each other as authoritative informants (Alton-Lee et al., 2000), or when they use exploratory talk (Rojas-Drummod, Pérez, Vélez, Gómez & Mendoza, 2003).

The *School Restructuring Study (SRS)* in the United States aimed to strengthen intellectual engagement in classrooms by developing higher level thinking, deep understanding, sustained conversations and real-world connections (Newmann & Associates, 1996). Student achievement was enhanced in over 130 classrooms when these authentic pedagogies were observed. However, despite these reform initiatives, low levels of authentic pedagogies were observed with rote learning predominating. The *Queensland School Reform Longitudinal Study (QSRLS)* built on these SRS objectives. On the basis of 1,000 classroom observations in 24 case-study schools over three years, teaching practices were mapped against four dimensions of productive pedagogies (Lingard & Mills, 2002). These dimensions included intellectual quality, connectedness, supportiveness, and recognition of difference. In line with findings from the *SRS*, correlations were found between the presence of productive pedagogies and positive learning outcomes in case-study schools. Yet, as with the *SRS*, the *QSRLS* reforms largely failed to challenge children intellectually or to connect learning to their world.

Consistent with the *SRS* and *QSRLS*, Nuthall concluded that New Zealand classrooms were socially supportive, but intellectually *undemanding* places with a repeated record of failed reform efforts. He attributed this situation to the long-held belief that learning is a consequence of being in busy classrooms where “the practice of teaching remains a cultural ritual, largely uninformed by any body of established research-based knowledge” (Nuthall, 2002b, p. 44). He argued that holding on to the myth that teaching creates learning perpetuates traditional classroom rituals where teachers continue to produce rote-learners rather than connect with children's minds. Nuthall (February, 2004) spoke of the need to expose these myths:

What teachers are doing is managing a busy active classroom of interested kids and at that point the assumption we all have is that of course the kid is

learning... All they see as a problem is classroom management. How to get those eyes looking bright and those hands going up and all that stuff that parents love to see when they come into a classroom...and everyone says “this is wonderful stuff!” But none of them know whether learning is taking place.

This section of the review highlighted the discontinuity between the nature of learning in everyday and classroom settings. Classroom practices have continued to reflect mainly transmission and cognitive constructivist theories of learning. These theories cast learning as a function of one-sided action, despite contemporary sociocultural views promoting learning as a social and cultural process in which participation is transformed. Reform efforts were noted to develop productive pedagogies, to use dialogue, and to engage collaboratively in real-world issues. The difficulty of sustaining these reforms was also observed. These findings serve to justify research, such as the present study, which aims to investigate the development of new classroom practices based on sociocultural theories of learning.

The strengths of the methodologies used in these classroom-based studies also inform the present research. For instance, the *SRS* and *QSRLS* combined contemporary theories of learning, research, professional development and reform efforts. These studies, conducted longitudinally and situated in the context of local classrooms, used a range of participant and dialogic methods to focus upon the social and cultural processes of learning.

2.6 LEARNING IN A COMMUNITY OF LEARNERS

This section critically reviews the literature about classrooms that operate as a community of learners. In so doing, it focuses on how primary school teachers, internationally, have sought to develop collaborative processes of learning that are consistent with contemporary expressions of sociocultural theory. Evident in this review, is the range of different designs that have evolved in classrooms to enable children and teachers to learn together. Preceding this review, different interpretations of community are identified to distinguish these from the diverse definitions of a community of learners evident in the literature.

2.6.1 Diverse conceptualisations of a community of learners

The term community is difficult to define: either a definition is absent or it is spoken about in general terms to imply a collection of people. Community is also defined as a place where people live and work without concern for defining the nature of interaction patterns therein (Graves, 1992). The term community-centered environments also refers to the classroom as a community, the school as a community, and the degree to which students and teachers feel connected to the local and global community (Bransford, et al 1999). However, it is possible that within these interpretations of community, students are engaging in traditional routines and activity rather than learning together.

The term community appears in relation to service learning where children in Australia and North America participate in community-based projects such as adopting a wetland or helping elderly people. These collaborative programmes embed learning within everyday settings and provide a citizenship focus (Battistoni, 1997; Billig, 2000; Stuen, 1995; Wade, 2001). Community is also defined according to its cooperative ethos. Cooperative interaction involves a group achieving a common goal but often with individuals working on separate aspects of the goal. While research has shown the positive impact of these cooperative processes on learning (Graves, 1992; Sharan & Sharan, 1992), it is also noted that many cooperative processes are limited to a few specific activities and may be highly teacher-directed.

A third interpretation of community includes classrooms where children participate in democratic processes. Such communities develop consultative learning and teaching practices where opportunities are provided for children to share in decision-making and to share responsibility for learning, teaching and management with the teacher. Issues of social justice, social responsibility and redistribution of power are key concerns of classrooms that operate as a democracy (Fisher, 1995; Lipsitz, 1995). Democratic strategies including: negotiating the curriculum (Apple & Beane, 1995) holding class meetings (Donoahue, 2001), or running school representative councils (Holdsworth, 2000) all aim to empower children to make a difference in the classroom, school or local community.

Another conception of community carries an affective meaning of caring and belonging. Caring is a way of being in relation with another where teachers and children are responsive to each other's ideas and feelings in a supportive environment (Noddings, 2005). In two syntheses of research about learning in the classroom, caring was shown to support learning and to be a core feature of a learning community (Alton-Lee, 2003; Darling-Hammond, 1997). A sense of belonging relates to feeling accepted in the group and to believing in one's ability to contribute to learning (Ames, 1992). Wentzel's (1998) longitudinal study with students in North America found that their perception of pedagogical caring was significantly correlated to their own sense of belonging and motivation to learn. Osterman (2000) also found that a sense of community was related to feelings of belonging in the classroom; when students' need for belonging was met, motivation, achievement and efficacy beliefs were enhanced.

Considerable overlap exists between communities characterised by service, cooperation, democracy, care and belonging. For example, service learning involves cooperative learning and caring for people and the environment, while children in caring school communities can participate in democratic and cooperative processes. These categories singularly or together fail to reveal the heart of a community of learners as conceptualised in this study. A community of learners includes aspects of these characteristics, but goes beyond them to embrace collaborative cultural practices and shared values, and an explicit focus on learning together (Rogoff, 2003). A community of learners is not the piecemeal assimilation of a few new pedagogical techniques such as cooperative learning within an otherwise adult-directed day (Matusov, 1999), nor is it a free-choice time where children are largely left alone to discover information.

Defying simple definition, a community of learners comprises a rich diversity of sociocultural practices as conceptualised below:

- Communities of learners [are based on] what we have learned in recent years about human learning – that it is best when it is participatory, proactive, communal collaborative and given over to constructing meanings rather than receiving them. (Bruner, 1996, p. 84)
- In the community of learners classroom, students are encouraged to engage in self-reflective learning and critical inquiry...as researchers... Teachers are

expected to serve as active role models of learning and as responsive guides to students' discovery process. (Brown & Campione, 1998, p. 153)

- In classrooms which operate as a community of learners, engaged enquiry emerges... Students help each other learn...show productive engagement and [an] orientation to learn. (Watkins, 2005, pp. 51-53)
- The central principle of learning as a community [is] creating instruction that builds on children's interests in a collaborative way, where learning activities are planned by children as well as adults, and adults learn from their own involvement as they help children learn. (Turkanis et al., 2001, p. 226)

For the purposes of this study, the central principle of Turkanis et al. (2001) is used to guide and support teachers as they seek to develop a community of learners. While this principle provides a framework, the ideas and values expressed by the other writers are also drawn upon in this thesis. Underlying all these conceptualisations of a community of learners is Wenger's (1998) notion of a "community of practice" characterised by mutual engagement, joint enterprise and shared repertoire. Applying these ideas to a community of learners sees teachers and children connected in shared activity (mutual engagement), for the purpose of learning together (joint enterprise), guided by cultural rituals and resources (shared repertoire). Wenger's notion of reification is also useful to emphasise how the abstract perspectives of learning as a process of participation, takes on a concrete existence in new and changing patterns of classroom interaction. In so doing, distinctions are removed between "big people who are learned and little people who are learners" (Barth, 1990, p.162).

The varied and sometimes vague definitions and conceptualisations of a community of learners, identified in the literature, highlight gaps in understanding about what a community of learners is and what it means to learn together in a primary classroom. This thesis aims to address this gap by clarifying the distinctive and dynamic nature of teachers' and children's interactions as they learn together. In so doing, this thesis goes beyond simple descriptive accounts of pedagogical practice, to theorise about and to make visible joint participation in a community of learners.

2.6.2 Diverse designs for communities of learners

In order to draw out key principles that underpin a community of learners, this section describes a range of innovations designed to develop collaborative practices

in primary classrooms. These communities of learners, and research in relation to these, are reviewed within four broad categories: parental involvement, repetitive participant structures, computer mediation and dialogic discourse. While these four categories are used to structure the review, acknowledgement is made of the overlap between them, such that communities can involve parents as well as repetitive participant structures.

Communities of learners with parental involvement

The *Open Classroom (OC)* at Salt Lake City School has functioned as a community of learners for nearly 30 years for children from kindergarten to sixth grade (5-12 years). Central to the organisation of learning in these classrooms are parents, known as co-ops, who with the teacher design activities for children in response to their needs and interests. The school day is planned flexibly to enable children to decide when they complete required and optional activities. The class regularly meets in a circle to share their learning, to plan further activities, or for whole class instructions. They also meet to help plan and develop forthcoming units of study to build on the children's interests and experiences. Teaching in the *OC* is about adults genuinely valuing children's contributions and interests and using these to focus the learning. A commentary of the sociocultural principles and practices of the *OC* programme from the perspectives of past and present students, parents, teachers and researchers is provided by Rogoff et al (2001).

Matusov, Bell and Rogoff's (2002) comparative study investigated the interaction patterns of children attending the *OC* and children attending a nearby traditional school. Third and fourth grade dyads, comprising one child from the *OC* and the other from the traditional school, were observed attempting to solve problems together. Children from the *OC* more commonly initiated guidance and built on each other's ideas, even using inclusive gestures to include the researcher as a third collaborator. In contrast, children from the traditional school used more quizzing forms of guidance where they asked questions to which they knew the answer and withheld information to test and to judge their peers in the same one-sided interaction style they were used to in their classroom. These findings led them to conclude that schooling was a cultural process in which children learn more than curriculum

content: they learn ways of interacting with others, and “to coordinate with, support, and lead others” (Rogoff et al., 1996, p. 410).

Matusov and Rogoff’s (2002) observational study of co-ops in the *OC* aimed to investigate their shifts in perspectives of learning and teaching when they had only before experienced one-sided instructional models. Their findings showed that only 10% of co-ops were using collaborative teaching approaches such as negotiating with and building on children’s interests and ideas in their first two years at the *OC*. This figure rose significantly to 46% after two years of experience. These writers concluded that learning to participate in the *OC* required a long period of “legitimate peripheral participation” to move beyond familiar one-sided instructional models. They also argued that middle class parents in North America struggle to understand, and to participate in, joint activity with children, some never managing to do so. Their findings suggest that a community of learners represents a distinctly different theoretical approach to learning and teaching in one-sided instructional models.

The pioneering work of McCaleb (1994) in building communities of learners among culturally and linguistically diverse populations in San Francisco also involved parents. Believing that one-sided instructional models were detrimental to the literacy learning of culturally diverse children, McCaleb set out to develop partnerships between teachers, parents and children in which they discussed and co-authored family books. Her participatory research, conducted with first-grade children in a public school, showed that parental involvement was an effective tool for developing literacy skills. Her findings also showed that children and parents came to value text and were motivated to continue learning as researchers within their community context. The strength of their community of learners that integrated home and school also lay in validating and respecting the cultural values and personal histories of minority families. Similar evidence came from Konzal (2001) who found that inviting parents into the school as learners became a means to create a community of learners. Her work identified the importance of teachers understanding the interaction patterns between children and their parents and of parents understanding the pedagogical approaches used in the classroom.

Discovery 1 is a Years 1-8 special character state school in New Zealand in which parents work in partnership with children and learning advisors (teachers) to negotiate and manage learning goals based upon the children's interests (Perry Rush, personal communication, 6, December, 2001). In these ways, the national curriculum underpins rather than drives their collaborative learning. Located on the third floor of a department building in Christchurch's Central Business District, the children are able to draw upon the local expertise having earned a trust licence to venture into it. A Teacher-Parent-Researcher Community (TPRC) is designing, implementing and evaluating these collaborative inquiries to investigate the nature and quality of learning and teaching. In so doing, this research community is informing the ongoing development of joint participation at *Discovery 1* (Boyask, McPhail, Kaur & O'Connell, unpublished manuscript). Children graduating from this learning community mainly move on to a special character co-educational, secondary school, called *Unlimited Paenga Tawhiti*, which functions also as a learning community based on values of collaboration, respect, shared responsibility, trust and care. This school is also the focus of research by students, learning advisors and parents to investigate their development as a learning community.

Communities of learners with repetitive participant structures

Fostering Communities of Learners (FCL) (Brown & Campione, 1996) also highlighted "repetitive participant structures" (p. 317) such as reciprocal teaching, jigsaw learning and cross-talk. Reciprocal teaching (Palincsar & Brown, 1984) was designed to share responsibility for learning in which children take turns to lead discussion about text, raise questions, summarise, clarify meanings and make predictions. Jigsaw learning (Aronson, 1978) was used to develop expertise in a subtopic, and later, to share that expertise with a home group in order to perform a consequential task. Cross-talk was a structure that supported children from different research groups to share their findings and to respond to questions of clarification. These repetitive participant structures created zones of proximal development by "seeding" new ideas which could "migrate" to other members of the community who appropriated and transformed them into new understandings (Brown & Campione, 1998, p. 160). *FCL* research highlighted the efficacy of dialogic and participant rituals for learning. Findings from their pre-test and post-test study of year 6 students using either reciprocal teaching *and* jigsaw learning (full research), a partial control,

a reciprocal teaching only control, or a reading only control, showed that the full research group outperformed the other three groups in retention, comprehension, argumentation skills, conceptual understanding, and critical and creative thinking skills.

Moll and Whitmore (1993) developed their bilingual community of learners in Mexico which supported authentic use of repetitive participant structures. These repetitive structures, referred to as social systems, reflected a whole language approach with the use of a writers' workshop, authors' circle, and literature logs. Expertise was distributed between and among teachers and children as they participated in these social systems. Teachers assisted children to use language in a way that raised awareness of their control of it. Not only was language seen as a means to communicate with others, it was viewed as a tool to mediate learning when teachers emphasised that "talking is probably the most important thing we do in here because you learn the most when you can talk" (p. 29). Using a case study design, Moll and Whitmore (1993) conducted weekly classroom observations in a year four bilingual community of learners over two years to investigate how their social systems provided a context for learning. These writers concluded that learning was embedded in ongoing dialogue that arose out of repeated participation in activities that mattered to children. Also important was their culture of mutual trust and the identification by both children and teachers as being learners.

Communities of learners with computer mediation

Communities of learners have also developed around networked computers to provide a communal database for children to co-construct deep conceptual understandings. In response to concern over the decontextualised nature of schooling, Scardemalia and Bereiter (1996) designed a *Computer Supported Intentional Learning Environment (CSILE)* to enable children to access and to build on each other's ideas to investigate connections across sub-topics. Changing the discourse patterns in an ongoing inquiry within, and between classrooms, was fundamental to *CSILE* in which children entered their own ideas and understandings into a computer database and retrieved and questioned the ideas of others. Discourse analysis of discussion notes in the database revealed a shift in the teacher's role from "standing

outside the learning process and guiding it to participating actively in the learning process and leading by virtue of being a more expert learner” (p. 156). The teacher helped children “enter into domains for conversation” in this computer-mediation (Applebee, 1996, p. 113). The analysis also showed children creating their own theories rather than passively accepting those of others. Comparative analysis research consistently showed *CSILE* participants to have greater problem solving strategies, improved communication and comprehension skills and deeper conceptual understandings (Scardemalia, Bereiter & Lamon, 1996).

Another computer-mediated community of learners, *The Fifth Dimension*, functioned as an after-school collaborative activity in which children made choices and experienced the consequences of doing so. Nicolopoulou and Cole (1993) investigated children’s participation in *The Fifth Dimension* across two cultural contexts, a library and a youth club. At the library site, there was sustained progress in the level at which the game was played because more *and* less experienced partners shared their expertise in joint activity and fluid roles, compared to the youth club where the culture did not support such distribution of expertise. These findings again reveal the positive effects that computer-mediation can play in developing collaborative patterns of interaction which enable students to “become proficient in all aspects of knowledge, including its creation” (Bereiter & Scardemalia, 1998, p. 675).

Communities of learners as discourse communities

Collective Argumentation (CA) was developed as a sociocultural model of classroom interaction to provide a context for 11 and 12 year old Australian students to engage in exploratory talk (Brown & Renshaw, 2000). Using a problem statement, such as the nature of infinity, *CA* supported students to make comparisons and explanations, and to justify their responses to reach a collective solution. As such, the discourse community moved from “‘my ideas’, and ‘your ideas’, to ‘our ideas’” (p. 58); the teacher becoming one voice in their co-constructed solution. Analysis of matched groups of children from either a *CA* or a control group showed the *CA* group worked more consistently with the ideas of their peers, clarifying, extending, justifying or paraphrasing verbal responses. Children in *CA* classes also shared authority with their teacher by generating more conversational turns and controlling more direction in

their shared inquiries. These writers reveal the importance of learning as a relationship in which teachers and students take on complementary roles (Renshaw & Brown, 1997).

Discourse communities were also evident when children came to think and talk in ways similar to university-based researchers in their knowledge disciplines. Elbers and Streefland (2000a) designed a community of mathematicians for Dutch children aged between 11 and 13 using the axiom that “we are researchers, let us do research” (p. 39). Teachers, known as senior researchers, collaborated with children, or junior researchers, to build upon their intuitive solutions to everyday mathematical problems. Their ideas were subjected to cycles of argumentation, first in small groups, then by the whole class referred to as a research community. Children co-constructed new mathematical understandings as they proposed, criticised, rejected or built upon the ideas of other researchers. Evidence revealed that new patterns of talk replaced traditional question-response-evaluation formats; children formulated and discussed their ideas, with teachers joining in their arguments (Elbers & Streefland, 2000b).

A community of scientists developed as 13 and 14 year old students collaborated with their teacher and community experts using an inquiry process (Crawford, Krajcik & Marx, 1999). Findings from their research showed the importance of a “driving question” (p. 701) to give the inquiry authenticity and to develop collaborative interactions. Also important was the teacher’s role in guiding students to collaborate with their peers and experts beyond the classroom. In another study, a community of musicians developed when teachers, students and university academics contributed to a shared public performance (Dolloff, 1997). Findings revealed the importance of students having the opportunity to know their teachers as performing artists and to perform with them, as well as the importance of teachers being prepared to let go their role as conductor to perform with the children. A recurring theme in this interdependence was participants’ feelings of being part of something bigger.

Other dialogic communities, such as a community of inquiry, support children to think and talk as philosophers in a programme called *Philosophy for Children (P4C)*. This programme enabled children to listen respectfully to each other, and to build on

and to challenge each other's ideas or unsupported claims (Lipman, Sharp & Oscanyan, 1980). In these co-constructive processes, values or theories were shown to be discarded, revised or confirmed (Fresquet & Marciel, 1998). These same dialogic or knowledge-building processes are evident in another use of the term community of inquiry, this time to describe a methodology in which researchers work with teachers and students to co-construct new understandings (Wells, 1999). Wells revealed the importance of "dialogic inquiry" in which the curriculum is driven by a "pervasive spirit of inquiry" generated by "real questions" and aimed at an "increase in understanding" (Wells, 2001a, p. 7).

This section has described the diverse ways in which teachers have developed their classrooms as communities of learners. While some designs have required parental support, computer mediation or community expertise, they all shared a range of dialogic, collaborative and repetitive systems and structures to enable teachers and children to learn together. Evidence revealed the benefits of learning together, such as the development of literacy and argumentation skills, co-constructive processes, deep conceptual understandings, critical and creative thinking skills, collaborative skills, sophisticated problem solving strategies and enhanced motivation. These positive impacts on learning are consistent with findings from the *Best Evidence Synthesis on Quality Teaching* that showed strong evidence for learning communities as supporting academic and social outcomes across for diverse learners where "caring and support is integrated into pedagogy and evident in the practices of teachers and students" (Alton-Lee, 2003, p. 89).

The review has also revealed gaps in understanding of the processes involved in developing a community of learners in the context of primary classrooms in New Zealand. Some studies highlighted the efficacy of repetitive and dialogic participant structures for learning together. Using an institutional lens, the present study attends to changes in the cultural structures and systems that might support a community of learners. The review also emphasised the importance of developing shared and dialogic inquiries that build on genuine interests. Using an interpersonal lens, the present study attends to new interactional patterns that might develop between and among teachers and children. Also reviewed, were the teachers' and children's new knowledge, skills, values and perspectives as they began to participate in a learning

community. Using a personal lens, the present study attends to changes in teachers' and children's perspectives and understandings as a community of learners develops. Using these three lenses, this study develops an evidence base for understanding the complex process of developing a community of learners in New Zealand primary classrooms.

Evidence from this review of the literature also highlighted the critical role of the teacher in developing a community of learners; a finding consistent with the *Best Evidence Synthesis on Quality Teaching* (Alton-Lee, 2003). While the complementary and dynamic nature of teachers' and children's roles was common across the reviewed research, considerable variation existed in what this meant for practice. For instance, some research referred to teachers as mediating assistance (Moll & Whitmore, 1993), others saw teachers as modelling learning (Brown & Campione, 1998), or as senior researchers (Elbers & Streefland, 2000a), or as collaborators with children in knowledge building (Wells, 2002). Given the critical role played by the teacher in developing a community of learners, further investigation is required to identify how they guide children to learn together in classrooms, and to consider the factors that enable or constrain their new roles. Equally important, is examination of the role played by children as they begin to learn with others in settings that have for so long accepted the idea that learning is a solo and teacher-directed activity. Investigation is also required to understand the factors that constrain or enable children's joint participation.

2.6.3 Underlying principles of communities of learners

Arising from this review of diverse communities of learners are principles for learning together. These principles, identified in Table 2.1, are categorised according to curriculum, pedagogical practices and their values for learning. Together they conceptualise learning and teaching from a sociocultural perspective. This thesis aims to further clarify these principles to help teachers construct their own sociocultural practices.

Table 2.1 Sociocultural principles underpinning the reviewed learning communities

A sociocultural curriculum involves teachers and children:

- building on what matters to children;
- planning learning goals and content together;
- negotiating ongoing learning directions;
- displaying broad learning intentions;
- co-constructing conceptual understandings;
- making connections to wider community issues and experts; and,
- being culturally responsive to and validating children's lives.

A sociocultural pedagogy involves teachers and children:

- collaborating in learning relationships;
- sharing roles and responsibilities for learning and management;
- sharing expertise within and beyond the classroom;
- using multi-directional dialogue to co-construct learning;
- developing intersubjectivity (shared meaning);
- using repetitive participant structures;
- reflecting on the shared roles of learning together; and,
- assessing learning in the process of learning.

A sociocultural approach to learning values:

- teachers, children and parents learning together;
 - participation in shared activity;
 - diversity and dialogue;
 - individual and collective agency;
 - flexibility and creativity;
 - mutual respect, trust and caring; and,
 - creation and critique of new knowledge.
-

2.7 CRITICAL ISSUES

The review thus far has highlighted the theoretical justification for developing a community of learners and the different ways in which primary teachers have developed sociocultural practices. While principles of learning in a community of learners have been derived, moving from the rhetoric of these sociocultural ideals to practising them in the context of New Zealand primary school classrooms is anticipated to be fraught with difficulty and dilemma. This section identifies some of these issues and considers ways to address them in the present study.

2.7.1 Dilemmas in developing a community of learners

The first dilemma likely to be faced by teachers in this study is the requirement to cover mandated curriculum. New Zealand primary teachers are accustomed to planning and assessing against achievement objectives set out in curriculum statements. They are also accountable to parents, principals and to the Education Review Office for the students' achievement of these mandated objectives. Despite research identifying the efficacy of formative rather than summative assessment (Black & Wiliam, 1998), it is common practice for schools to test achievement of these objectives using summative measures. A tension exists between these commonly accepted planning and assessment practices and the practices of a community of learners. For instance, a community of learners will require teachers and children to negotiate a curriculum that is underpinned by the national curriculum but which also builds on children's interests and cultural experiences (Turkanis, 2001). Developing a community of learners will also require teachers to view learning as a collective activity in which children contribute to the co-construction of new and shared understandings.

A second anticipated dilemma is the challenge teachers will face to learn new practices in ways that are different from the top-down initiatives that have previously dominated professional development. Many of these professional development programmes are consistent with transmission views of learning in which teachers are seen as improvable by outsiders; where learning is "done to someone by someone else" (Barth, 1990, p. 50) in a setting removed from their practice. Research has shown the inadequacy of these programmes to bring about and to sustain innovation in the classroom because they do not support ongoing conversations between teachers in their own learning communities (Cochran-Smyth & Lytle, 1999a; Lieberman, 2000; McCombs & Whisler, 1997). Furthermore, schools are typically hierarchical structures with systems and expectations that serve to maintain the status quo (Moll & Greenberg, 1990; Newmann & Associates, 1996). These taken-for-granted traditions are partly perpetuated by teachers' and parents' beliefs that schools should be as *they* had previously experienced them, as Kohn (1999) noted:

The features of our children's classrooms that we find the most reassuring – largely because we recognise them from our own days in school – typically turn out to be those least likely to help students become effective...learners. That dilemma is at the heart of educational reform. (p. 1)

The present study responds to these anticipated dilemmas by incorporating three “stories of educational reform” (Fullan, 2000, p. 581) into the methodology. The inside story promotes innovations that are jointly developed by teachers and children. The inside-out story promotes connections with outsiders, such as a university researcher who can bring theoretical expertise to the inside story of reform. The outside-in story of reform promotes infrastructures such as new school systems and the structure of this action research. By valuing the contributions of teachers, children and the researcher, by viewing the classroom as a cultural system (Palincsar, 1998) and by developing a collaborative research methodology, these three stories of reform are anticipated to support the development of a community of learners.

It is also anticipated that the reforms implied in developing a community of learners will require teachers to engage in emotional work (Hargreaves et al., 2001). Teachers’ emotional response to the changes they seek to make will shape, and be shaped by, relationships with children, other teachers, school management, parents and me as the researcher. Emotions will be an implicit aspect of the teachers’ goals for change, not only in content, but also in their capacity to make and sustain these change. The present study needs to heed the warning that “without attention to the emotions, educational reform efforts may ignore and even damage...what teachers do” (p. 156). Chapter Four discusses systems within this study which are designed to be emotionally responsive.

Another anticipated dilemma for this study reflects the difficulty of developing intersubjectivity in classrooms with 30 children. Crook (2002) argued that while conditions known to encourage intersubjectivity can be created, there is no guarantee that mutual states of understanding, which lie at the heart of collaboration, will develop. Crook also argued that as shared understandings increase, subtle non-verbal communication also increases, and that these are difficult to observe. The present study responds to these issues by making repeated participant observations in the classrooms to detect and analyse intersubjectivity in all its overt and tacit guises.

2.7.2 The importance of teachers’ and children’s perspectives

It is important for the present study to consider teachers’ and children’s perspectives of learning and teaching because they consciously and unconsciously shape and

justify participation in the classroom (McCombs & Whisler, 1997). While the term perspective of learning is most commonly used in the educational literature (e.g. Paavola et al., 2004; Rogoff, 1998; Wells, 2001a), it is used interchangeably with other terms such as views of learning (e.g. Brophy, 2002; Watkins, 2005), conceptions of learning (e.g. Pramling, 1988; Wenger, 1998), or ideas of learning (e.g. Berry & Sahlberg, 1996). For the purposes of this study, the term perspective is used to refer to the teachers' and children's perceptions or personal understandings of learning and teaching in the classroom.

Numerous studies, identified in Chapter One, have highlighted the importance of seeking and engaging with *teachers'* perspectives in educational research, especially when there is an intention of reform (e.g. Fullan, 2000; Hargreaves et al., 2001). Research shows that teachers who can articulate their perspectives are more sensitive to the dynamics of classroom interaction, better able to prevent the formation of hidden cultures, and better placed to initiate reform (McCombs & Whisler, 1997). However, as noted by Lytle and Cochran-Smith (1990), teachers' perspectives are often marginalised in research in favour of listening to theories generated by researchers:

The voices of teachers, the questions and problems they pose, the frameworks they use to interpret and improve their practice, and the ways they define and understand their work lives are absent from the literature of research on teaching. (p. 83)

Teachers' perspectives determine what counts for learning as well as how they support it (Wenger, 1998). If teachers hold the view that learning occurs in teacher-directed activity, they are more likely to design and direct individual tasks. Conversely, if teachers believe that learning happens in shared activities, they are more likely to develop conditions in which children can share responsibilities for and decisions about learning. This argument aligns with Nuthall (2001), who observed that teachers' perspectives are associated with the perpetuation of cultural myths about learning and teaching; when teachers hold on to perspectives supported by transmission theories, they are unable to think about new practices supported by sociocultural perspectives. Rogoff et al (1996) also made this claim when they found the major constraint to developing a community of learners was teachers' unconscious perspectives arising from past experiences of one-sided instructional

models, which got in the way of understanding a sociocultural view of learning. It is by bringing perspectives to a conscious level in this way that teachers can come to see themselves as knowers and as agents for change (Cochran-Smith & Lytle, 1999a).

The importance of seeking out and engaging with *children's* perspectives in educational research and reform was also noted in Chapter One (e.g. Christenson & James, 2000). As was argued to be the case for teachers, research has too often failed to listen to children's perspectives about their experiences (James & Prout, 1997). Up until recently, children in Western schooling were viewed as "lesser adults progressing toward adulthood" (Smith & Taylor, 2000, p. 2), which led educational researchers to do research *on* them rather than to contemplate the idea of seeking out their voices. This situation has led to gaps in our understanding of children's experience of learning in the classroom, of appropriate reforms to improve learning conditions therein, and of their responses to innovation.

The Convention on the Rights of the Child (United Nations, 1992) was an important statute to enable children to express their perspectives on matters affecting them. More importantly, however, was the emergence of the view that childhood is culturally defined (Rogoff, 2003), and that they are experts on their own lives (Graue & Walsh, 1998). Researchers are beginning to access children's expertise as learners in the context of the classroom by exploring their experiences with them. For instance, the *Starting School Research Project* (Dockett & Perry, 2003), in which children's voices were listened to, led to new knowledge about children's experiences of starting school. Similarly, Alton-Lee and Nuthall (1992) also developed research methodologies to investigate the private talk of young children and in so doing revealed the hidden world of their classroom learning. These examples point to the recent knowledge gains when researchers have engaged with children's perspectives and accepted these as valid evidence (Woodhead & Faulkner, 2000).

On the basis of this review of critical issues, gaps have been identified in our understanding which has contributed to the focus of attention in the present study. Little is known about the perspectives teachers and children hold of learning and

teaching in the classroom, or how their perspectives might change as they begin to learn together. Gaps also exist in our understanding of how currently accepted one-sided practices might impact on teachers as they seek to develop a community of learners. How best to bring about and sustain these sociocultural practices in primary classrooms is also unknown. The review has revealed the value of generating these understandings by seeking out and engaging with teachers' and children's perspectives of learning and teaching; joint participation central to the methodology of the present study.

2.8 CHAPTER SUMMARY

This review of the literature has traced the pathways forged by Vygotsky and Dewey to illustrate the theories of contemporary sociocultural scholars. While acknowledging the ongoing debate about sociocultural theory, a central tenet of the present study is that learning is a transformation of participation in social and cultural contexts. The mutually constituting nature of learning raises significant contradictions with the ways in which learning and teaching are practised in primary classrooms. The tension focuses on the individual, separated and teacher-directed practices of schooling and the collaborative, inclusive and negotiated practices that underpin a sociocultural view of learning. With such contemporary understandings emerging in the educational literature, we can no longer continue to defend traditional ways of learning in primary classrooms. This study aims to tease out these tensions and dilemmas so as to find ways in which primary teachers might move towards developing sociocultural approaches.

Participation in everyday settings and indigenous communities were shown to reflect interactional patterns that focus on developing mutual understandings in guided and intent participation. These valued ways of being together varied significantly from the taken-for-granted cultural practices that are typical in Western classrooms. The review highlighted discontinuities between everyday and classroom settings; the latter mainly characterised by decontextualised and depersonalised practices which are consistent with transmission and cognitive constructivist views of learning. These classroom practices, with their narrower range of tools and resources for learning,

were shown to be resistant to change despite reform efforts based on sociocultural and social constructivist theories of learning.

Also identified in this review were the diverse conceptualisations of the term community and of the different meanings attached to the term community of learners. Analysis of these diverse meanings generated a working definition for use in this study. Also shown were the different ways in which primary teachers, internationally, have sought to develop their classrooms as learning communities. These designs included: parental involvement, repetitive participant structures, computer mediation and dialogic and disciplinary engagement. The research in relation to these communities of learners revealed children's knowledge gains, skill development and attitude changes. Sociocultural principles arising from these learning communities were identified in Table 2.1 (p. 35).

Critical issues and tensions for the study were also raised, including planning for and assessing mandated curriculum, accountability issues, the predominance of one-sided professional development and the marginalisation of teachers' and children's perspectives. Building on the sociocultural notion that research needs to engage with teachers' and children's perspectives, the present study supports teachers to articulate and to challenge their taken-for-granted perspectives of learning and teaching, and to seek those held by children as reform effort are made.

The following chapter describes the sociocultural essence of the collaborative methodology used in the present study. Collaborative action research builds upon the methodological strengths of the research reviewed in this chapter such as: capacity to document the emergent nature of change, to work alongside teachers, and to develop trusting and respectful research partnerships situated in the context of their classrooms.

CHAPTER THREE

METHODOLOGY IN THEORY

As civilised human beings, we are the inheritors ... of a conversation, begun in the primeval forests and extended and made more articulate in the course of centuries. (Oakeshott, 1962, p. 199)

3.1 INTRODUCTION

This study aims to investigate the transformation of participation as teachers seek to develop a community of learners in their classrooms. Implicit in this aim, is the importance of listening to teachers' and children's perspectives of learning and teaching and of working with them to change their participation in the classroom. Focus is, therefore, given to a methodology that develops research partnerships. Contemporary sociocultural theory, as described in Chapter Two, justifies this collaborative methodology as well as the pedagogy of a community of learners, and the methods used to analyse its development. In these ways, sociocultural theory provides overall coherence to this study.

This chapter begins by stating the research questions and examining an interpretive research paradigm and its ontological, epistemological and methodological positions. These interpretivist positions are argued to support the aims of this research and its qualitative design. Various conceptions of action research are outlined from which key principles and definitions are identified for the present study. Action research is then discussed as an effective form of professional development for teachers. Following this, tensions and conflicts associated with this methodology are considered, including: theory and practice tensions, conflicts of role and entering and leaving the field. A full description is given of the methods used to generate and analyse data. Finally, ethical issues concerning participation in action research are considered.

3.2 RESEARCH QUESTIONS

Three research questions of a transformative nature focus this research.

- 1. How does the participation of Year 3 / 4 teachers and children change as a community of learners develops in their classroom?*
- 2. In what ways do Year 3 / 4 teachers' and children's perspectives of learning and teaching shape the development of a community of learners?*
- 3. What factors constrain or enable Year 3 / 4 teachers and children to develop, and to participate in, a community of learners?*

The first question seeks to understand the transformation of participation in learning and teaching activity as teachers seek to develop their classrooms as learning communities. Implicit in this question are the different ways in which this transformation manifests itself through personal, interpersonal and institutional analytic lenses. The second question seeks to examine teachers' and children's perspectives of teaching and learning. Understandings are sought about the different ways these perspectives might impact on the development of a community of learners, as well as how their perspectives change as they begin to learn together. The third question seeks to investigate constraining or enabling factors. Understandings are sought about the different ways in which these factors impact the reform process of developing a sociocultural approach to learning in the classroom. As such, these three broad questions focus on the transformation of interaction patterns, perspectives and practices. Rogoff (1997) emphasised the importance of such questions in sociocultural research to understand how "children [and adults] get from this kind of participation to that kind of participation, and how...the activities in which they participate change with the children's and others' involvement" (p. 274).

3.3 RESEARCH PARADIGM

Kuhn (1970) advanced the notion of a research paradigm as an overarching conceptual framework to guide the thinking and activity of a community of scholars. A paradigm comprises their ontological, epistemological and methodological beliefs

which reduce the complexity of qualitative research. The present research is guided by an interpretivist paradigm (Denzin & Lincoln, 2000) which is consistent with constructivist philosophical approaches. Both approaches share the notion that reality is a social construction, created between the observer and the observed, and that lived experiences need to be understood from the perspective of the *observed*. While Schwandt (1998) revealed the debate about which of these subtly distinct world views should be the umbrella term, the interpretivist term is used here as defined by Neuman and Kreuger (2003):

The interpretive approach is the systematic analysis of socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social worlds. (p. 71)

3.3.1 Interpretivist ontology, epistemology and methodology

As a theory of being, ontology refers to how we see ourselves in relation to others. Interpretivist researchers adopt a relativist ontology claiming that there can be no single correct way of perceiving the world. With multiple realities, notions of prediction, objectivity and control are replaced with thinking about understanding, subjectivity and choice. This subjective view of the world means that people's view of reality can change as new meanings are constructed. Interpretivist researchers are therefore interested in finding out how people, in the case of this research - teachers and children, understand their lived experience of teaching and learning (Schwandt, 1998).

As a theory of knowledge, epistemology refers to the relationship between the knower and the known. Interpretivist researchers argue a strong connection between the two; the knower and the known interact and shape one another (Denzin & Lincoln, 2000). This epistemology indicates convergence with a sociocultural view that knowledge is co-constructed in dialogue and in other forms of joint activity. The implication of this epistemology for the present study is that new understandings will be co-constructed between the teachers and myself, and between teachers and children through our collaborative participation.

Methodology concerns the theoretical perspectives that inform the conduct of research. Given the interpretivist researcher's relativist ontology and socially

negotiated view of knowledge, a methodology is required that enables them to define, and to make sense of the issues that exist in the field. In the case of this research, defining, and making sense of the processes of developing a community of learners needs to be co-constructed from the perspectives of the participants. Interpretivist methodology is thus a participative and collaborative endeavour concerned with constructing new understandings “that get inside the ways others see the world” (Neuman & Kreuger, 2003, p. 75).

3.3.2 Qualitative Research

These ontological, epistemological and methodological positions are subsumed within a broad qualitative research approach. Qualitative research aims to understand the world of the participant by situating researchers, with all their values and assumptions, in that world (Denzin & Lincoln, 2000). Authentic social interaction in the field, using a range of methods is the key to qualitative researchers making sense of or interpreting the meanings participants bring to an emergent study (Denzin & Lincoln, 2000). In contrast, quantitative researchers focus on predictability, control and hypothesis testing, often using statistical methods in a study that has a predetermined structure (Merriam, 1998). The decision to use either a quantitative or qualitative approach, or to use them together, does not rest on one being better than the other. Rather it is a matter of one being more appropriate to the researchers’ ideology and questions, and to their need to supplement or illuminate data using a different approach (Lewis & Lindsay, 2000). The use of qualitative research in education is expanding rapidly, especially that of action research (Eisenhart, 2001).

Five characteristics of qualitative research identified in the literature have implications for this study (Bogdan & Biklen, 1998; Eisner, 1998). First, as a qualitative researcher my focus is on the natural setting of the classroom so as to understand how a community of learners develops and how participation and perspectives change rather than simply to understand the outcomes of this development. Second, as the key research instrument, I will participate in the classroom *with* teachers and children and discern subtle meanings from my conversations and observations. Third, as a qualitative researcher my aim is to interpret the multiple meanings of being a child or a teacher in the classroom, those

meanings being revealed inductively through the three analytical lenses described in Section 3.6. Fourth, teachers' and children's voices are written into this report to help readers in similar settings to experience the transformation vicariously. Finally, because findings from this qualitative research cannot be generalised to other school settings, its success will be judged on its coherence, its insights and the degree of its usefulness for other teachers. These issues of validity and reliability are also discussed in Section 3.6.

3.4 ACTION RESEARCH METHODOLOGY

Carr and Kemmis (1986) noted the appropriateness of action research as a research methodology arguing that “the purpose of educational research is to develop theories that are grounded in the problems and perspectives of educational practice” (p. 122). This section explores various conceptions of action research, the principles of collaborative action research and critical issues pertaining to this methodology.

3.4.1 Conceptions of action research

Action research is informed by a diverse history traced back to Aristotle, who advocated practice informed by self-reflection. Similar threads can be linked to Dewey who, at the turn of the 20th century, argued that the scientific method should be democratised so that ordinary people could participate in research. Lewin first coined the term action research in social work during the 1940s as a joint activity between researchers and people who wanted to take control of their own lives. From these sociological beginnings, action research became a prominent educational research methodology in the 1960s when Stenhouse worked with teachers as researchers to develop new instructional models in the classroom (Elliott, 1997). Five contemporary conceptions of action research are briefly considered for the purpose of drawing together threads of meaning from each to inform the methodology of the present study.

Schön (1983) defined action research as being “generated out of dialogue between reflective-researchers and practitioner-researchers” (p. 324). He recognised teachers as researchers when they engaged in reflective dialogue while planning for and thinking back on, practice (reflecting-on-action), as well as during teaching while

framing and solving problems on the spot (reflecting-in-action). Schön saw teachers' knowledge as embedded *in* practice and *in* their reflections on practice (knowing-in-action). He argued that these reflections represented teachers' vast tacit knowledge (Polanyi, 1967), which makes it difficult for action researchers to uncover, as explained by Calderhead (1987):

Just as expert tennis players, who might return shots in rapid succession, intuitively calculated to land at particular spots on the court, often cannot describe the knowledge of ball control...neither can...teachers [explain] their classroom interaction. (p. 3)

Elliott (1994) conceived of action research in these same practical terms. He perceived teachers as “knowledge generators rather than appliers of knowledge generated by outsiders” (p. 133). Elliott argued that teachers' knowledge was embedded in concrete practices, the analysis of which led to a conscious awareness of their perspectives. For Elliott, action research was a means of improving everyday practice by deepening teachers' understanding of problems and by planning to solve these. Elliott (1997) also differentiated between insider and outsider roles, proposing that university researchers (outsiders) should collaborate with school teachers (insiders) in the generation and analysis of data so as to create a shared vision for educational research and reform.

Wells (1995) spoke of action research as a community of inquiry. Inspired by the intellectual excitement generated in children's inquiry in the classroom, he recognised the potential for teachers and teacher-educators to engage in their own inquiry into their practice with colleagues. Wells and Claxton (2002) argued that learning about teaching should be “conducted as a dialogue about matters that are of interest and concern to the participants” (p. xi). Rather than do research *on* teachers where the results would need to be delivered to, and consumed by them, Wells proposed to co-construct new understandings *with* teachers in school-university partnerships. He initiated the *Developing Inquiring Communities in Education Project (DICEP)*. Three distinguishing features of *DICEP* are relevant to the present study: the group learned together within a common theoretical framework based on sociocultural theory, the group was organised around democratic principles, and topics for investigation were chosen because they really mattered to teachers (Wells, 2001b).

Kemmis and McTaggart (1988) were leading proponents of the term participatory action research (PAR), a methodology described as a “collective, self-reflective enquiry undertaken by participants in social situations in order improve the rationality and justice of their own social...practices” (p. 5). The motivation behind PAR is to work with people committed to becoming enlightened about their circumstances and to acting in ways that liberate them from the constraints embedded in their social, economic and political lives. In an educational setting, researchers using PAR are interested in working with teachers to develop theoretical understandings and to change and to improve practice. In overlapping stages of planning, acting, observing and reflecting, co-participants examine critically their knowledge, skills and values, as well as investigate the nature of taken-for-granted assumptions about everyday activity. As such PAR embraces values of participation, democracy, empowerment and emancipation.

McNiff and Whitehead (2002) described a similar process in action research as: reviewing current practice, identifying an aspect to improve, imagining a way forward, trying it out, taking stock, and modifying the action. They join the above action researchers in emphasising its “non-definitive, generative, transformational and evolutionary processes” (p. 57). McNiff and Whitehead use action research as a means of self-study in which research is conducted “by the self into the self, undertaken in company with others acting as research participants and critical learning partners” (p. 15). Their work revealed the importance of letting go the need for certainty and embracing its unpredictability as adding value to the research process. Action research as self study is recognised as a valid, rigorous and productive form of research *and* professional development. These researchers argued that such a methodology enables teachers to reflect on and to generate new “living theories” of practice and to identify the “living contradictions” (p. 22), or compromised values, in their practice.

Common to these diverse conceptions of action research are participation, reflection, dialogue and collaboration with the ultimate aim of co-constructing new theories of and practices in learning and teaching. These common threads, stated below in Table 3.1, form the basis of ten sociocultural principles which underpin the present action research. Practical and theoretical convergences can be identified between these

principles underpinning action research and those underpinning the reviewed learning communities (see Table 2.1, p. 36).

Table 3.1 Sociocultural principles underpinning action research

Action research involves teachers and researchers:

- forming a community of inquiry to understand and to improve theory and practice;
 - sharing responsibility for the overlapping and emerging stages of research;
 - using democratic processes to share decision-making;
 - engaging in dialogue to co-construct new understandings;
 - focusing on problems in the classroom that really matter to teachers;
 - setting individual goals within an overall theoretical framework;
 - contributing their diverse perspectives, interests and expertise;
 - participating as learning/research partners;
 - forming trusting and respectful relationships; and
 - theorising about their practice both individually and collaboratively.
-

An overall sense of democracy and interdependence between the activities of university researchers and school teachers arises from these ten principles. Given the purpose of the present study is to develop a collaborative approach to learning in the classroom, it is important to emphasise this same sense of collaboration and community in the methodology. It is for this reason that the term collaborative action research (Feldman, 1999; Oja & Smulyan, 1989; Sagor, 1992; Wells, 2001) is used in the present study. The term participatory action research is not used in the strong sense because of its critical-emancipatory definition (Kemmis & McTaggart, 2000), however, it is used in the softer sense of reflecting the democratic and collaborative principles as outlined above in Table 3.1.

The present study also recognises a dialectical relationship between research and action, and theory and practice where theory develops *in* action (Zuber-Skerritt, 1992). As a partner in collaborative action research, my aim is not to apply theory to practice; it is to help close the gap between theory and practice by co-constructing

understandings of the transformational processes of developing a community of learners. Reason and Bradbury's (2001) definition of action research guides this research because it embraces this interdependence between teachers and researchers, theory and practice, and action and reflection. Their definition, below, also reflects the sociocultural view that the teachers' learning contributes to, and is constituted by, the social and cultural processes of the action research community:

Action research is a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes...It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities. (p. 1)

The present collaborative action research (CAR) enacts this definition by forming a community of practice (Wenger, 1998) comprising four primary teachers and me as a university researcher. Our shared commitment to developing a community of learners in the classroom evolved as we participated together at school and at university. As collaborative action researchers, we each brought rich sources of expertise to the research. Teachers as insiders brought their perspectives, their knowledge of children, their understandings of their classrooms, and their tacit understandings of teaching and learning. As an outsider, I did not impose my truth rather I brought my perspectives as a former primary teacher, and now university researcher, my valuing of and commitment to collaboration in research and in learning, and my understanding of CAR as a means to explore new possibilities.

3.4.2 Collaborative action research as professional development

Teachers' participation in a collective inquiry about their practice is central to effective professional development (Darling-Hammond, 1996; Lingard & Mills, 2002). This places teachers at the heart of educational reform, yet some professional development models continue to be based on one-sided perspectives of learning where externally generated theory is transmitted by an expert (Zeichner, 1994a). When professional development is "designed, prescribed and scripted by others" (Olson & Craig, 2001, p. 680) the discourse becomes controlled thus restricting participation and transformation. Also constraining teacher learning is the accepted practice of privatising teachers' work leaving it unavailable for discussion (Hargreaves, 1994). Furthermore, teachers' beliefs that other people's understandings

are more important than their own (Lieberman, 1995) constrain participation in a learning conversation. The dialogic nature of CAR acts to deprivatise practice and to open it up for critical reflection in a learning community. As members of this community, teachers can share their evidence-based ideas generated in their practice. In the present study, CAR becomes a learning community similar to the one that the teachers were seeking to develop in their classrooms.

In a comprehensive review of professional development, Putnam and Borko (1997) found that effective professional development focused on just four key factors: based in evidence, embedded in practice, forged in collegial relationships, and situated in discourse communities. These four factors reflect the core principles stated above as underpinning CAR methodology. Another large scale study of the effects of different professional development on teachers' learning by Garet, Porter, Desimone, Birman and Yoon (2001) found that it was in the integration of teachers' inquiries into their teaching practice that best enhanced new understandings. Their findings also align with those from other reform initiatives such as *QSRLS*, discussed in Chapter Two, in which the best examples of productive pedagogies developed within professional learning communities (Lingard, Mills & Hayes, 2000).

Thomas, Wineburg, Grossman, Myhre and Woolworth (1998) reported on a professional development project that sought to establish a community of learners among secondary school teachers. Teachers from the English and History departments met regularly over two years to read and to discuss fiction and history texts and then, to view videotapes of their efforts to integrate these two curriculum areas. Findings pointed to an enhanced collegiality within and across departments, reduced feelings of isolation and the development of an intellectual community for teachers. These writers concluded that "as compelling as the idea of a community of learners may be, it will forever remain a fragile entity *if no parallel community exists among teachers*" [italics added] (p. 12). Engaging teachers in intellectual inquiry within professional communities both within and beyond schools so that they can engage in the same kinds of inquiry with their children is widely argued (Burns, 2000; Cochran-Smith & Lytle, 1999a; Dadds, 2002; Feldman, 1999; Lieberman, 1995; Lingard & Mills, 2002; Little, 2003; Prawat, 1992a).

The professional development and sense of community which CAR methodology engenders, has also been shown to enhance teachers' efficacy beliefs or judgements of their capabilities to bring about student engagement and learning (Tschannen-Moran & Woolfolk-Hoy, 2001). Participation in the co-constructive processes of CAR can provide four sources of efficacy information (Bandura, 1997). First, experiencing mastery of the goals teachers set themselves will most enhance their efficacy beliefs. Secondly, experiencing vicariously the success of similar colleagues achieving their goals will also enhance teacher efficacy. Efficacy beliefs also develop as a result of verbal persuasions received from others, or through experiencing psychological arousal, both of which are likely to happen in CAR. The effects of a high teacher efficacy are seen in: teachers' commitment to ongoing learning, their willingness to take pedagogical risks, their enthusiasm for teaching and their persistence to overcome difficulties in reform efforts (Woolfolk-Hoy, 2000). CAR provides these four sources of efficacy information to promote teachers' beliefs that they are capable of developing a community of learners, that they can take risks and that they can persist in the face of constraints to sustain development.

3.4.3 Critical issues in collaborative action research

While CAR methodology offers teachers and researchers opportunities for professional development and the creation of new understandings about learning and teaching, its growing use in educational research has highlighted critical issues to which there are no clear solutions. This section explores three critical issues relevant to this study: theory and practice tensions, role conflicts and entry and exit issues. Being alert to these methodological issues will be critical to the success of this research journey.

Theory and practice tensions

Tensions are likely to arise in a study such as this because it adopts a sociocultural view of knowledge and learning that will contradict more dominant one-sided beliefs and practices. Metaphors of learning, such as "acquisition" in which information fills mental filing cabinets (Sfard, 1998), have guided teaching and learning in the classroom. Attempts to develop a "participation" metaphor in which learning becomes a process of participation in shared learning activities, or to a knowledge-creation metaphor in which innovative knowledge communities engage in "a process

of transforming and developing ...existing ideas and practices” (Paavola et al., 2004, p. 564), may be met with resistance and confusion. As discussed in Chapter Two, the process of learning how to participate in a community of learners can be difficult for people whose experiences are limited to one-sided views of learning (Matusov, & Rogoff, 2002). To ease these theoretical tensions, this study builds on the perspectives that teachers and I hold, as well as on those published in contemporary research literature. In this way, spaces for dialogue can be created in which views might be expressed using a common language (Miller, 1992).

Zeichner (1994b) pointed out that the dominant view of educational research among teachers is that it is an activity conducted by outsiders on insiders. It is likely that tensions will exist between the methodology itself and the participants’ view of what constitutes research. Teachers may also challenge the dialogic methods as an effective means to generate data. Sfard (1998) argued that while theoretical tensions will arise from holding seemingly conflicting views, they are also great sources of power. Similarly, Palmer (1998) argued that holding the poles of a paradox together can energise research. Instead of thinking in polarities, the present study encourages co-constructed understandings that build upon individual perspectives. The same joint participation underpins a community of learners, where learning and teaching becomes a shared activity between teachers and children. In research, as in learning, the traditional culture of disconnection becomes one of connection and inseparability.

Role conflicts

Conflicts of role can occur in CAR methodology because it brings together insiders and outsiders from diverse educational worlds, each with their own knowledge, status, influence, emotions, problems and language (MacPherson et al., 1998; Waters-Adams, 1994; Zeni, 2001). As the outsider in this research, I took on the role of both facilitator and collaborator. As facilitator, I initiated the research and took overall responsibility for organising the generation and analysis of the data. Initially, it was my responsibility to develop collegial, trusting relationships, to help teachers turn their vague concerns into actionable problems, and to support them in the uncomfortable process of stepping beyond what had always been. Over time, my role as facilitator evolved into one of collaborator in which the teachers and I shared

responsibilities in the research. We built on each other's ideas, supported each other and con-constructed new understandings of a community of learners either in dialogue or in distal arrangements through electronic mail.

My previous role as a primary teacher created tension for me. Being back in a classroom prompted typical teacher responses where I only knew how to be the teacher. As a researcher, I was unsure about how to enter the classroom, where to position myself, how to respond to the children or to the teachers. Teachers in this study also felt tension as they took on new roles. I was particularly sensitive to some teachers' apprehension about deprivatising their practice by having me in their classrooms. Sharing their practices and perspectives over a sustained period of time also created tensions. Initially, some teachers were reserved about contributing their perspectives, but as a sense of trust and honesty developed, deeper insights were revealed.

Another tension for insider-outsider action research arises from an insider's perception of outsiders as experts due to the "inequitable power bases of those with and without research knowledge" (Poskitt, 1994, p. 2). Despite my early assurances that we all bring expertise to the research, teachers continued to afford me an expert status by virtue of my university position. It was not until later in the research that teachers came to see how their ideas were contributing to new understandings; they came to see each other as experts. Teachers came to recognise that the work of collaboration was achieved "not first in one person's mind, and then in the other's, but on the loom between them, in the centre of their joint space" (Donaldson & Sanderson, 1996, p. 44).

Conflicts of role can also come about when insiders and outsiders start out as relative strangers but become friends in the course of the research. Josselson (1996) wrote about the dilemmas of friendships developing in narrative research, and the need to acknowledge and manage these conflicting roles. The effort required to manage the tension between personal and professional relationships was an issue in this study. First, my professional relationship with one of the teachers prior to the research grew into a caring and respectful friendship. This teacher would call in at home to share events that had occurred in his classroom and his reaction to these. Our friendship

privileged me with deeper insights into this teacher's thinking, but it also required me to develop a greater sense of responsibility and commitment to our work and to see, hear, and value everyone's voices. Second, the roles required in CAR changed the relationships among the teachers, who came to regard each other and me as professional friends.

Studies have shown that action research is not a natural activity for teachers (Johnston, 1994), and that teachers are not always ready to engage in its self-reflective processes (Poskitt, 1994). These findings highlight the importance of action researchers developing reflective skills, and a desire to really "hear and understand what people tell you" (Rubin & Rubin, 1995, p. 17). Also noted in the literature is the importance of empathising, of being sensitive, non-judgemental, emotionally honest, trustworthy, self-aware, flexible and patient (Bogdan & Biklen, 1998; Merriam, 1998; Miller, 1992; Neuman, 2000). Ability to organise systems to cope with the stress of sustaining research partnerships, being open to new possibilities, developing tolerance for uncertainty, and using humour are also noted as skills required by action researchers (Glesne & Peshkin, 1999). In these new forms of participation, the teachers and I developed competencies seldom used in our everyday practice as teachers and as researchers (Desrosiers, 1996).

Entering and leaving the field

Accessing a research site is problematic for all fieldworkers, but particularly so for those who want to collaborate *with* insiders (Berg, 2001). The problem lies in finding a suitable site with co-participants whose interests resonate with those of the outsiders. The different ways to get into the field vary widely (Fontana & Frey, 2000), but common to all is becoming familiar with a range of potential sites (Neuman, 2000). Once a site is found, entry needs to be negotiated. This is an important and time-consuming phase of the research requiring careful planning to give sufficient information to gatekeepers (Bogdan & Biklen, 1998), and to gain their confidence. The emergent and shared nature of CAR further complicates this situation, where some degree of access to potential insiders is needed to discuss aims, methods, commitments, resources and expectations prior to seeking formal ethical approval to be there. Access to a physical research site does not necessarily mean access to good data. Neuman (2000) illustrated this idea with an access ladder which

showed that the most sensitive information is accessible when greater lengths of time are spent in the field, and when greater levels of trust are achieved.

It can be as problematic to leave the field as it is to gain entry (Bogdan & Biklen, 1998). Withdrawal from the school setting requires the same sensitive planning as entry because close research relationships have developed and the effects on the insiders who stay on in the field need to be considered (Frankfort-Nachmias & Nachmias, 1996). While revealing our lives beyond teaching and researching developed high levels of trust, the thought of losing this close relationship the following year did create anxiety for two teachers. Useful strategies for dealing with the end of a mutually satisfying research partnership include: openly discussing the imminent loss and easing out of the field rather than abruptly ending it (Bogdan & Biklen, 1998). Also supportive is an invitation to the insiders to continue participation with the outsider in different forms, such as co-publishing or co-presenting. These initiatives were taken up by one of the teachers in this study.

3.5 DATA GENERATION METHODS

Interpretive researchers hold that data are not out there to be collected by objective researchers, instead they are *generated* through the researcher's relationships with participants and interpretations made thereof (Graue & Walsh, 1998). Because qualitative research is descriptive, data generation takes the form of words and pictures from the field. This section considers the data generation methods used in this study.

3.5.1 Participant observation

Eisner (1998) claimed that the "richest vein of information is struck through direct observation" (p. 182). Observations in the classroom can be structured or unstructured. Structured observations are made using a schedule to record the timing and nature of events, whereas unstructured observations are jotted in a notebook to record full details of social interactions and events as they unfold. Participant observations vary in their degree of observation and participation illustrated by Glesne and Peshkin (1999) on a participant-observation continuum. At the observer end of this continuum, the researcher has little or no interaction with the people in

the setting, such as observing a classroom through a one way mirror. At the next point on the continuum, the observer-as-participant is still mainly an observer but has some interaction, such as taking notes at the back of a classroom. Further along the continuum the participant-as-observer interacts extensively with others, such as engaging in a range of classroom activities and also taking notes. At the far end of the continuum the teacher *is* the researcher or full participant in the classroom. For the purposes of this study, I positioned myself as participant-as-observer.

3.5.2 Interviews with teachers

The qualitative interview is used to supplement the rich descriptions from observations to ensure the interpretation of meaning is consistent with the participant's view (Eisenhart, 2001). Interviews are categorised as highly structured, semi-structured or unstructured (Fontana & Frey, 2000; Merriam, 1998). A highly structured, or standardised interview, is an oral form of a survey in which predetermined questions are asked in sequential order. Unstructured or informal interviews are more like a conversation that explore themes relevant to the inquiry. Between these two extremes, semi-structured interviews are guided by open-ended questions, responses to which are probed for deeper meaning. The present study used semi and unstructured interviews because of their potential for spontaneity, flexibility and probing. The semi-structured interview schedule contains specific and open-ended questions of different types such as: following-up, probing, detailing, interpretive, hypothetical, direct and indirect.

Kvale (1996) wrote about interviews as “a construction site of knowledge...between two persons conversing about a theme of mutual interest” (p. 2). This perspective is based on a sociocultural premise that new understandings are embedded in an exchange of views, or dialogue; new understandings are developed between people. Interviews in this sense are a journey as Kvale explained using a traveller metaphor:

The interviewer wanders along with the inhabitants, asks questions that lead the subjects to tell their own stories of their lived world, and converses with them in the original Latin meaning of conversation as ‘wandering together with’. (p. 4)

Kvale's ideas are shared by other sociocultural researchers who liken interviews to research conversations (Gollop, 2000), long and serious conversations (Feldman, 1999), purposeful conversations (Berg, 2001), guided conversations (Rubin & Rubin, 1995), and negotiated accomplishments (Fontana & Frey, 2000). Knowledge is shared and new understandings developed as both the interviewee and the interviewer jointly construct the conversation (Feldman, 1999), which as sociocultural theorists argue, is shaped by the context in which the interview takes place. While there is always an asymmetry of power where the interviewer defines the overall focus, efforts were made in the present study to shift this power in favour of the interviewee, by encouraging them to direct the conversation to issues that mattered to them. By restructuring traditional hierarchical research relationships, the data gained depth and reality (Rubin & Rubin, 1995), and teachers developed their voice (Gitlin et al., 1992).

While face-to-face conversation in a research community is the preferred mode of discourse, electronic mail can provide another point of connection between the participants (Chang-Wells & Wells, 1997). These writers found electronic mail to be useful when research participants worked in separate locations. Advantages of conversations through electronic mail include revisiting an event and rethinking its meaning in the act of writing to which other participants can respond. This has the potential to create a richer description of teachers' perspectives. Disadvantages of using electronic mail include the risk of developing a culture of exclusion if they are sent between only two members of the community.

3.5.3 Interviews with children

Interviews with children are increasingly becoming a means to generate rich data about their feelings and perspectives in relation to their classroom learning. In line with the suggestion of David, Edwards and Alldred (2001), children in this study were interviewed in pairs to optimise the potential for them to "take control of the discussion and draw it off onto a number of different tangents" (Connolly, 1997, p. 171). Mayall's (2000) analysis of research conversations with pairs or groups of children revealed their social competence to listen, respond, add points, and to support each other to speak; talking with children showcased their collaborative abilities. At the heart of successful conversations with children is the relationship and

rapport that develops between them and the researcher. Gollop (2000) suggested rapport building strategies such as disclosing information about the researcher, valuing children's ideas, being relaxed, giving choices about talking, and creating spaces for children to direct the dialogue. The latter point is emphasised by Mayall (2000) as a means of encouraging discussion about things that matter to them.

Including children in this research created unique challenges. For instance, despite my earlier assurance that no right answers existed, having our research conversations in the school context initially led some children to respond in a traditional teacher-pupil interaction. For instance, when I probed an initial response, some children concluded that it was incorrect. As Graue and Walsh (1998) pointed out, children expect that the answers to questions posed by an adult are known by that adult: "few children have had the experience of being approached by an adult who wants them, the kids, to teach her, the adult, about their lives" (p. 113). I made a point of conveying to the children my belief in their social competence and in the expertise they had to share with me. I was also mindful of Connolly's (1997) allegation that there can never be "one, true and definitive 'authentic voice' of young children" (p. 179), only voices that respond to the context and relationships therein.

3.5.4 Documents, photographs and research diary

Documents are a useful source of evidence to support themes emerging through other methods. Categorized as either: personal documents, official texts or reflections of popular culture, they can include letters, school policies and student magazines (Bogdan & Biklen, 1998). While analyses of these documents can reveal rich accounts of the author's perspective, they do not reveal the diverse perspectives and disagreements that may have transpired in their writing (Pollard, Thiessen & Filer, 1997). Consideration thus needs to be given to the possibility of their representing a sanitised version of events.

Photographs are another valuable means to enhance participant observation (Glesne & Peshkin, 1999). While there is debate about the efficacy and ethics of using photography in qualitative research (Bogdan & Biklen, 1998), it is a relatively unobtrusive way to add value to data because it enables the researcher to see the complexity and ambiguity of a situation without getting caught up in it (Wolcott,

1994). Photographic records can also stimulate later discussion about the interactions that occurred around them, this acting as a door into a sequence of actions, rather than as a window into a single time and place (Forman & Fyfe, 1998).

A research diary is a valuable means to reflect on the research process and the relationships therein. A diary is also a means to maintain reflexivity where the effect of the researcher's values, feelings and actions can be identified (Winter, 1987). Research diaries have been used to explore responses to issues that arise in the research and to the feelings associated with these such as the "untidiness" of CAR (Lee, 2002). The process of writing can also enable understandings to emerge of the research process, and to engender strategies to cope with the anxiety which can become a constant research companion (Glesne & Peshkin, 1999).

3.6 DATA ANALYSIS

Data analysis in qualitative research has been likened to "a mysterious metamorphosis [in which] the investigator retreated with data, applied his or her analytic powers, and emerged butterfly-like with 'findings'" (Merriam, 1998, p. 156). Analysis is a creative process that organises the data, breaks it into manageable pieces, synthesises it to find patterns from which theories and new understandings can develop (Bogdan & Biklen, 1998). It is a sense-making process that moves from simply describing data, to categorising it, to finally interpreting or theorising it. This three dimensional process is seen as moving up "from the empirical trenches to a more conceptual overview of the landscape" (Miles & Huberman, 1994, p. 261). As such, data analysis is a complex, intuitive, holistic and time-consuming process that involves moving back and forth between concrete bits of data and larger abstract concepts (Glesne & Peshkin, 1999). Bogdan and Biklen (1998) identified two modes of data analysis: analysis *in* the field and analysis *after* the data are generated. Analysis of the raw data generated in this CAR was a daunting and time-consuming exercise; coding, memoing and writing being useful tools in this task.

Coding is the heart of analysis where judgements are made about the meanings of chunks of text, and labels are attached to isolate the most striking aspects of the data. As such, coding is a sorting tool to interrogate the meanings held within larger

categories of meaning emerging from the data (Graue & Walsh, 1998). While coding is a process of data reduction (Neuman & Kreuger, 2003), in the present study, multiple codings against one chunk of text served to enlarge the data set. However, revisiting the same text chunks under different codes enabled new connections or distinctions to be seen and to separate them into deeper layers of meaning. *Memoing* is a tool to help make sense of early interpretations made in the coding process. As notes to self, they enable hunches and insights to be documented, as they occur in the coding process: they can trigger new ways of exploring the data. Memoing is a means to play with the data and to speculate about possible conceptual meanings. *Writing* is another tool to support the immense cognitive task of theorising about the data. In the case of the present research, it was in the process of making tables, charts, chapter overviews and writing numerous drafts of each chapter that the data were theorised and meaningful conclusions reached.

Electronic software packages are another supportive tool in the analysis process. While qualitative software does not analyse data, it does have an immense capacity to manage large amounts of it. After reviewing advantages and disadvantages of electronically managing data (Tesch, 1990), I chose to use *NVivo* (Qualitative Solutions and Research, 2002). As detailed in the following chapter, this software provided a technical tool to manage the analysis process. Coding data electronically helped to find my way into the code mines (Glesne & Peshkin, 1999), break down the complexity, recognise patterns, and quickly retrieve coded items. As such, *NVivo* provided a user-friendly store, sort and retrieve function. Of greater importance, however, were the conceptual tools derived from sociocultural theory which enabled me to observe participation and to make sense of the transformations therein.

3.6.1 Sociocultural analysis

The writings of Rogoff (1998, 2003) about the cultural nature of development, as discussed in the previous chapter, are drawn upon in the analysis process. Rogoff (1998) argued that people can not “be taken outside of the activity to have their development analyzed” (p. 688); that individual, interpersonal and institutional processes mutually constitute each other and are therefore inseparable. Analyses of

their transformations of participation are thus considered simultaneously by observing activity through three lenses: first from a personal perspective, then from an interpersonal viewpoint and then from an institutional angle. As Rogoff (2003) argued:

The child is fore-grounded, with information about him [or her] as an individual as the focus of analysis. At the same time, interpersonal and cultural-institutional information is available in the background. A general sense of interpersonal and cultural-institutional information is necessary to understand what this child is doing, although it does not need to be attended to in the same detail as the children's efforts. (p. 56)

According to Rogoff (2003), the personal lens is used to analyse individual development by bringing into focus the teacher's or child's participation in learning and teaching activity. While observing individual participation and contributions to group activity, interpersonal and institutional information remains available in the background. An interpersonal lens is used to analyse interaction patterns between and among the children and the teacher. While observing this interaction, personal and institutional information is temporarily blurred in the background. An institutional lens is used to focus upon and analyse the cultural rituals, values and practices of the classroom while personal and interpersonal information is placed in the background. Observing the development of a community of learners through these analytic lenses will ensure rich observations and complex understandings (Fleer & Robbins, 2004).

This sociocultural analysis was used to illustrate how development occurred in the process of participation which was focused through "community, interpersonal and personal *planes of analysis*" [italics added] (Rogoff et al., 1995, p. 46). As the Girl Scouts participated in the culturally organised activity of selling biscuits, transformation of participation was seen in marketing practices where, instead of door-to-door sales, they began to use telephones, facsimiles and computers. This illustrated development through the community plane of analysis. As the girls collaborated with other Scouts, family members and customers using these new marketing tools, they took on new organisational and planning roles. This illustrated development through the interpersonal plane of analysis. Embedded in these interpersonal and community processes were new personal understandings of marketing, new money handling skills, and problem solving abilities, illustrating

development through the personal plane of analysis. The use of these three planes of analysis, later referred to as lenses or foci of analysis (Rogoff, 2003), revealed learning and development as involving mutually constituting personal, interpersonal and community processes. Activity viewed using one lens was not isolated, nor was it primary “except with regard to being the current focus of attention” (Rogoff, 1997, p. 269).

3.6.2 Validity and reliability of the data

While concepts of validity and reliability are challenged by action researchers because their findings are context-specific (Woods, 1996), they remain an inescapable concern for qualitative research. To ensure the findings from action research reflect the evidence (validity), concern is given to principles of fairness, authenticity and reflexivity (Lincoln & Guba, 2000). Fairness focuses on the presentation of a balanced and trustworthy account that represents the concerns of all participants; to omit any voice is a form of bias. Educative authenticity also contributes to balance and fairness by supporting participants to engage in co-constructive processes about the phenomenon under study. Reflexive critique is also important in action research whereby researchers reveal their personal history (Gitlin et al., 1992) and examine their role in the collection and analysis of data.

To ensure an accurate and comprehensive fit between what is recorded as data and what actually occurred in the setting (reliability) focus is given to the dependability of data through respondent validation and triangulation. Respondent validation (Delamont, 1992) concerns returning copies of interview transcripts, comprehensive fieldnotes and early analysis to participants for their response to its accuracy. Triangulation is another means to achieve dependability of data by aiming to get two or more sightings from multiple positions to get a fix on an accurate meaning (Delamont, 1992). Two types of triangulation were used in this study. Triangulation between methods was used by employing multiple methods, and triangulation between researchers was used by collaborating with the teachers.

The term transferability replaces the idea of generalisability, to ensure its usefulness to a reader in other contexts. Because findings in action research can not be generalised to other settings, qualitative researchers carefully detail the setting and

the participants so readers can judge the applicability of its findings to their own contexts (Bogdan & Biklen, 1998). Using multiple classrooms and describing in detail the settings and participants can support the transferability of findings to a broader range of situations.

3.7 ETHICAL CONSIDERATIONS

Entering teachers' and children's classroom with the view to doing research with them is intrusive and has the potential to cause harm. The ethics of action research focuses on the need to protect participants from possible harm. Zeni (2001) pointed out, however, that the practicality of providing protection is "ambiguous, context-sensitive and therefore resistant to generic regulations" (p. xi). Mindful of Zeni's caution, this section discusses the principles and procedures required to develop an ethically sound relationship with teachers and children. Chapter Four details how these ethical considerations were managed in the present study.

3.7.1 Informed consent

The principle of informed consent is fundamental to ethical research because it concerns an individual's right to choose to participate (Cardno, 2003). To ensure those consenting are fully informed, Frankfort-Nachmias and Nachmias (1996) proposed four principles: full information, comprehension, competence, and voluntarism. It is the responsibility of the researcher to provide *full information* to potential participants about the aims of the study, the research processes, the roles they would be expected to take, the commitments they would be making, and the ethical procedures designed to minimise harm. It is also critical that potential participants are able to *comprehend* this information. This implies writing the information sheet in language appropriate to the age of the reader and providing opportunities to discuss these details. It is also important to consider the *competence* of potential participants to make sense of the information and their capability to make a decision about taking part in the research. Finally, participants must be able to *volunteer* to participate, free from any "fraud, deceit, duress, or similar unfair inducement or manipulation" (Berg, 2001, p. 56). This principle of voluntarism is particularly important in a school context which is "inscribed by differential power relations" (David et al., 2001, p. 352).

These four principles underpinning informed consent are particularly important when researching with children. The present study draws upon research findings where educational methods were used to support children to understand information about a proposed school-based study (David et al., 2001). These researchers were committed to upholding the rights of children and to ensuring they could *volunteer* to participate. The children, all of whom were considered *competent* to process age-appropriate information, and to make choices as to how they might participate in the study, if at all, were provided with *full information* through specially designed leaflets. These leaflets, including questions and answers children might ask about the research topic and their participation in it, were used as a basis for whole-class discussions with the researchers. Participation in these dialogic approaches helped the children *comprehend* the research after which time they were able to confidentially complete a tick-box style consent form. David et al (2001) pointed out that their consent procedures to ensure children were fully informed “invoked some of the social meanings that [they] wished to explore” (p. 348); that is the material resulting from these whole-class activities constituted data. Their findings reveal the complexity of recruiting children for school-based research, and the conundrum that by gaining “educated consent” they are already participating.

The notion of informed consent is also problematic in action research because much of the information at its inception is unavailable and likely to change in a way that cannot be anticipated (Zeni, 2001). For this reason, informed consent needs to be treated as a process of ongoing negotiation with the participants, rather than as a single event at its inception (Alton-Lee, 2001). If a university-based researcher is involved in the research, permission to make changes to the protocol needs to be sought from the university’s ethics committee as the action research progresses.

3.7.2 Privacy, anonymity and confidentiality

Three further means to protect research participants from harm are rights to privacy, anonymity and confidentiality. *Privacy* relates to controlling the access of others to self, and maintaining the freedom to decide when, and to what extent, actions and perspectives can be shared with others. *Anonymity* acts to separate the identity of an individual or institution from information they give by using pseudonyms so they can

not be identified. *Confidentiality* is the assurance given to participants that the information they provide will only be known to the researcher and not made public.

As with informed consent, it is problematic to guarantee *privacy* in action research because of its essentially collaborative nature. It is important, therefore, to advise participants of instances where privacy may be impaired. For instance, rights to privacy for the teacher can be difficult to maintain. While times for classroom observations need to be pre-arranged to suit the teacher, it is impossible to predict that these times will end up being suitable. Protecting children's right to privacy is also an issue for action research. For instance, talking with children in the classroom for purposes of the research will conflict with expectations to complete work set by the teacher. Efforts need to be made to respect their right to privacy and to seek permission prior to: collecting samples of work, having an interview or taking photographs. These issues highlight the importance of developing trusting and respectful relationships with the participants so that honesty can prevail if their rights to privacy are unintentionally breached.

Assurances of *anonymity* can also be difficult to keep in action research. This is particularly so when other teachers and children at the school know the identity of the participants. Anonymity can also become problematic if some participants want to be recognised as co-inquirers because to do so increases the likelihood that the research site and other participants will be identified. While these issues of anonymity are still the focus of debate, Alton-Lee (2001) noted that certain risk of losing ownership caused by anonymity is a far greater ethical problem than the minimal risk of recognition. *Confidentiality* is also problematic in action research. For instance, the rights to confidentiality are breached when information is freely given in one context, such as discussion with a child during a classroom observation, and is later read about in the researcher's field-notes by the teacher for verification purposes. It is important therefore to tell participants how much confidentiality can be ensured, and to seek permission prior to sharing information with others in the research context.

3.7.3 Right to Withdraw

Research participants should be continuously informed of their right to withdraw from a study, especially a longitudinal study such as this one. Ethical tensions can arise where researchers need to weigh up potential good being done for society versus potential harm that may come to participants (Eisner, 1998). The privilege afforded to researchers to enter teachers' and children's place of learning, to reside within its culture and to make it their research site, does not afford them rights over the participants, nor compel them to stay part of the research. This right to withdraw is particularly important in action research with teachers because of the time-consuming nature of CAR on top of their other professional demands. The right to withdraw, or to decline to participate in any part of the research, needs to be made first on the information sheet but repeated regularly as the research proceeds.

3.8 CHAPTER SUMMARY

This chapter has explored the sociocultural approach to the methodology used in the present study. Adopting an interpretivist position, data are generated in natural settings to seek teachers' and children's perspectives of learning and teaching and of the changes happening as a community of learners develops. The present study builds on the various conceptions of contemporary action researchers who positioned teachers as knowers, as reflective researchers, and as agents for change. The key principles identifying action research as a collaborative, democratic, dialogic, participatory and practical methodology were shown to reflect the sociocultural principles underpinning the reviewed communities of learners (see Table 2.1, p. 36). Collaborative action research methodology was argued to be mutually supportive of a community of learners and an effective form of professional development because the knowledge, skills and values that teachers need to help children to learn in a community of learners, is generated when they treat their classrooms as sites for a collaborative inquiry.

This chapter has also highlighted a range of theoretical and practical tensions associated with CAR methodology to which the present study needs to remain mindful, especially those in relation to potential conflicts of role. The multiple data generation methods were described to reveal their essentially dialogic and

collaborative nature. The analysis of data was shown to be a complex, iterative and creative process using the technical tools of *NVivo* and the conceptual tools of Rogoff's (2003) personal, interpersonal and institutional lenses. Finally, the ethical considerations highlighted the tensions and complexities faced by participants in action research, as well as the responsibilities of those who initiate the research to protect them from harm.

The following chapter outlines the methodology in action. Specific details are provided to describe the methods used to enter and exit the field, to generate and analyse the data, as well as to protect participants from harm.

CHAPTER FOUR

METHODOLOGY IN ACTION

4.1 INTRODUCTION

This chapter documents the methodology in action by describing how the methods, outlined in the previous chapter, were used in this study. The ethical procedures involved in entering the field are first described followed by the processes used to select the teachers and the target children. Details are then provided for the research site and the participants. The specific use of the data generation methods at the school site, and beyond it, are fully explained and summarised, followed by a description of how I withdrew from the research site. Procedures used for sorting, coding, analysing and presenting the data are also described. This chapter concludes by providing an overview of the study to highlight the structure that held together its evolutionary processes. Table 4.1 defines the abbreviations used to identify the data sources.

Table 4.1 Description of the data sources

Method	Code	Description
Classroom observation (CO)	05.12.03CO80/1	Observation date and number/ classroom number
Memo or comment written about the observation	(27.11.03CO79/2MEMO)	Memo date/observation and classroom number
Interview with principal/teacher/child	14.03.03TiareINT:44	Interview date/pseudonym/ interview page number
Conversation (CONV) with teacher/child	26.05.03AmyCONV	Conversation date/ pseudonym/conversation
Reflection and Planning (RaP) day	08.04.03KellyRaP1:15	RaP date/pseudonym/ RaP number/page number
Reflections (REFL) written to teachers prior to RaP days	25.06.03RaP2REFL	RaP date/ RaP number/ reflection
Email from or to participant	19.07.03RickEMAIL	Email date/pseudonym
Document	25.05.03Worksample/DOC	Publication date/ example/document
Research diary	07.12.03DIARY	Entry date/ diary

4.2 ENTRY TO THE FIELD

Prior to selecting a school, I faced the dilemma of finding teachers working in a local primary school who shared my enthusiasm for developing a community of learners, who were prepared to participate with me in this action research, *and* whose Principal supported these collaborative research initiatives. Selection was thus consistent with purposive sampling (Berg, 2001). In my efforts to find such a sample, I took on a facilitation role with the Ministry of Education to work on their project entitled *The New Zealand Curriculum Exemplars*. On the advice from the Massey University Human Ethics Committee (MUHEC) in October 2001, I made it known to the Principals and teachers of the participating schools that, while I would be working as the Project Facilitator, I would also be identifying a potential site for my own research. During 2002, I worked with teachers and children in four local primary schools to develop Social Studies Exemplars which enabled me to assess their interest in, and suitability for, my research. The proposal to conduct this research was submitted to MUHEC and approved in Protocol 02/29 in May 2002.

I was confident that one of the schools, Jubilee School, (a pseudonym) would make a good research site with its promotion of innovative curriculum delivery that fostered learning partnerships in “relationship-driven teaching” (Rogers & Renard, 1999, p. 34). I made initial telephone contact with the Principal in July 2002 to suggest Jubilee School as a site for my study. A follow-up meeting was planned to discuss an informal proposal, including the collaborative roles required of teachers who were interested in the idea of developing their classrooms as a community of learners. From our discussion, it was evident that my proposal was within the school’s “zone of accepted practice” (Zeni, 2001, p.158). I wrote to the Board of Trustees (BOT) inviting their school to participate in the research (see Appendix A1). On advice from the lead researcher of the Exemplar Project, I indicated to the Ministry of Education my intent to make one of the Project’s schools my research site, assuring them that, as my exemplar work in that school was complete, there would be no conflict of interest.

4.2.1 Description of the school

Jubilee School is a large New Zealand urban state primary school in a provincial city, catering for over 500 children from Years 1 - 8. Jubilee has a multicultural roll

comprising 56% European New Zealanders, 30% Māori (indigenous people), 8% Pasifika and 6% other. For professional development purposes, the school is divided into two multi-level clusters run by two deputy principals. For planning purposes, the school is divided into five teams each with its own leader. A set of value statements prioritised in each of the five teams is displayed in the school's entrance foyer as an expression of each team's *tūrangawaewae* or place to stand.

Children at Jubilee School came from a wide range of socioeconomic backgrounds. The school has a decile three ranking reflecting the low socioeconomic status of individual families. (Decile rankings range from 1 to 10, 1 being a very low, and 10 a very high socioeconomic status). The high proportion of transient families in the local community brought a range of social problems to the school. The present research was conducted within the Year 3 / 4 team of Jubilee School. These research classrooms were situated together in an L shaped block of five classrooms connected by an external covered walkway. Rooms One and Two were connected through an internal coat bay and by a long narrow room to the rear. Rooms Three and Four, on the other side of the L shape, were connected by a semi-enclosed coat bay. The fifth classroom sat empty in the corner of the L shape but was used later in the year as a new entrant room. This classroom block was separate from the school's main building and bordered a grassed playing field.

4.2.2 The participants

Once the BOT had consented to the school becoming a site for this research (see Appendix A2), I suggested that a third party invite the teachers to participate in this study so as to minimise the possibility of coercion. This offer was not taken up by Hugh (pseudonym for the retiring principal). Instead he advised all the teachers in the school about the general nature of this research, indicating that, if it were to proceed, it would be situated within the Year 3 / 4 team. Hugh asked for volunteers to teach in that team as an expression of interest to participate in the study:

We let people know that if you want to work in that team, you're going to be doing this research. Rick has always been keen...and Tiare wanted to be in it... Amy and Kelly wanted to be there too, and there are a couple who want to tag along in any way they can. And they'd love to be involved. And they see it as a huge opportunity. (11.12.02HughINT:22)

On receipt of the names of four teachers who had expressed interest in the research, an Information Sheet was sent to them inviting their participation, and extending an invitation to discuss the research (see Appendix A3). With this offer taken up, I met with the four teachers for two hours in one of the teacher's home in December 2002, where they were meeting to discuss the values that would unify their team. At this meeting, I explained the research aims, including a brief explanation of a community of learners. I also explained the emergent design of this collaborative research, and its ethical obligations. I explained that I could not assure complete anonymity because other teachers at the school would know their identity. I also described the difficulty protecting their right to privacy in the classroom.

The teachers raised a range of issues, including concerns about their ability to collaborate in action research. One teacher revealed her fear of having another adult in the classroom. Another teacher expressed enthusiasm for this research which was seen as a means for professional and personal learning. Two other teachers raised the issue of me having the expertise and them learning about developing a community of learners *from* me. On that day, these issues became topics of conversation, during which some of the potential conflicts of role, discussed in the previous chapter, were raised. This meeting enabled me to listen to their concerns, as well as to demonstrate my appreciation of their expertise and my belief in our joint participation as a means for all of us to learn. This was the first of many professional conversations with the teachers, after which I gave them their Consent Forms and asked that these be posted back to me (see Appendix A4).

This preliminary meeting with the teachers created opportunities for them to talk about the research and in so doing, to begin to understand what it was about so that they could give their "educated consent" to participate (David et al., 2001). Once the teachers had consented, we worked together to design a sequence of learning activities to support children to understand the nature of the research "in order for them to make 'choices' about participation" (p. 347). These activities, led by me, used the six thinking hats (de Bono, 1985) which was a familiar strategy to the children, and which supported discussion about the research (see Appendix A5). I also built on an analogy children made to a community being like honeycomb, inspired by the hexagonal shapes used to create a jigsaw of the knowledge, skills and

values each child brought to and could share in their classroom. These activities also integrated with their Social Studies learning about community, culture, rights and responsibilities. At the end of these sessions, Information Sheets (see Appendix A6), and a child-friendly pamphlet (see Appendix A6a), and a Consent Form (see Appendix A7) were given to the children. Information Sheets and Consent Forms for parents/carers were also given to the children to take home (see Appendix A8 and A9). An invitation was included for parents/carers to discuss the study with me: an offer not taken up. A post-box was placed in each classroom for children to return their own and their parents' completed Consent Forms. Consent was treated as a process of ongoing negotiation by seeking regularly teachers' and children's permission prior to talking or working with them. In addition, pamphlets were designed mid way through the research for each class to illustrate new forms of joint participation and to prompt ongoing discussion between children, teachers and parents. A consent form was signed by the transcriber agreeing to confidentiality (see Appendix A10).

Both parents/carer *and* child had to consent to participate in the study. If a child was non-consenting, subsequent to their parent/carer permission, that child's non-consent stood. A 61% overall response rate (n = 73) came from a possible 120 students, of which 80% were positive from both parent/carer *and* child. Of the overall responses, 20% (n = 15) were negative from a parent/carer, a child or both to being observed and/or to participating in a taped interview. As observational notes and tape-recorded interviews were essential, these 15 children were not considered for inclusion. This gave a pool of 58 children across the four classes, from which 16 target children could be selected. Non-consent to participate meant that these children still participated in the class programme but they were not targeted for observation.

In order to ensure representativeness of gender, ethnicity and ability, the teachers selected the four target children from the consenting pool of children in their class. Across the four classes, seven children were female and nine were male. The mix of ethnicity included ten European New Zealanders, three Māori, two Samoans and one Iraqi. Their abilities also varied across curriculum areas, and all were perceived to be confident to talk with me. Given the high turnover of children at Jubilee School, target children were also chosen for their likelihood to remain at the school for the

duration of the research. The average age of the target children was 8.2 years. Table 4.2 below shows specific details of the 16 target children, all of whom were given pseudonyms to maintain anonymity.

Table 4.2 Details of participants across the four classrooms

Rm No.	Number of children in class 02.02.03	Teacher pseudonym gender and ethnicity	Age at 02.02.03	Years teaching	Target children's pseudonym and gender	Age at 02.02.03	Years at the School
Rm 1	30	Rick M European NZ	35 Team leader	3	Sakura F Era F Ikani M Caleb M	8.4 8.6 8.6 8.6	3 1 1 0
Rm 2	29	Amy F European NZ	25	2	Mere F Wendy F Aaron M Dan M	8.7 8.8 7.5 7.10	2 3 3 2
Rm 3	30	Tiare F Māori	30	9	Michelle F Zac M Jonah M Mike M	7.5 7.4 7.9 8.1	3 1 3 3
Rm 4	31	Kelly F European NZ	27	2	Sarah F Alice F Tahu M Keith M	8.5 8.2 8.5 8.6	3 3 3 3

While I knew one of the teachers, Rick, from his pre-service teacher education, as well as through the Exemplar Project, where I had also met Tiare, I had not previously met Amy or Kelly. Rick, the team leader, had been teaching for three years at Jubilee School, following ten years in the commercial world. Amy had been teaching for two years at Jubilee School after working in child care centres. Kelly had also been teaching for two years at the school having earlier travelled overseas. These three teachers each held a degree and had later completed a Graduate Diploma of Teaching. Tiare had been teaching for nine years after completing a Diploma of Teaching (Primary). She had taught at Jubilee School for four years. Table 4.2 provides further details of these teachers, whose real names are replaced by pseudonyms.

4.3 DATA GENERATION AT THE SCHOOL

Data generation occurred on two sites, at the school and at the university. This section describes how I used the methods, described in the previous chapter, at Jubilee School site. These procedures include: participant observations, interviews, conversations and photographs.

4.3.1 Participant observations

I was at the school every week during term time from February 18 to December 15 2003. For security reasons, I signed in and out at the school office at each visit, stating my time of arrival and departure and the reason for my visit. Initially, my intention was to make weekly observations in each of the four classes. However, because of the time taken to write up each observation, while still continuing my University and Exemplar Project responsibilities, I only managed to observe in each classroom once, but sometimes twice, every second week, giving a total of 103 classroom observations over the year. After the educated consent sessions, Rick suggested I maintain a presence in each classroom so the children could feel comfortable with me. I participated as another adult in the classroom during these early sessions without taking notes. This also gave me a chance to overcome my feelings of anxiety about taking on a new role in the classroom; a constant theme in my research diary:

I'm not really sure of my role in the classroom yet. I'm not the teacher anymore, nor am I a teacher aide, a mother help, or a student. I'm a researcher. Where do I put myself? What do I do? How do you be a researcher? (23.02.03DIARY)

I began to write observation notes in an A4 spiral bound notebook. During observations, which varied from fifteen minutes to two hours, I sketched diagrams of the classroom and the positions of the target children. I also noted how the children and teacher interacted with each other, the tools they used, and my re-construction of conversations I had heard or been part of. If their interactions involved a child who had not consented to participate, I only noted the nature of the interaction with 'boy 1'. While I only worked intensively with four children from each classroom, I did not exclude talking with other children, if they initiated conversation with me, but I did not write about this.

Initially, visiting times were pre-arranged either at school or by phone, but the teachers came to prefer a more flexible approach and to *'just walk in'* (27.06.03TiareRaP2:6). From Term Two, I arrived at school, not knowing which class I would observe in. If it was not convenient to be in one class, I observed in another. One advantage of this flexibility was that I was free to observe whatever looked to be most interesting. Often the richest data were generated this way as noted in my research diary:

I popped my head round the door to drop off my field notes. All the children were on the mat, including Rick, looking at new Social Studies books. I wasn't going to observe in here this morning, but their genuine need to share together lured me in. (31.10.03DIARY)

On one occasion I decided not to enter a classroom when I heard tension in the teacher's voice, because I wanted to protect that teacher's right to privacy. I tried to be as unobtrusive as possible as I slipped into each classroom, ignoring the children and teacher while I decided where to position myself and how to participate. Sometimes I would sit alongside a target child to talk about his or her learning or I would participate with them in some way. I moved around the classroom to participate with all the target children and if their learning took them into the library, assembly hall or the playground, I followed. Sometimes, I observed a target child from a distance while still being able to see and hear their interactions. If the children were sitting together on the mat or in the assembly hall I sat beside them on the floor, rather than at the back of the room. If I was invited to join a class circle, I put my notebook away, for reasons described below:

The protocol of this participation precludes taking notes. To sit in the circle is to be in the circle; to take notes, takes me out of it. It would be unethical to disrespect this shared culture of collaboration by taking notes in circle. (25.11.03CO77)

I treated informed consent as a process by regularly re-seeking permission with individual target children to observe and talk with them. A typical response was: *'Yes! Sure. Is that what you have to do for your research?'* (02.04.03CalebCO17/1). I was also concerned that my talking with the children in class time would not disadvantage them. On one occasion, my actions did disadvantage a target child who, having not finished her spelling due to our conversation had to stay in at playtime to catch up. The following diary extract records my response to this dilemma:

I apologised for holding her up and missing her play time. She smiled in a way that said 'that's OK!' But, it's an ethical dilemma for this research where children are punished for my talking with them! She seemed to enjoy my apology. I suppose it's not often an adult apologises to a child in a school context? (31.10.03DIARY)

In the first term, observations were quite general as I familiarised myself with the culture of each classroom and decided how best to participate. At this early stage, my participation was designed as much to develop relationships with the teacher and the children, as to record activity that broadly related to the development of a community of learners. The teachers' professional development goals, set at our first and subsequent RaP days served to focus my observations from Term Two onward. While this gave every classroom a different observational focus, the four principles of a community of learners (see p. 85) provided a sense of cohesion to these observations.

As soon as possible after each observation, I reflected on my field jottings and wrote up comprehensive fieldnotes using a word processing programme with observer comments written in italics. I labelled each set of fieldnotes with a classroom observation number, room number, date, time, title and brief introduction. For example: CO42, Room 4, 12.08.03, 2.15pm: Deciding on questions for a science inquiry (see Appendix B1). Teachers were given copies of the fieldnotes after each observation was written up to read and respond to the interpretation I had made of events. Respondent validation thus became another means of keeping our conversations going, another means of learning together, as well as another means to maintain the authenticity and dependability of the data. Sometimes my observer comments contained questions and hunches that led to further reflection by the teacher, and by me, later in the analysis process. The teachers' further questions triggered my ongoing reflection, as is exemplified below:

Rick returned my field notes. It was so good to get his take on my notes so quickly. He reflected on an incident I had not seen (the children's insistence on What's on Top) and it reminded me of a similar incident I had read about. I thanked him for his responses and later shared the two page excerpt from Rogoff's book so he could see that other teachers had also experienced just this situation. We were building a conversation about the importance of sharing decisions with children. (21.05.03DIARY)

I also realised early in the data generation period that photographs taken in the classroom of target children participating in their learning activities would support later analysis of fieldnotes. My application to MUHEC to amend the original protocol required me to gain permission for taking photographs from the Principal, all the parents and all the children. As the school had already gained permission from parents for photographs to be taken for educational purposes, the Principal granted me permission to take photographs for this research, deemed by her as an educational endeavour. The photographs, as well as excerpts from my fieldnotes, proved to be an invaluable means to stimulate dialogue about activities during later interviews and conversations with teachers and children. With the help of these photographs embedded in the fieldnotes, I began to discern subtle new forms of joint participation in the classroom and to distinguish these from one-sided forms of participation. By so doing, I was tuning into activities which had previously been invisible to my eye. In this re-focusing, I began to make sense of the classroom activities in terms of Rogoff's (2003) three lenses: the cultural rituals and systems (observed through an institutional lens); interactions between and among children and teachers (interpersonal lens); and individual learning and development (personal lens).

4.3.2 Interviews as '*messy talk time*'

The first interview was conducted with the retiring *Principal*, Hugh, prior to the research. The semi-structured interview schedule for Hugh was made up of five sections: demographic details, changes at the school, shared beliefs, perspectives of professional development, and his view of future challenges facing the school (see Appendix B2). I concluded the interview by seeking his advice about how to best begin this research and in so doing, develop a learning community with the teachers. Hugh gave me documents that further described Jubilee School, including his soon to be delivered retirement speech, an Education Review Office (ERO) Report, School Charter, Policy Statements, and Strategic Plans. A copy of his interview transcript was sent to Hugh for verification. He made several amendments, and asked that one comment be deleted from the transcript.

The *target children* were interviewed in pairs at the end of each of the four school terms. Interviews, each lasting 30 – 40 minutes, were audio-taped and scheduled during class time. The interviews were usually held in the meeting room with a large

oval table and comfortable chairs. If this room was unavailable we met in a vacant classroom or the staffroom. The interview times were pre-arranged to avoid clashes with other activities the children were involved in, such as production rehearsals. The teachers and I decided it was best to be unobtrusive about collecting the target children from their classroom so as not to highlight their participation. I met the children for their interview prior to their class resuming from a break, or I quietly asked them in class, if that particular time was suitable to talk. On one occasion, a target child chose not to leave his activity to talk with me, and I respected his right to privacy at that time. All other target children joined me willingly for our interviews.

At the beginning of each interview, I thanked the children for leaving their classroom to talk with me, and assured them that the transcriber and I were the only people to listen to the tape. The children's comprehension of confidentiality was evident in the follow-up interview I had with the target children in the following year:

You didn't need to be afraid that you're going to give the tape to like 2XS and they're going to play it...cos you wouldn't...No one else was going to hear it. (23.02.04CalebINT:10)

I also reaffirmed that it was *their* views I was most interested in hearing and engaging with, there being no right or wrong answers. I showed the children how to operate the audio-tape recorder and asked them to turn it on when they were ready, and to stop it at any time by pressing the pause button. There were two instances when children turned the tape off to talk privately with me. A semi-structured interview schedule was designed to investigate children's participation in the classroom and their perspectives about learning and teaching (see Appendix B3). As the research evolved, these interviews focused more on the children's response to change as teachers began to develop a community of learners in their classroom.

The first interviews with the children in March began with questions about their personal history such as age, ethnicity, family placement, length of time at the school, and their interests. Discussion around these questions helped us settle comfortably together with the tape recorder. The full range of question types, as outlined in the previous chapter, was used to develop a rich picture of their perspectives and participation. The interview schedule was organised into four sections. The first part included questions designed to encourage discussion about the

children's participation in, and perspectives of, classroom learning. The second section aimed to find out about their perspectives of teaching, and how a teacher helps them to learn. The third section focused on shared learning activities in which teachers were learners, children were teachers or both were learning together. The final section focused on their vision to change participation in the classroom so as to improve learning. Ten questions from this semi-structured interview schedule were repeated in the subsequent three interviews to generate data about the transformation of children's perspectives and participation (see Appendix B4 for an interview transcript).

While the schedule of questions guided the interviews, I also wanted to verify my interpretation of children's classroom participation. Explaining that I valued their responses to my thinking, I read excerpts from my fieldnotes, to prompt recall of the event and to talk about their participation in it. Photographs were also used in the third and final interviews to prompt the children's memory of earlier classroom participation and to stimulate discussion about the interactions that occurred around them. The children talked readily and excitedly as they recalled their intentions and feelings during events captured in my fieldnotes or in photographs. The final interviews with target children were quite different. I talked with the four target children from each class as a group, and in one case invited target children from another class to join our discussion. As Mayall (2000) suggested, I had handed over some of the agenda to these children, which enabled them to build on each other's ideas about matters they regarded as important.

After the data generation period had officially finished, I decided to return to Jubilee School in February 2004, to talk with the target children about their participation in the research. The teachers felt that all the target children, now in four different classrooms, should be given the opportunity to talk with me. The children and I sat in a circle on the floor of a spare room, and with their consent, I audio-taped this discussion which had no particular questions in mind other than to reflect on their participation in the study. Our conversation covered some of the highlights and the problems of participation, as well as ways to improve processes for researching *with* children. The final words of this thesis are drawn from this last conversation.

The *teachers* were interviewed individually using a semi-structured format lasting approximately 90 minutes. The first interview was held in week six of Term One. Two of the teachers preferred to have their interview in their classroom, while the other two were comfortable to join me at my home after school. Prior to each interview, the teacher was given a copy of the questions. The interview began with an expression of gratitude for their time and for their willingness to participate in the study. I assured them of confidentiality, explaining that the transcriber had signed a confidentiality agreement. Verbatim transcriptions of these interviews were recorded and copies returned to the teachers for verification and comment.

The teachers' interviews aimed to explore their current participation in the classroom, and how this reflected their perspectives of learning and teaching. A second aim was to discuss their ideas for developing a community of learners. The semi-structured interview schedule focused on the same four broad themes as the target children's schedule (see Appendix B5). The first questions explored the teacher's background experiences, including out-of-school interests and current responsibilities at the school. Questions were then raised about significant moments in their teaching careers and their preferred ways of teaching. The third section focused on their role to support children's learning. The fourth section looked at different ways the teachers collaborated with children. Finally, their visions for change were discussed including how their strengths might become the basis for the goals set in this research.

These semi-structured teacher interviews were to be conducted at the end of each term. However, I soon realised that these formally arranged times and pre-considered questions, did not generate the richest data. Rich data were generated in short conversations as we participated in the classroom, or immediately afterward, about a genuine excitement, tension or event. This realisation early in the data generation fits with Schön's (1983) notion of teachers' learning being embedded in their reflection-in and on-practice. The following extract reveals Rick's valuing of what he termed, '*messy talk time*':

I liked the formal interviews...I like talking and it was provoking having 'professional talk' ...that's what I am enjoying, thinking and talking about what I do and why. Perhaps we need to programme in some messy talk time. (30.04.03RickEMAIL)

Messy talk time thus became a new way to generate data. We talked in the staffroom, on duty in the playground, in the classroom and via electronic mail. The central ideas of these talks were written up as soon as possible afterwards and returned to the teachers for verification and comment. A final interview was, however, held with each of the teachers at the end of Term Four. One teacher's interview was held at the school, another at her home, and two interviews were held in my garden. During one interview, a teacher was called away to attend an ill family member, so we agreed to continue the interview at the beginning of the following school year. Each teacher was sent a copy of the interview schedule (see Appendix B6) prior to meeting. These questions covered six issues: transformation of participation, changes in perspectives of teaching and learning, enabling factors, constraining factors, co-participation in the research, and future goals.

In May 2003, an interview was held with the new Principal, Jane (her pseudonym). A semi-structured interview schedule of five themes guided our discussion (see Appendix B7). We talked about challenges she faced in her new role, her views of professional development, her vision for the school, planned innovations and how developing a community of learners linked to these. We met in the meeting room and began to talk, but once our conversation turned to issues listed on the interview schedule, I asked Jane's permission to turn on the tape so as to capture what had transpired naturally into '*messy talk time*'. It was evident from our conversation that she wanted to be kept informed about our research, so as to support the transformations the teachers were seeking to make. After verifying her transcript, Jane agreed to parts of it being shared with the teachers at our forthcoming RaP day.

4.4 DATA GENERATION BEYOND THE SCHOOL

The following section describes four further procedures that took place beyond the school site. These methods include discussion at four Reflection and Planning (RaP) days held at the university, discussion using electronic mail, my use of a research diary and official school documents.

4.4.1 Reflection and planning days

Conscious of the time-consuming nature of CAR, I funded four teacher-release days for reflecting and planning for each teacher. The teachers left their classrooms at the end of each term to join me at the university for these RaP days. The rationale underpinning these four days was to share understandings of what was currently happening in the classrooms, to talk about individual efforts to develop a community of learners, and to share our perspectives of teaching and learning. I also shared my understanding of a sociocultural approach using a diagram (see Appendix B8) and by providing four principles derived from Rogoff et al (2001):

1. we are all learners together,
2. we share responsibility for learning,
3. we share decisions about learning,
4. we have caring conversations.

I introduced the methodological features of CAR by comparing it to the broad definition of a community of learners used in this study. This comparison, made in Table 4.3, was discussed on our first RaP day.

Table 4.3 Comparing a community of learners and collaborative action research

A central principle of a community of learners is ...	A central principle of collaborative action research is...
“ instruction that builds on children’s interests in a collaborative way, where learning activities are planned by children as well as adults , and adults learn from their own involvement as they help children learn” (Turkanis et al., 2001, p. 226).	methodology that builds on teachers’ interests in a collaborative way, where research activities are planned by teachers as well as researchers , and researchers learn from their own involvement as they help teachers learn.

On our first RaP day, we shared negotiated a process for the way we wanted to learn together in the study. Interestingly, our most valued approaches to working together, presented below in Table 4.4, were consistent with the four principles of a community of learners.

Table 4.4 Summary of shared values for learning together in the research

Learning together	An explanation	A quote from RaP day
making connections	Being a team player: to touch each other's lives.	<i>'Learning is about developing a relationship.'</i>
being calm	Both inner and outer calm as a management technique.	<i>'Step back and be proactive rather than reactive.'</i>
staying honest	See mistakes as a step to learn.	<i>'We muck up sometimes.'</i>
showing respect	Respect each other's issues.	<i>'I care about your concerns.'</i>
being a learner	We are learners even though we are called teachers.	<i>'I'm a teacher, but I still learn.'</i>
being fair	Explain why things are.	<i>'Reason it out.'</i>
jointly reflecting	Think about why we do things.	<i>Why not do it differently?</i>
letting go	Put out feelers despite feeling nervous about it.	<i>'I want to let go, but it's so hard.'</i>
sharing the load	Share the leadership, the power, the responsibility	<i>'I'm not responsible for everything.'</i>
having fun	Be in the moment and be creative, fun and flexible	<i>'Learning can be fun sometimes.'</i>

The four principles of a community of learners, listed above, served to anchor our discussion, to provide coherence across each teacher's goals and to develop our own understanding of a community of learners (see Appendix B9 for a RaP day excerpt). Prior to each of the four RaP days, I wrote feedback to each teacher based on my observations. From the second RaP day I structured my feedback in response to each teacher's professional development goals set previously, as well as used excerpts from my fieldnotes to seed new ideas (see Appendix B10). I also suggested that each teacher consider issues and events they wished to reflect upon. A jointly decided agenda was posted to each teacher in response to their request to have some structure to our RaP days (see Appendix B11). Also in response to the teachers' request, I gave them short excerpts from Rogoff et al (2001) to exemplify how teachers in North America had interpreted the four principles, identified above, to develop their learning communities. On the second RaP day, I shared an article written by Stewart (2002) who had interviewed teachers from Discovery 1, described in Chapter Two. Bringing in these other teachers' voices, served to enrich our conversations about developing a community of learners, a point noted by Kelly:

I found the readings helpful in putting the concept of a community of learners into a real context that I could visualise. The readings illustrated some examples and activities that could easily be adopted and contained things that were already happening in my class ... They made me feel more confident in my own practice. (28.04.03KellyEMAIL)

The RaP days followed the same sequence of reflecting back on each teacher's practice over the previous term. These discussions were guided by the teacher's goals and reflections, my reflective feedback, and the four principles of a community of learners. Once I had started taking digital images of classroom activity, we also used these to stimulate discussion. Toward the end of each RaP day, the teachers took turns to lead a session aimed at refining and extending their goals, as well as planning how these goals might be achieved. While these goals were set by each teacher, ways of implementing them became the focus of discussion to which we all contributed. Each teacher's goals then became the focus of my participant observations over the following term, as well as the focus of my feedback report prior to our next RaP day. An excerpt from my research diary illustrates this respect for individual goals coupled with our collegial approach to developing them:

Everyone was so supportive of each other's goals. This respect gave a sense of ownership. Never was the goal itself questioned...it was only explored out of shared concern for each teacher's success...if doubt crept in, the support from others was extraordinary. (28.06.03DIARY)

Our conversations made at our first RaP day were not tape-recorded because I had thought I would be able to jot brief notes and write these into full fieldnotes afterwards. However, I soon realised that by jotting notes, I was taking myself away from the dialogue that I wanted to be part of. As these conversations were generating rich data, I sought permission from the teachers to tape-record our subsequent three RaP days, with the understanding that if this impacted on the flow of our talk, the recorder would be turned off. The presence of the tape-recorder on the table did not present a barrier to talking. On two occasions it was turned off, once by me and once by another teacher in response to sensitive issues that had been raised.

Each RaP day signalled the closure of one cycle of reflecting, planning acting and observing, and the emergence of another, as portrayed in Table 4.7 (p. 97). As such, RaP days were crucial to developing our unique research partnership as well as

developing some structure to our CAR. RaP days also brought teachers to the university. Positioning the research in both our places of learning symbolised the coming together of two usually disparate cultures; that of the teacher and that of the researcher. My attempt to provide a safe and supportive place for the teachers in which new ideas were seeded and new initiatives sustained, was evident in my introduction to our second RaP day:

*And I do see today as our day even though it's research that I've got to make sense of. It's a day for us to talk, a day for believing in **us** – us as a team and you as an individual, and it's a day about having the confidence to develop your teaching. (27.06.03AllyRAP2:1)*

4.4.2 Electronic mail, research diary and documentary data

In the early data-generation period, it became evident that using electronic mail would create another valuable site for dialogue to continue at convenient times about classroom activity that I had been unable to observe. Two of the four teachers enjoyed the ease with which they could communicate their successes or frustrations in their classroom using electronic mail. One teacher never felt comfortable using this medium, instead preferring face-to-face contact. Electronic mail also proved an efficient way to make or change interview times, and to plan for and reflect upon our agenda for the RaP days. I also began sending copies of my fieldnotes to teachers for their verification as attachments in electronic mail, but I reverted to handing them hard copies as these were not print out and responded to.

My intention at the outset of this research was to negotiate with the teachers their use of a diary as a place to record their thoughts and feelings about changes happening in their classrooms. Coincidentally, Jane, the new Principal, distributed Reflection Diaries to the staff at this same time. Given the teachers' negative response to her initiative, I decided not to ask if they would like to use a research diary. However, I kept a research diary myself, as a place to find my voice as a new researcher, as a metacognitive tool to reflect upon my presence in the research, to anticipate possible new directions, and to write my response to the research.

Publicly available official documents were also used as part of the data generation methods. These documents included: school promotional brochures, strategic goals, values statements and ERO reports. These were useful to help me understand

demographics and the cultural ethos of the school, as well as its future directions. Samples of target children’s work were also used as examples of the kinds of activities the children were participating in.

Table 4.5 summarises the data generation methods used in this study and provides a brief justification for their use.

Table 4.5 Summary of the data generation methods.

Method	Details of procedure	Rationale
Interviews	Four formal semi-structured interviews with pairs of target children. (x 30)	To gain an understanding of children’s perspectives and their new forms of participation.
	Two formal semi-structured interviews with the four teachers, one at the beginning of the year, and one at end of the year. (x 8)	To gain an understanding of each teacher’s perspectives of and participation in teaching and learning.
	One formal semi-structured interview with retiring and new principal. (x 2)	To provide information about the culture of the school as well as their views about learning.
‘Messy talk time’	Conversations with target children throughout the year.	To co-construct understanding with children about their learning.
	Conversations with teachers throughout the year.	To co-construct understanding with teachers about practice.
	One semi-structured focus group discussion with target children after the data generation phase.	To co-construct understanding with the children about their participation in this research.
Participant Observations	Observations were made in each classroom or assembly once or twice a fortnight throughout the school year. Average observation time per week = 5 hours. (x 103)	To learn about teachers’ and children’s participation in the classroom, enabling me to enter into meaningful discourse about transformation of participation.
Reflection and Planning days	Four days of talks between me and the four teachers at the university. (x 18 hours)	To participate as a community of practice, reflecting upon and planning for transformation of participation in the classroom.
Electronic mail	Conversations via electronic mail began midway through the year.	To communicate with teachers about their participation in the classroom when I was off-site.
Documents	Documents that describe the values and plans of the school.	To provide another source of data about the school culture.
Photographs	Photographs of children learning.	To support recall of a prior event.
Research diary	Written before, during and after this data generation phase.	To capture my thoughts and feelings about participating in this collaborative research.

4.5 EXIT FROM THE FIELD

I was concerned that my withdrawal from the close relationships that had developed over the course of the research might harm teachers and children. Different activities were planned jointly to support the participants through the leaving process. The first activity involved the target children and me planting shrubs that I had donated to the school as a gesture of appreciation for allowing me the opportunity to conduct this research. I also wrote a personal message to each target child and teacher expressing my gratitude for their participation in the research. Another activity involved all the Year 3 / 4 team joining me and my student-teachers from the University for one day at a local reserve. The student-teachers engaged with the children in a range of Social Studies learning experiences planned as a requirement of their learning. At the end of the day, the teachers and children were escorted back to their awaiting buses by one student teacher playing his bagpipes - a poignant ritual that marked the formal severing of our research connections.

4.6 DATA ANALYSIS

This section describes the methods used to analyse data in the field as well as after the data generation period. My use of coding, memoing and writing as tools to support the analysis process are described. Computer software tools to manage the data are also described. The sociocultural analysis of data using Rogoff's (2003) personal, interpersonal and institutional lenses is also described. Finally, explanation is offered for the presentation of data in the following three results chapters. While I was prepared for the non-definitive stages of data generation and analysis in the field, I was unprepared for the complexity and uncertainty of the analysis processes after I had left the field. Bogdan and Biklen (1998) captured my feelings when they wrote, "There, facing you is all the material you have diligently collected. An empty feeling comes over you as you ask, 'Now what do I do?'" (p. 170).

4.6.1 Coding, memoing and writing

As noted above, the analysis process began in the field as full fieldnotes were written with my observer comments and with the teachers' reflective comments. I began the daunting task of analysis after the data generation period by reading and re-reading fieldnotes written from Room One. I looked for patterns and manually marked

similar pieces of information in the margins, and wrote comments on post-it notes. While this was enabling immersion in the data, it soon became apparent that I needed a system to better manage the complex, iterative processes of analysing so much data. *NVivo* (QSR, 2002) enabled me to do just this. An *NVivo* project was created for each classroom and fieldnotes, emails, interview transcripts and RaP day transcripts pertaining to that classroom were imported. Using the “browse a document function”, I read and re-read the data set from one classroom to identify initial themes. Using the “coder”, each theme was assigned a code which sometimes was an actual word the teachers or children used, such as *'headspace'*. Each coded chunk of text was placed at a “node” and stored with similar ideas (see Appendix C1). Each node was assigned a set of properties to ensure my coding remained consistent across the long and meandering analysis process. This list of node properties became my codebook, which guided the ongoing analysis of data from the other three classrooms. By sorting the data in this way, and repeatedly browsing the text coded at a node, I began to discern patterns and themes within and across the four classrooms.

“DataBites” was another *NVivo* function that enabled me to write my thoughts and attach them in the coded text. Inserting databites into a coded document was indicated by coloured and underlined text so that, at a later date, I could return to my earlier thought and continue theorising about it. Later in the analysis process, I shaped these “free nodes” into “tree nodes” to group similar themes together and to show relationships between them. These nodes could be moved in or out of different “branches” of the tree enabling further clarification of key themes. At this point, making tables became a useful tool to further sort the data (see Appendix C2). To my surprise, I found the act of writing about the themes identified in *NVivo* supported a much deeper level of theorising. Because, the data sources were readily identifiable in *NVivo*, I was able to return to original transcripts to check for deeper contextual meaning to clarify my developing arguments. Writing early drafts served to highlight false leads, illuminate new paths to follow in the analysis: it became the activity in which I became creative in the analysis and felt the satisfaction that comes from the pursuit of new understandings. The teachers were sent a copy of the results chapter that pertained to their classroom for comment.

4.6.2 Sociocultural data analysis

While *NVivo* provided the technical tools to code the data systematically, the institutional, interpersonal and personal lenses, as described in the previous chapter, provided conceptual tools to look at the data set. These analytic lenses were used to reveal the sociocultural context of the themes that had earlier emerged in the coding processes. For example, the theme ‘*child-initiated joint participation*’ emerged in the coding and memoing processes as an example of participation in a community of learners. This theme was then further examined through an interpersonal lens to identify more closely the nature of the teachers’ and children’s interactions, while temporarily backgrounding the individual child’s perspectives or understanding of joint participation (personal lens), as well as the cultural context of the classroom (institutional lens). Table 4.6 provides examples of the nature of participation observed using the three lenses as the teachers sought to develop a community of learners.

Table 4.6 Nature of participation observed through three lenses

Research Questions	Nature of the participation
1. How does the participation of Year 3 and 4 teachers and children change as a community of learners develops in their classroom?	<i>Personal focus:</i> Transformation of a teacher’s or a child’s skill, understanding, perspective, disposition or learning identity.
	<i>Interpersonal focus:</i> Transformation of interaction patterns between a child, the teacher and/or other children.
	<i>Institutional focus:</i> Transformation of taken-for-granted cultural practices, routines and values framed by the teacher’s professional development goals.
2. In what ways do Year 3 and 4 teachers’ and children’s perspectives about learning and teaching shape the development of a community of learners?	<i>Personal focus:</i> A teacher’s or a child’s perspectives of learning and teaching and tensions therein.
	<i>Interpersonal focus:</i> The impact of teachers’ and children’s perspectives on their ability to participate in shared activity.
	<i>Institutional focus:</i> The impact of teachers’ and children’s perspectives on the cultural rituals, routines and values in the classroom.
3. What factors constrain or enable Year 3 and 4 teachers and children to develop and to participate in a community of learners?	<i>Personal focus:</i> Individual perspectives, behaviours, tensions and emotions that enable or constrain a community of learners.
	<i>Interpersonal focus:</i> Interaction patterns that enable or constrain a community of learners.
	<i>Institutional focus:</i> Cultural practices, routines and values in the classroom or in the research that enable or constrain a community of learners.

4.6.3 Data presentation

In reporting the findings, direct quotations are taken from the data set to amplify the teachers' and the target children's voices. These data sources are identified in Table 4.1 (p. 71). The pseudonyms used for the four teachers and the sixteen target children are shown in Table 4.2 (p. 76). Evidence for the development of a community of learners is provided as teachers' and children's transformation of participation in the classroom. These transformations are presented in the following three results chapters according to the personal, interpersonal or institutional lens through which they were observed. Table 4.6, above, identifies the kinds of data reported through each of these lenses in relation to each of the research questions. By presenting the results in this way, the mutually constituting nature of the development of a community of learners can be understood: transformation reported through one lens, can be seen to shape and be shaped by, changes observed through the other two lenses.

The first two research questions, stated at the beginning of Chapter Three, guide the presentation of data in Chapters Five and Six. Chapter Five presents the transformations of participation in Room One, as well as the impact of Rick's and the target children's perspectives on their joint participation. Chapter Six presents separately the transformations of participation in Rooms Two, Three and Four, as well as the impact of the perspectives held by Amy, Tiare and Kelly, and their target children. While data are presented for all three teachers and all their target children through the institutional and interpersonal lenses, only the activity of each teacher and *one* target child from each of the three classrooms is reported through the personal lens. The decision to choose this target child was made using three criteria: the quantity of data, the triangulation of these data, and the ability of the data to reveal different aspects of the transformation process. Some target children had been absent when I was observing or were less confident to talk with me, which left me with less data about their participation. Data about some children had only been revealed through one source and was, therefore, less dependable than data generated from multiple methods. The third criterion for choosing a target child required a decision to be made about the nature of his or her transformation and the contribution it made to my reporting a full and rich picture of the development of a community of learners. Chapter Seven presents data in response to the third research question.

4.7 CHAPTER SUMMARY

This chapter has described and summarised how the qualitative methods, theorised in the previous chapter, were used in this collaborative action research to generate and analyse data at, and beyond, the school site. The ethical processes of selection, entry and exit were outlined, as were the procedures used to generate data in ways that minimised potential harm to the teachers and the target children. The methods used to analyse data during and after the data generation period were described using a sociocultural perspective. Finally, the presentation of data across the three results chapters as described.

The chapter concludes with an overview of this study in Table 4.7. While the same qualitative methods were used throughout the study, the table highlights the structure that held together the emergent and iterative cycles of CAR. Our first RaP day, held at the end of Term One, signalled the first of three cycles of CAR where teachers set individual goals to develop unique features of a community of learners in Term Two. At the end of this second term, data from my fieldnotes were summarised in relation to each teacher's goals in preparation for our conversations on our second RaP day. This second RaP day marked the beginning of the second CAR cycle where new and revised goals were set to focus action and data generation over Term Three. At the end of this third term, I summarised the data for teachers to support our reflective conversations about the achievement of their goals at our third RaP day. This third RaP day enabled teachers to set new and revised goals to focus action and data generation over the third CAR cycle in Term Four. Our fourth and final RaP day was held at the end of Term Four.

Table 4.7 Overview of the study

Research focus	<ul style="list-style-type: none"> • Identify teachers' and children's transformation of participation in learning and teaching. • Identify ways in which teachers' and children's perspectives shape the development of a community of learners. • Identify factors that constrain or enable teachers and children participate in a community of learners. 			
Methodology	Collaborative Action Research			
Methods	Semi-structured interviews with teachers and children Participant observation in classroom and other school settings Document analysis <i>Messy talk time</i> with teachers and children Photographs of teachers and children in learning and teaching activity Reflection and Planning Days with teachers only			
Participants	Children n = 16 F = 7 M = 9 Age range 7.4 – 8.8 years Teachers n = 4 F = 3 M = 1 Age range 25 – 35 years			
Research site	Four Year 3 / 4 classrooms in a full primary (Year 1-8) school			
Sequence of the study in 2003	Term 1 Reconnaissance Document analysis Observations in each class 1 st teacher interviews 1 st interviews with children 1 st Reflection & Planning day	Term 2 1 st CAR cycle begins Observations in each class Face-to-face dialogue 2 nd interviews with children 2 nd Reflection & Planning day	Term 3 2 nd CAR cycle begins Observations in each class with photos E-mail and face-to-face dialogue 3 rd interviews with children 3 rd Reflection & Planning day	Term 4 3 rd CAR cycle begins Observations in each class with photos E-mail, dialogue and 2 nd teacher interviews 4 th interviews with children 4 th Reflection day

CHAPTER FIVE

A COMMUNITY OF LEARNERS IN ROOM ONE

The question from a participation view becomes understanding the transformations that occur in children's participation in particular kinds of activities, which themselves transform. (Rogoff, 1997, p. 274)

5.1 INTRODUCTION

The line of reasoning presented by Rogoff (1997), above, highlights the importance of understanding how teachers and children in this study changed their participation in classroom activities, which themselves transformed. The aim of this chapter is to present the results of these transformations of participation in Room One as Rick sought to develop a community of learners. The presentation of results from just one classroom enables management of substantial quantities of data, as well as provides a structure to advance understanding of transformation in the other three classrooms. Details of the setting and cultural context of Room One are first provided. Data are then presented through the institutional lens to show new forms of culturally organised activity. Using an interpersonal lens, data are then presented to demonstrate new forms of collaborative interaction. Finally, data are presented through the personal lens to reveal Rick's and the four target children's new perspectives of teaching and learning, their new learning identities, and their new capacities for collaboration. These results illustrate how transformation observed through one lens shaped, and were shaped by activity observed through the other lenses.

The analysis of data in this chapter responds to the following two research questions.

How does the participation of Year 3 and 4 teachers and children change as a community of learners develops in their classroom?

In what ways do Year 3 and 4 teachers' and children's perspectives of learning and teaching shape the development of a community of learners?

5.2 SETTING and CULTURAL CONTEXT

While four classrooms at Jubilee School provided the *setting* for this study, data were generated in the *cultural context* of teachers' and children's classroom participation. These terms, used to distinguish the results presented in this, and, the following two chapters, require explanation. The setting refers to the physical features and layout of the classroom, and the cultural context refers to the everyday and often taken-for-granted rituals and routines which give meaning to the way the teachers and children go about their participation in teaching and learning. These cultural processes are embedded in the wider institutional context of the Year 3 / 4 team, as well as Jubilee School's values and expectations for learning which, in turn, are shaped by long held beliefs, expectations and traditions of schooling in New Zealand. The setting and cultural context of Room One are first described and illustrated with a short vignette.

5.2.1 The setting

Except for timetabled sessions in the library or in the hall and for morning break and lunchtime, Era, Sakura, Caleb and Ikani, the four target children from Room One stayed in their classroom for the school day. Natural light came into the classroom through two walls of windows; one facing north to the field, and another facing south. Double doors led into a shared coat bay through which the single door to Room One remained open. Another external door led out to the adventure playground and grassed playing field, and a third internal door opened into a back room which contained a wet area and two long, low tables. Twenty nine wooden desks and plastic chairs were arranged in five groupings surrounding a carpeted mat area. Another desk sat under the large whiteboard fixed to the wall. Rick's desk and padded swivel chair sat in the far corner with wall mounted notice boards and book shelves above. The room had a portable teaching station, a library, maths and computer corner and shelves for reading boxes and other resources. Other artifacts displayed on the walls at the start of the research included posters entitled:

- Our Culture: Action, Achievement and Attitude;
- Our Weekly Goal: To learn the names in our class, use them and to come down quietly onto the mat;
- Our Class Treaty: Being a team, self-control, stay calm, honest, respect, sharing, helping, fun, don't talk on the mat, don't interrupt the teacher, don't disturb others when they're learning.

5.2.2 The cultural context

The following vignette grounds the abstract culture of Room One, as observed early in the study, in the concrete particulars that occurred there (Graue & Walsh, 1998).

I am greeted by the voices of 30 children as they pack up from their previous activity. Noticing my arrival, Caleb, calls me over to help him spell a word. Ikani overhears and spells out the letters for him.

Rick: If you haven't finished, that might tell you that you haven't been working as hard as you could... Era, I want you to keep warm today...we don't want your asthma back. Princess Sakura, why are you always first on the mat?

Sakura, wearing her jewelled crown, beams back at him. She likes the way he uses humour. Rick's comments prompt others to the mat. Era squeezes into a spot behind Sakura so she can stroke her hair. Rick notices Ikani with his hood up and suggests he remove it. A girl gives the T sign; Rick nods his permission for her to use the toilet. A shrill ring from the phone pierces Rick's attempt to begin. He gestures to a girl to answer it. While motioning the children to come close to him as if like an aircraft signaller, Rick says the office lady on the phone can wait...this is learning time. Arms and legs folded, finally, everyone is ready.

Rick (turning to me): We're doing persuasive arguments. I took their books home last night to mark. They need to follow these four steps. Rick (to the class): I'm doing too much talking, Caleb, my friend, you tell Ally about persuasive arguments.

Caleb: Well the four steps are problem, then it's the writer's opinion, then it's reason why um that argument is happening and then um...

Era: ...what can be done?

Others are keen to join in and begin to talk over each other. Ikani is not with them: he's lost in his own world, shaking his head from side to side and winding his sleeve tightly round his wrist. Rick, keen to reinforce the sequence of steps they must follow, asks for all eyes his way. He asks permission to read a boy's persuasive argument about the problem of having to share a bedroom with his brother.

Rick: Now, we need to start thinking for our published ones. I want you to think about writing in sentences that link together rather than just making statements. Remember the publishing guidelines, they're up there. When I put a "P" in your book that means you can publish.

As Rick speaks, he notices some children not paying attention.

Rick: Ikani, my friend, are you listening? You won't know what to do. You two might like to separate yourselves. I know you've been sitting for a long time... thank you for paying attention... Now this is what I want you to do. When I give your book out, go to your desk, rule off yesterday's work, put today's date... I want this finished by bell time!

The children are called up one at a time to collect their draft book. On the way back to his desk, Caleb asks his friend what they are supposed to do. Sakura is already at her desk, clutching her soft toy she has already finished writing her problem statement. Ikani is locked in a game of facial grimacing with two boys. Era has found her red pen to rule off... She begins to head up the title, and asks how to spell persuasive.

Ratner's (2000) five interdependent aspects of culture including: cultural activities, cultural values, physical artifacts, psychological phenomena and agency are illustrated in this vignette to depict the nature of participation at the beginning of the study. The vignette shows Rick engaging with the children in mainly one-sided *cultural activities* and routines; he decides what they are learning, how they will go about their learning, and deals with the disruptions that threaten to interfere with his plans. The children mainly pay attention and comply with, or clarify, his instructions. The *cultural values* of care, respect, diligence, compliance, correct spelling and task completion are demonstrated as Rick sought permission to read a child's work, expressed concern for a child's health, expected the children to follow instructions and to work diligently to complete the task. The children focus on right spelling, using the right pen, underlining the right words and following the right procedure. The *physical artifacts* including: exercise books, pens, rulers, whiteboards, desks and chairs are tools for learning. *Psychological phenomenon* is evident in Sakura's enjoyment of Rick's humour, Ikani's dream-like state, Rick's apparent need to control the learning, and Caleb's need for reassurance. *Agency* is evident in Rick's motivation to encourage the children to learn and to complete this part of the curriculum. Agency is also evident in the children's motivation to earn the privilege to publish their writing and to tell me about it. These five aspects of culture are observed through an institutional lens.

5.3 TRANSFORMATION USING AN INSTITUTIONAL LENS

To understand the changes in Room One through an institutional lens, examination is first required of Rick's professional development goals set at the RaP days to focus his efforts to develop a community of learners. These goals and implementation strategies, recorded in Table 5.1, are evidence of Rick's agency and form, therefore, part of the cultural context observed through the institutional lens. Four key themes illustrating transformation through this lens are then presented. These new aspects of culture include: the struggle to let go of one-sided participation, the co-existence of one-sided and joint participation instructional models, the emergence of a culture of learning, and a ritual of sharing experiences beyond the classroom.

Table 5.1 Rick’s professional development goals

RaP Days	Professional Development Goals	Expression of four principles	Implementation Strategies
RaP 1 08.04.03	1. To enable kids to share their outside school lives in the classroom. 2. To give kids more real opportunities to decide/control what is learnt/done.	We have caring conversations. We share decisions about learning.	<ul style="list-style-type: none"> • Start <i>What’s on Top</i>. • Clear ‘<i>headspace</i>’. • Give learning focus. • Ask how kids want to do it. • Set joint guidelines. • Peer tutoring.
RaP 2 27.06.03	3. To make learning more visible. 4. To involve kids at the beginning of the learning process. 5. To include kids in management decisions. 6. To encourage caring.	We are all learners. We share decisions about learning. We have caring conversations.	<ul style="list-style-type: none"> • Reveal curriculum documents. • Have kids setting learning intentions. • Focus on what we are <i>learning</i> rather than what we are doing. • Kids develop success criteria. • Kids decide awards.
RaP 3 01.09.03	7. To continue bringing the learning to the surface. 8. To physically let go of the teaching space and control. 9. To participate <i>with</i> kids.	We are all learners. We share responsibility for learning.	<ul style="list-style-type: none"> • Continue making curriculum links. • Continue learning intentions and success criteria. • Make these visible for assessment. • Build on kid’s interest.

Ratner’s (2000) notion of culture is evident in Rick’s professional development goals and implementation strategies. New cultural activities are evident in strategies such as *What’s on Top*, peer tutoring and learning intentions. Participation in these new activities can promote new cultural values consistent with the four principles of a community of learners, such as collaboration, care and learning. New physical artifacts are used such as curriculum documents and visible displays of their learning intentions. Rick’s need to clear his ‘*headspace*’ and his persistence to pursue his goals, are both evidence of psychological phenomena. Finally, agency is evident in Rick’s goals and implementations strategies, and in his desire to share the responsibility for achieving these goals with the children.

5.3.1 The struggle to let go of one-sided participation

At the beginning of the study predominant interaction in Room One, as portrayed in the above vignette, confirmed that Rick was mainly using one-sided instructional models. Learning was either a function of his activity or the children's, to their mutual exclusion. Rick's one-sided activity included setting up his class the way he liked it, planning, controlling and timetabling the day's activities, all designed to achieve his curriculum-focused objectives. These teacher-generated activities commonly comprised of one-way communication. Rick gave instructions, granted permission to speak, made decisions, issued reprimands, asked questions and judged responses. Rick's directive role in these adult-run transmission models, as described later in Table 5.2 (p. 105) is evident in the following extract:

Rick: I've got to have a plan, a sequence of where I'm going ... I've got to have a focus...

Ally: Who makes the decisions?

Rick: Me... [I decide] the direction. I tell my kids that my classroom is not a democracy. I'm the boss and I'm not going to be challenged in that and the kids need to know that. (19.03.03RickINT:23)

Children-run interaction (see Table 5.2) was mainly observed when the children were free to choose an activity when they had finished their prescribed work, when they were awarded free time by the teacher, or when they worked on a task without the teacher's involvement. Typical examples of children-run interaction included: reading at the library corner, playing language games or working at an individual activity. Rick's participation was separate from the children's activity: he mostly scanned or roved the room to control behaviour without contributing to the activity.

In both these adult-run and children-run instructional models, a boundary separated Rick from the children. Either Rick was active in moving information across a boundary to be stored in children's minds, or the children were active in gaining skills and information from pre-arranged resources. Consequently, the development of shared meanings, or intersubjectivity, was precluded (Rogoff, 1997). Surrendering these one-sided activities to develop a community of learners was not a straightforward process. Rick's struggle to develop joint participation included: complex planning schemes, pendulum swings, contrivances and the delegation of children as proxy-teachers, as well as some brief and unaware forays into joint participation.

Rick's first attempt to develop joint participation derived from a complex planning scheme designed on our first RaP day. Using the theme of transport, each teacher was to plan and teach one part of this unit using objectives from a different curriculum area. After a set time, a few children from each class were to share their curriculum focused activities with children from the other three classes, who would then decide which curriculum focus sounded most appealing. The complex nature of this plan, as well as attempts to co-ordinate activity across three classrooms spelt its demise. Rick's next attempt to share activity with the children reflected a pendulum swing on the one-sided continuum from transmission to acquisition (see Figure 1.1, p. 2). His goal was *'to get the kids learning off each other ...to move away from me to the kids'* (19.03.03RickINT:27). Rick handed children full responsibility for deciding a new direction for learning, rather than *sharing* the decisions with them. In response to this opportunity to hold the power, the children initiated an equal and opposite swing back to Rick, returning the power by asking him about trivial procedural matters. The following extract reveals this pendulum swing:

Rick: You get to make some choices with these two pieces of paper. You get to control what happens. The power of these pieces of paper is huge! These are your only parameters...it has to be about transport and it has to be practical...I don't want to give you ideas. I want you to do this by yourself... I'm going to reserve my right to not share my ideas.

Girl: Do we use pen or pencil?

Boy: What side of the paper do we use? (28.05.03CO28/1)

In Rick's struggle to develop shared activity, he also contrived joint participation (see Table 5.2) by *'manipulating it'* or getting *'buy in'* from the children to support his ideas. Rick was giving the illusion of power-sharing by giving children opportunities to choose between two of *his* options, or to choose the order of his planned activities. This contrived collegiality (Fullan & Hargreaves, 1992) was just one-sided interaction masquerading as joint participation: *'I ask "what do you want to do, maths or reading?" You say, "Oh well let's have a vote" and you let the kids have that control or sense of control'* (19.03.03RickINT:28).

The struggle to normalise joint participation continued. Rick granted expert status to Sakura, thus authorising her as a proxy-teacher (see Table 5.2) to help less able learners, just as he would do. Rick wrote the names of these designated experts on the whiteboard, so others would know who to go to for help. Also observed were

children's initiation of one-sided activity (see Table 5.2) in which they invited others to tell them task requirements: *'just tell me what to do'* (03.04.03IkaniCO19/1), or to judge the quality of their work: *'is this ok?'* (19.03.03CalebCO10/1).

When first observing these pendulum swings, contrivances and appointments of proxy-teachers, I coded them as examples of joint participation between children. However, over time, I came to realise that these were, in fact, still one-sided interactions; these were *not* examples of learning in a community of learners. Rick's authorisation of a child to help, his restriction of the level of choice to his options, and children seeking evaluation from another, were one-sided activities. Occasionally, I did witness brief forays of joint participation. Interestingly, neither Rick nor I, initially recognised these slips from one-sided activity, we just knew something was different:

I was struck by how different Room One 'felt'. Children were justifying the position of photographs on a time-line; an activity that stimulated lots of excited talk in small groups. It was noisy and chaotic. Rick was in this chaos - part of it - talking with the children. Something held this chaos together. Rick sensed it too, but we couldn't describe it. (21.05.03CO26/1)

The children had been working together in groups to make a time-line with resources Rick had given them. For brief moments, Rick joined in with each group by listening to their ideas and adding his own, to which children further responded. It was not until later in the research that I came to discern a graceful coherence in this chaotic looking activity. A summary of the five one-sided models, discussed in this section and observed in my early observations in Room One, are described and exemplified in Table 5.2. In all these models, the activities of the teacher and the children are separate; power is with the teacher.

Table 5.2 Summary of one-sided instructional models

	Description of participation	Example from the data
Adult-run transmission	Teacher as expert transmits information, gives instructions, directs set tasks, covers the curriculum, makes all decisions. Children are passive, listen, follow instructions, do set tasks, try to get inside teacher's head.	<i>Rick writes up a sentence starter... "He was never quite the same after he was struck by lightning." A child asks if they can start writing and Rick says they can (28.10.03CO67/1).</i>
Children-run Acquisition	Teacher arranges the resources or open-ended activities, but then is passive, only scanning the busy classroom. Children explore activities individually or in small groups, acquiring information.	<i>Children work individually, in pairs or small groups playing language games chosen from the shelves...jigsaws, magnetic letters, alphabet cards (02.04.03CO17/1).</i>
Child as proxy-teacher	Teacher authorises a power shift to a child , to be in control, to tell, to decide, to reprimand or to validate. Other children are passive, listen, and follow directives.	<i>Rick asks the children to choose someone who can teach them. Sakura is chosen as 'she is intelligent, her name's on the board as an expert' (10.09.03CO51/1).</i>
Child initiated transmission	A child initiates one-sided interaction without the teacher's actual presence by either inviting a more capable other to tell, to do it, or to validate it.	<i>Ikani is looking confused. He asks a more able child to tell him what he must do. Later he asks if what he has done is right (14.03.03CO09/1).</i>
Contrived joint participation	Teacher manipulates activity so children think they have decision making power, but these are only choices between teacher set tasks. Children decide between the choices.	<i>What do you want to do, maths or reading now? You say 'Oh well lets have a vote' (19.03.03RickINT:28).</i>

5.3.2 Joint participation co-exists with one-sided models

Over time, the pendulum swings and contrivances became less frequent resulting in sustained periods of joint participation in which Rick and the children learned together. Observations revealed four unique models of a community of learners, hereafter called joint participation: between the children themselves, between Rick and the children, initiated by a child, and non-verbal collaboration. These four joint participation models (see Table 5.3, p. 108) served to normalise a community of learners which *co-existed* with one-sided models.

Joint participation between children (see Table 5.3) occurred when children were engaged in purposeful activity arising from ideas that mattered to them, and when they were listening and contributing their ideas by building on another child's ideas. It was in this dialogic and responsive process that intersubjectivity developed and new knowledge was co-constructed. Inherent in their interactions was a seamless

quality which I came to recognise and later code as 'dovetailing'. This dovetailing of verbal and non verbal contributions is illustrated in the following extract:

Sakura Era, Ikani and two other boys stand ready to share their group's research on water snakes. Sakura introduces their presentation by explaining each child's contribution to their booklet, and to this presentation. She moves behind her co-learners to give Ikani their booklet. Red cheeked she hovers behind to be with him as he reads his page...a supportive gesture she later repeats. Era takes the book and excitedly talks about her learning! Sakura then talks about her contribution with Era now holding the book for her. She explains with great clarity how the snake swims. Each child shares responsibility to respond to audience questions. They are so excited to share their expertise and their dovetailing happens so naturally. Is this the dovetail principle? (05.12.03CO80/1)

Joint participation between Rick and the children (see Table 5.3) occurred when Rick and a group of children contributed ideas in which new meanings were co-constructed. These times were often spontaneous and notable for their emotional, social and cognitive connections. The boundary that once separated Rick and the children, creating a 'stop-wait-go' quality, had disappeared to reveal the same seamless dovetailing heralded by phrases such as 'I agree with that...But I think...I'd like to pick up on...'. The following extract reveals this dovetailing, as well as showing Rick achieving his professional development goals: 'to make learning more visible; to encourage caring; and to participate with kids':

*Sakura: We figured out on the computer that they use their tail to swim...
Boy1: Why do you think water snakes are so fascinating?
Sakura: I like the way they do things and how they use their tail...
Boy 2: If it didn't have a tail would it still be able to swim?
Sakura: I think so cos its skeleton can bend...
Rick: As a group how did you work?
Boy 1: Off and on, some of us mucked around, some kept on working
Sakura: I agree with that...I think we were quite good. They were all helping. Era helped the whole time, but then some of us stopped work, but we got lunchtime to work.
Era: And I think it helps it. I think we did it quite good but some of us got side tracked. At lunchtime we didn't get much done and people kept coming in and we didn't work...
Rick: I'd like to pick up on what Era and Sakura said. They said 'some of us'. And I know what they are talking about. Sakura said that Era helped the whole time. She was willing to take responsibility onto her... they didn't say the names of those who stopped working. (05.12.03CO80/1)*

A third variation of joint participation was observed in which children initiated joint participation (see Table 5.3) with others. Children began quite naturally to invite others into shared activity with them. I began to code this as child-initiated joint

participation; activity that Rick saw as the children becoming 'little me's' (19.12.03RickINT:18). The distinctive nature of child-initiated joint participation is seen in the following extract after a member of Caleb's group asked me where I thought they should place their names on their poster:

Do I just give my opinion or enter a conversation? I am intrigued by my hesitation. Usually I would just tell, but to tell in this classroom would be to conflict with its norms. They don't want me to tell, rather to be part of their thinking. The way she repeated 'what do you think?' and kept running on with her own thoughts was so different to 'ask and wait for me to tell' - typical of one-sided participation. She was inviting me to dovetail with their thinking. What do I do...if I'm not to tell? In my moment of indecision, it dawned on me to ask what they had already considered so I could build on that. (05.12.03CO80/1MEMO)

A fourth variation of joint participation was coded as non-verbal (see Table 5.3) in which one child talked and the others, including Rick, engaged in active listening behaviours. Their tacit contributions were seen in: eye contact (signalling empathy or frustration), supportive facial gestures and touch (nodding, smiling, stroking, affirming), and body positions (the listener leaning forward to encourage the talker, and listening to more than was actually said): *The children do not just sit on the mat, they lean forward engaging with the speaker, actively listening and using eye contact (05.12.03CO80/1).*

These four joint participation models, summarised in Table 5.3, and the five one-sided models, summarised in Table 5.2, crystallised in the analysis of data that were generated in Room One. The dovetailing nature of shared activity, as distinct from the separated interactions of one-sided participation, was evidence of an emerging culture of collaboration; a community of learners was developing through this institutional lens. More important, however, was evidence showing joint participation as co-existing with one-sided participation. Rick was developing Room One as a community of learners, but not as an all-or-nothing model; joint participation became just another way for Rick and the children to learn in the classroom. The co-existence of power-sharing, inherent in a community of learners, with the power-shift or power-solo relationships of one-sided models was verbalised when Rick said 'today I was part of it rather than directing it' (21.07.03RickCONV).

Table 5.3 Summary of joint participation instructional models

	Description of participation	Exemplified from the data
Children’s joint participation	Children are connected with each other in purposeful activity, listening and contributing expertise. Shared meanings develop and knowledge is co-constructed. Teacher encourages children to collaborate on a task.	<i>The children work in small groups writing a booklet for a new entrant class. They were at desks, on the floor, or at the computer, with each group contributing one page of the booklet (17.09.03RickCONV).</i>
Teacher and children’s joint participation	Both teacher and children are connected in purposeful activity, listening and contributing expertise as co-learners, building on earlier contributions. Shared meanings develop and new learning is co-constructed.	<i>Rick writes < and > but makes a mistake as he reads the equation. Others explain how they remember which way the signs go. Rick and the children develop shared understanding of < and > (15.10.03CO58/1).</i>
Child initiated joint participation	A child initiates joint participation with other children without the teacher’s actual presence. Past joint participation has shaped the children’s current participation.	<i>Four groups had little me’s all doing little things and all talking, asking and sharing ... they were working together, learning together (18.12.03RickINT:18)</i>
Non-verbal joint participation	While either teacher or child talks, others are connected to the ideas being expressed. This is seen in non-verbal forms of communication such as eye contact, touch, gestures, postural cues and facial expression.	<i>As child begins to read her research, quiet descends. Rick crouches on the mat to listen with the children. Their bodies lean forward, their eyes on her.(05.12.03CO80/1)</i>

The co-existence of joint and one-sided participation in Room One created a dynamic learning context. These different instructional models shifted rapidly and sometimes for only brief moments, as they glided from one to another; a change likened to the globule movements of a lava lamp. Rick preferred the metaphor of a moving train that kept changing direction with windows onto new ways of interacting in the classroom. Rick’s and the children’s joint participation emerged from or stood alongside, other more traditional one-sided instructional spheres as exemplified in the following observation taken between 9.10 and 9.14am:

Rick was taking the roll (one-sided) when new books arrived. The children suggested they look at them together (child-initiated joint participation). Rick checks the timetable to see what had been planned...a maths pre-test (one-sided). He decides to go with their idea and joined them on the mat to browse the books together (joint participation). Era asks me over so she can share her book with me (child-initiated joint participation). Caleb brings to me a copy of the email he received from aquarium staff (child-initiated joint participation). He tells me sharks cannot be tamed (one-

sided). Two children work alone at their desks to finish work (one-sided acquisition). (31.10.03CO68/1)

5.3.3 A culture of learning emerges

Room One's culture of 'doing', where activity was product focused changed during the research to reveal a culture of learning in which the prospect of sharing their new learning with others generated excitement. Initial interview data with the four target children revealed their preoccupation with doing activities. Sakura, Era, Caleb and Ikani talked about *'doing handwriting... the quilt we're doing... doing geometry shapes... doing a draft ... doing real easy stuff'* (08.03.03INT8/24). They also spoke of feeling anxious when they were unsure about what they were supposed to be doing. Questions asked by the children were mostly of a procedural nature to clarify what they were to do. While Sakura felt Rick *'explains it easily so I know what I am doing'* (08.03.03SakuraINT:3), Ikani, Era and Caleb often did not understand task requirements as this extract shows:

Caleb: Like yesterday we were doing this pet thing. It was persuasive arguments...I'm like "what are we supposed to do?"

Ally: So what did you do when you didn't understand?

Caleb: I asked L because he's my neighbour by my desk.

Ally: How did he help you?

Caleb: Well he told me to do this and this, and then he told me to do this and this, and then I understood what to do. (08.03.03INT:8)

Early in the research, Rick spoke of the 'buzz' he got when *'do was happening'* (19.03.03RickINT:10) where the ultimate accolade another teacher could pay him was to say his children *'really know what to do. And they just get on and they're just really focused'* (19.03.03RickINT:31). He justified his 'doing' focus as a means to draw the children into learning. Rick also spoke of pressure to cover the curriculum and to produce evidence that the children were achieving mandated objectives. Early observations also revealed pressure on children to get activities finished, and being penalised for not doing so by *'staying in'*, or doing the work in *'their time'*. So sustained was this focus on getting work finished that, despite later successful joint participation, Caleb said his group had *'a really rough time because we didn't finish'* (04.12.03CalebCONV).

The turning point for Rick came when he realised that he had asked the children what they wanted to 'do' to take the next step in their transport theme. Not surprisingly,

the children suggested craft type activities such as making clay models of animals used for transport or folding newspaper into cars. Some children did suggest activities to reinforce their learning, such as making a facts quiz or acting in a play, but no-one came up with an idea that would promote *new* learning. The following comment in my fieldnotes highlights this point:

Children are choosing what they want to do (which may have stemmed from Rick's instruction that it had to be practical) rather than what they want to learn. Do we need to talk more about the learning that is embedded in activities? The use of language seems critical. Just using the term 'community of learners' highlights learning. (28.05.03CO28MEMO)

My fieldnotes prompted a written response from Rick, as well as further dialogue on our second RaP day, an extract from which follows:

Rick: I let the kids choose what they wanted to do in our transport theme. I gave them the power and they bought into it. But one mistake I made was I said two words... 'practical' and 'do'. On reflection with Ally I think they thought of the word practical as something they do. Instead I need to ask what they want to learn. That reinforced to me how important language is. (27.06.03RickRaP2:79)

Rick set a new goal that day: *'to make learning more visible to the children'* (27.06.03RickRaP2) and on the following RaP day he wrote: *'to continue bringing learning to the surface'* (01.09.03RickRaP3). Establishing these goals seeded the development of a culture of learning in Room One; a culture that grew in the language they used, the learning intentions they wrote, and other strategies that focused on learning. Rick made a conscious effort to use words that reflected a learning ethos such as: *'are you switched on for learning'*; *'you're here to learn'*; *'what's the learning in that?'*; and *'let's do some learning'*. Later observations revealed language that emphasised learning together such as when Rick said: *'we need to work together'*; *'nice support'* *'our community'*; *'thanks for working with me'*; *'it's our job to learn'*; and *'we're learning together'*. My final 35 minute observation, recorded 18 references to learning compared to only seven references in six hours of observations over Term One.

A culture of learning also became clear when Rick began to share learning intentions by talking with the children about *what* and *how* they wanted to learn. Initially, Rick wrote these learning intentions by turning curriculum objectives into *'kid speak'*. Then he showed the curriculum documents to the children to discuss how their

activities were designed to achieve official learning objectives. These were stepping stones to Rick actually writing learning intentions *with* the children. The following extract exemplifies the excitement Rick felt to have successfully shared decisions about learning with the children:

Rick: The kids came up with it [learning intention and success criteria] ...it was all 'kid speak'. All I had to do, with the assistance of Sakura and another child, was draw all the different things they had said into sentences... It was like one of those moments. And when you get out of the classroom you glow, "It worked, YES!" (22.08.03RickCONV:4)

These learning intentions, three of which are exemplified below, served as visual prompts for learning, as well as for the process of learning together.

Number: We are learning about what numbers are. We will know: how to read numbers; what numbers mean; what place value is up to millions.

Creative Writing: We are learning about: adjectives to describe things so that our story hooks readers in; using interesting words; adding humour with words; sequencing our work so it will flow.

Research: We are learning: to work with a group not against the group; about a topic, some facts and information... hopefully new things; how to present our work...we are learning off each other.

5.3.4 A cultural ritual of sharing out-of-school experiences

Rick's first goal sought to develop a community of learners by providing opportunities for children to share their diverse out-of-school experiences in the classroom. He used many strategies to do this, such as informal chat at roll call, impromptu conversations, and using his family relationships to support their learning of number relationships. However, one strategy, *What's on Top*, became a shared daily ritual, participation in which '*set us up as a group because we listen*' (27.06.03RickRaP3:101). *What's on Top* typically began when Rick stated, '*let's catch up on each other*' (15.05.03CO23/1). He sat with the children in a circle on the mat. A child, chosen because he or she was next on a class list, began talking about an event or issue beyond the classroom. Going round in the circle, the children had the opportunity to share something that was on their mind without the use of visual aids. This became a safe space in the classroom for each child to talk from the heart, with Rick just another member of the group. Even if they chose not to contribute, non-verbal joint participation was happening, both in their presence in the circle, and through their gesturing and body language. As a participant in this ritual, I put my

notebook away because to write would have been disrespectful to the strong sense of belonging in this circle. As they shared slices of their lives, such as a sibling starting school, being punished, playing netball, Mum yelling, Dad drinking or Nanna crying, I reflected on these connections:

It is not show and tell, nor is it time to show off, tell tales or tune out...it was a genuine and honest sharing of their minds and hearts in their responses to tragedy, to joy or to mundane events. These children hold so much pain and joy, yet the norms of schooling say to leave it at the classroom door so learning can happen. (04.09.03CO47/1MEMO)

Rick regarded *What's on Top* as a way to bridge the gap between home and school, to bring outside issues into the classroom and to 'create spaces to validate feelings, park issues and feel safe [so they] can move on ready to learn' (15.05.03RickCONV). He also saw *What's on Top* as a way to value the individual and to build a sense of connection in the group: 'they connect with me and I connect with them' (01.09.03RickRaP3:101). *What's on Top* also enabled Rick to show himself as someone other than a teacher, and by so doing validated the act of sharing, caring and trusting, all essential elements of learning together. Coincidentally, it also provided me with a chance to show myself as someone other than an 'indescribable other' in their classroom, a place from which I often drew strength when coping with this research, as one diary entry captured:

I felt drained today so I visited Room One simply to draw strength from its culture of togetherness. In What's on Top, I was unsure if I should be honest about my real reason for visiting, but the circle demands honesty. I thanked them for helping me through my day. (04.09.03DIARY)

This repetitive participant structure became the most anticipated time of the day. Indeed, so sacred had *What's on Top* become that, as Rick's note to me described, the idea of missing it, even for a day, was unthinkable:

We got back from cross country later than expected. After lunch we were discussing what we were meant to be doing and three or four all at once said "We forgot What's on Top." It was affirming. It was good. And this thing in my mind said "No I'm on my way - I want to teach here, we'll do it later". But then another thought came "why wait?"... 15 seconds later we were in our circle. It felt natural. The kids just needed to connect with each other. (15.05.03CO23Rick)

5.4 TRANSFORMATION USING AN INTERPERSONAL LENS

This section places in the background the cultural activities and values discussed above through the institutional lens, so as to foreground activity through the interpersonal lens. Observations through the interpersonal lens revealed new learning relationships in which Rick guided children's participation in a community of learners. These new interaction patterns include: engaging in conversational talk, sharing learning decisions, sharing responsibility for behaviour management, and developing the heart of joint participation in social and emotional connections.

5.4.1 Engaging in conversational talk

While Rick began to use a learning language, the manner with which he and the children engaged in discourse also changed. Instead of using predominantly one-way communication, which Rick initiated and controlled, spontaneous conversational exchanges began to occur. The children began to build on Rick's and each other's earlier contributions. In this knowledge-building dialogue (Wells, 1999) new understandings were being co-constructed. These changes in communication patterns from one-way rehearsed lines to conversation reflected two of Rick's goals: *'to physically let go of the teaching space'* and *'to participate with the kids'*.

Early in the research, Rick claimed that learning was best signalled *'when you can see your children talking with each other... sharing ideas...and complementing each other and then getting back to do their job'* (19.03.03RickINT:10). While this reflects some joint participation, Rick then did not appreciate the dovetailing nature of conversation as a means to learn. While Rick continued to give one way directives, conversational exchanges became another legitimate way to communicate in the classroom. The following extract shows Rick, kneeling on the floor opposite Sakura, letting go of traditional one-way classroom discourse to engage in conversation and trust that together they would arrive at a new focus for her learning about big cats:

Rick (looking at work Sakura had copied from a book): Let's figure out a question you really want to learn about out?

Sakura: I'm crazy about cats... big cats.

Rick (laughing): That's a surprise! What's so fascinating about them?

Sakura explains that it's her fascination with their endangered status, and the way they move and behave with each other.

Rick: Why do you think big cats might be endangered?

*Sakura ponders if it is the people that are to blame...hunters in the wild maybe? Rick wonders if they are only endangered in the wild, but Sakura is not sure...she ponders about zoos not being good for them either.
Sakura: Maybe people might want their body parts?
Rick: I think we might have hit on it. Why are big cats endangered?
(08.10.03CO56/1)*

While the gist of this conversation captures the fluidity of a knowledge-building dialogue, it did not capture their non-verbal joint participation. Rick and Sakura sat facing each other with strong eye contact, looking relaxed as they talked and gestured to find a new way forward in Sakura's learning. Gone was the stop-wait-go quality of one-way communication. Neither knew the outcome; they both '*hit on it*'. Guided by previous participation with Rick, Sakura went on to frame questions that genuinely intrigued her about the endangered status of some big cats. She even engaged in email conversations with zoo keepers and other distal partners. The use of dialogue became common as Rick recognised the improvement in children's work, and the new ways children talked about their learning: '*they were actually listening to each other*' (19.12.03RickINT:32).

Analysis of the data not only found conversations as sites for learning but as sites for assessment. Rick's feedback took on a quality that Askew and Lodge (2001) called loops of learning. Rather than passing over his judgement about a child's work, he and other children listened respectfully as new understandings were shared in dialogue. Rick was able to assess their learning, as well as their ability to use their new understandings in this dialogue. Not all children were able to share their work in such conversational talk, preferring instead to read pre-written words. Children's transformation of participation to talk about, rather than simply read their work, was itself evidence of new learning. The following extract highlights this difference as Ikani read his work, but Era and Sakura share their new learning in unrehearsed talk:

Ikani read his work. But his words don't connect with the audience...he just hands them over as quickly as he can. But Era and Sakura chose not to read their work, flushed with excitement they pause to find the right words, and engage with the ideas in a way that others can pick up on. Sakura was on fire talking about it. Talking didn't create the boundary that Ikani's delivery had; she made a connection. (05.12.03CO80/1)

Rick also used dialogue in the classroom to evaluate the nature of their joint participation. He openly shared his view of how well he thought their collaborative

skills were developing, but also asked the children to share their ideas about this with him: *'I need to learn from you'* (04.12.03CO80/1). The children's ideas about how they were learning together are summarised below:

We listened to what others said...we shared our ideas...we just had fun together and we learned...we disagreed...we got a part for everyone...we shared our things...we drew all together...we shared the decisions ...we figured it out...we sat together (04.12.03CO80/1)

Changing these communication patterns was not easy for Rick. The following extract taken from a presentation about a community of learners Rick gave to student-teachers, revealed how deliberate and difficult it had been to stop himself talking and to start listening; a key transformation required to develop a community of learners:

Rick: It was a conscious decision to change, to stop talking all the time. I had to remind myself to keep quiet...ideas would come from the class. Teachers talk too much. I became confident to wait for the kids to talk. I didn't need to fill the spaces, the silences, or provide all the information. It became a legitimate way to teach for me... It's OK not to talk all the time and it's better for learning. (05.03.04RickCONV)

5.4.2 Sharing learning decisions

In line with Rick's professional development goals, new forms of interaction were observed that saw children share learning decisions. Rick created opportunities for children to become involved in creating curriculum with him *before* the learning began. As noted through the institutional lens, at the start of the research Rick made all the learning decisions, however, as the culture of the classroom became more collaborative, Rick began to make learning decisions *with* the children. He did this by engaging with their thinking and dovetailing ideas to move toward previously unconsidered planning decisions. Interviews with the target children identified: their eagerness to participate with Rick in this way, their pleasure in doing so, and their recognition that sharing decisions enhanced their learning:

Caleb: He's [Rick] given us choices instead of saying "do this, do that".

Era: He doesn't force us to do things.

Ally: How does that make you feel?

Sakura: Happy because someone is actually paying attention to what we want to do instead of just doing their own thing.

Ally: Can I ask you, does that help you in your learning if [Rick] will listen to you and share decisions with you?

Sakura: I think it is better to let us have our own choices because then maybe people who are not that interested in what he is telling them then they stop learning. It's better than things we have to do.

Caleb: I have really enjoyed it like pretty much saying what Sakura said. He gives us our own choices. (08.12.03INT:6)

Rick's initial attempts to share decisions highlighted his difficulty to understand the notion of sharing. His first efforts to share decisions amounted to choosing from or voting on his pre-selected alternatives (contrived joint participation). It was not until later in the research that Rick recognised sharing decisions as negotiating shared meanings with the children, so as to come to a new decision that neither had previously thought of before. This intersubjectivity between Rick and the children was evident when together they made decisions about:

- their hypothesis for an experiment;
- their information sources for learning;
- their learning intentions and success criteria;
- their research questions;
- their sharing of learning; and,
- their plan to help new five year old children to settle in to school.

The last example from the above list is elaborated upon here. Rick and the children talked about the special needs of five year old children, from which a genuine concern arose to help them settle into school life. The children recognised that they had expertise as experienced school children and were motivated to share this to help these newcomers. After a period of negotiation, a decision was made to design a booklet entitled *'The Book of Jubilee School'*. Also jointly decided, was the way in which the booklet was to be written; each child was to be responsible for writing one page. Rick built on the children's ideas by suggesting that they form groups of three to share the responsibility for three pages of the booklet, with one member an expert writer to support this joint participation. Rick recalled how Sakura had picked a disruptive and easily distracted child to join her group by claiming that she had the skills to help him. Sakura then chose Ikani, who she knew to engage in "underlife activity" that was separate from the official learning programme (St George & Cullen, 1999). Such spontaneous acts of support and kindness showed the children as capable of putting the needs of others above their own.

5.4.3 Sharing responsibility for behaviour management

Rick realised part way through the research that developing a community of learners had to include sharing responsibility for the management of the class as well as learning. Sharing responsibility for behaviour made classroom management more effective because *'the other kids were contributing ideas about how they felt'* (19.12.03RickINT:6). Rick and the children developed shared responsibility for the following aspects of classroom management:

- the recipient of weekly class award;
- the sequence of the daily timetable;
- the new class layout;
- the rehearsal protocol; and,
- the natural consequences of inappropriate behaviour.

The last example from the above list is elaborated upon here. Rick talked privately with repeat offenders in the classroom, listening to their issues, and leading them to accept the natural consequences of their inappropriate behaviour. He also began to talk openly about behavioural problems with the whole class, explaining why certain kinds of behaviour were unacceptable, describing the effects it had on others, and encouraging children to share responsibility for reaching a solution. The following extract shows Rick opening up for discussion the repeated bullying behaviour of one child, enabling other children to express their feelings about it, to understand the motives of a bully, and to think of suitable ways to approach this problem:

Rick: Let me just ask you in front of everyone. Why are you doing this?

Sakura: It's probably because he wants to get us in trouble.

Caleb: He won't have the power to choose what he learns, like us.

Others give their reasons for his bullying antics and ideas for possible repercussions. Rick has spent time talking privately with this bully and his victims. Now he is being open with all the children, so they can recognise the nature of bullying behaviour. (04.09.03CO47/1)

Another example of transformation of participation in behaviour management was observed when children began to initiate directives themselves. Early in the study, Rick gave the directives, or children gave them having been cued by Rick's expression that he needed silence. Children were heard saying *'Shh, he's waiting for*

quiet'. Analysis of data later in the study showed that these initiatives were also cued by the children's need to be respectful to others, to listen to someone, or to not be distracted. The children began to share responsibility for managing behaviour that contravened the values of joint participation by stating such things as *'be quiet, it's their turn to talk'*, *'stay calm'* or *'you'll lose the power'*.

When Rick began to engage in joint participation, some children became over-excited; a reaction he found difficult to manage. Rick shared his concern with me that he was *'losing it'* when little conversations spontaneously broke out. I reflected on this behaviour in my fieldnotes as being a natural consequence of inviting children into joint participation when they had been accustomed to always being directed in the classroom as the following extract shows:

Normally children do things at school because they are told to: they follow rules, sit still, listen, answer questions, do activities. A community of learners tips this world upside down. Instead of being ignored, a connection is made in joint participation. A new energy is born as they are released from captivity into purposeful learning. It needs managing! (28.05.03CO28/IMEMO)

My memo prompted further talks about seeing the children's exuberance as a sign that he was letting go of one-sided activity, rather than a sign he was losing control. It seemed to me that these spontaneous outbursts indicated that the children needed to talk. While Rick did come to anticipate this unleashing of energy as he developed a community of learners, he also came to manage it in different ways. Sometimes he opened a side door to the playground to let the children run off their energy: other times he took back the power and reverted to the safety of one-sided participation. At other times he became part of the energy, joining in a conversation near him as revealed in my fieldnotes:

This talk about their performance tonight generated a lot of separate conversations, which today Rick just lets happen. He joins in a conversation with children near him. Soon his voice signals that it is his turn to talk again. (25.11.03CO77/IMEMO)

5.4.4 Developing the heart of joint participation

Developing a community of learners in Room One was not only about engaging cognitively to co-construct new understandings, and engaging socially to share decisions and responsibilities, it was also about developing emotional, spiritual and

physical connections. Rick began this research believing that the most important thing he did in the classroom was to make children feel safe *'then they'll do what I want them to do'* (19.03.03RickINT:17). While he continued to believe in providing an emotionally safe classroom, his purpose changed from ensuring contented learners in a one-sided programme, to ensuring contented learners in a community. Rick came to see that developing new emotional relationships in which feelings and their humanness were shared, as much as their knowledge were at the heart of joint participation. Target children also recognised the importance of knowing each other to learn together as the following extract shows:

Sakura: If you don't know people you can't really cooperate with them.

Caleb: You have to know a teacher real well to learn...

Sakura: And the really strange thing is that when [Rick] is away, I think that people in the class are really attached to him, because they don't act the same as they do when he is here. (08.12.03INT:7/37)

Analysis of the data revealed that collaborative relationships were promoted in the following emotional connections: sharing feelings and emotions, caring about each other's lives, acting with loving kindness, and drawing closer together.

Sharing feelings and emotions

The openness with which Rick and the children were able to talk about their feelings created strong emotional, spiritual and physical connections. Notable was Rick's verbal persuasion to convey his belief in a child prior to and following a new venture. Rick also quickly identified the emotional mood of the class, and of other adults, as shown below when Jane, the new Principal, came into the classroom bearing a box of new books.

Rick (to Jane): Are you still grumpy? You sounded grumpy on the radio.

Jane says she is now ok but explains why she had been grumpy. The class spontaneously claps to show their genuine pleasure that she feels happier.

Boy: You're the best Principal I've had. You're a girl!

Rick gently explains his lack of decorum (15.10.03CO58/1).

Feelings and emotions were also openly shared in *What's on Top*, and timetabled events were often delayed to ensure feelings could be fully expressed. Interview data also revealed a strong focus on emotional content as shown in the following excerpts:

Era: We had to be honest with ourself. (20.06.03EraINT:49).

Sakura: He has a good sense of humour, he's a real kind teacher. If we worry about something, we tell him... If he is a bit embarrassed he doesn't keep it in, he like tells everyone. (08.12.03SakuraINT:5)

Rick: When you've nurtured her and she feels comfortable to say in class that she is smart. She knew I valued her. (19.12.03RickINT:33)

Caleb: Well [Rick] says "I'm like an open book and when I raise my voice and get angry you can just walk up to me and say stay calm" and he closes and he stays all calm. (18.03.03CalebINT:15)

Ikani: I was worried. I was like...how do I do this? (20.06.03IkaniINT:9)

Caring about each other's lives

Rick and the children cared deeply about each other's lives beyond the classroom. Rick's concern about events that transpired in the children's lives was evident across all data sources. Also revealed in the data were the children's awareness that Rick cared about them, *'he cares about us when we are sick or we done wrong'* (08.12.03SakuraINT:36). The children reciprocated this concern for Rick as the next two excerpts show:

Rick shares his nervousness about his impending hospital appointment in the What's on Top circle. Everyone looks concerned for him. Caleb's body lunges toward Rick, their eyes connect as he offers him a strategy to deal with his anxiety. Rick smiles and thanks him. (10.06.03CO30/1)

I really cared about him being sick. I think mostly everyone did and we didn't want him to be. He is a special teacher. (08.12.03SakuraINT:33)

The morning roll call, which over the duration of the research *'became more fluid and loose'* (14.11.03RickRaP4:7), also highlighted their mutual caring. Rick always made eye contact, smiled and added a personalised greeting when calling the children's name to which they replied with their own personal greeting such as *'have a nice day'*. I asked the children why they made these comments.

Sakura: Oh just um...so I can like...

Caleb: cheer him up in the morning...

Sakura: to make him feel better (20.06.03INT:51).

Acting with loving kindness

The data also revealed examples of spontaneous acts of loving kindness that transcended usual classroom activity in *'person to person rather than teacher to pupil contact'* (14.11.03RickRaP4:7). A sense of sacrifice, humility and compassion seemed to emerge from their deepening social, emotional and cognitive connections, which I began to code as a spiritual connection. Examples of sacrifice were evident when children chose to work with a difficult child instead of a friend, *'I'll be able to*

work with him' (12.09.03SakuraCONV). Examples of humility included saving another child from humiliation by maintaining anonymity: '*some of us got side tracked*' (05.12.03EraCO80/1), and by not boasting about their expertise. Examples of compassion included putting the needs of others first: '*If you don't listen to the person then it's not fair on them*' (20.06.03EraINT:30/1). The children showed an intuitive understanding and acceptance of themselves and of each other as seen when Sakura hovered near Ikani, gently reassuring him of her presence in his moment of need. Data also revealed children upholding each other's integrity and praising the goodness in each other. Common to these data was a paradox of children developing a greater awareness of who they were, yet more sensitive to the needs of others.

Drawing closer together

A new way of positioning themselves for learning became evident in which Rick was less visible as the dominant classroom figure. Rather than standing above the children, Rick met them at eye level; sitting, kneeling or lying on the mat in a circle or messy formation. Children also began to sit in Rick's chair to lead a session, or at his desk to work. Instead of teaching from the board while the children were sitting at their desks, Rick needed the '*closeness of them in a group around me cuddled up in a net*' (19.03.03RickINT:24). He explained later why he preferred this:

Sitting down with the kids is so effective. It draws the kids into you, they are with you. Today I was on the floor and [student teachers] were sitting on chairs. They simply weren't part of the group. (30.04.03RickEMAIL)

Drawing closer together in new and fluid physical configurations positioned Rick to share control and to learn with the children. However, letting go of these traditional arrangements had required a conscious and sustained effort as this extract shows:

I've made myself get out of my teaching chair and put kids there and get down onto the mat with them. If I sat on the chair I felt I needed to control. When I sat on the floor we could share it. I was just the tallest kid in the class. It seemed to say that we come together on equal terms, I am your teacher but I am a learner too, it is important that we share. (14.11.03RickRaP4:6)

The target children also recognised their new physical positionings as a way for Rick to learn *with* them and to guide their joint participation. The following extract shows the children using metaphor to explain their pleasure at Rick sitting with them:

Era: Well, it just feels like he is not the head anymore.

Ikani: It feels like he is one of us.

Caleb: When he sits down with us ...

Era: ...we are the feet and he is the ankle.

Caleb: It's like he's more part of the class if he sits down with us.

Sakura: Yes, and when like we are doing research and we suggested to him what we wanted to do, he helps us and he tries to suggest new ideas to make our research better. Instead of telling us what to do, he doesn't do that, he actually sits down and helps us. (08.12.03INT:42)

Also evident from the data was a freeing up of new spaces to learn together. Instead of restricting learning to sitting on the mat or at individual desks, the children worked at other children's desks, Rick's desk, on the floor, in the back room, the library or outside; a privilege that was denied if they took advantage of his trust in them. However, this freedom also led to tension. Rick's insistence that they move round the school in two straight lines provoked resentment amongst the children; it being at odds with the freer physical configurations in the classroom. In Term Three, Rick gave up trying to enforce this traditional ritual of lining up in pairs in the realisation that it contravened the norms of their community of learners as the next extract shows:

It is time for ball skills. They just all disappear out of the classroom, oozing over to the tennis court, just like people walking in the street. Everyone catches up in a messy glob of humanity. (15.10.03CO60/1)

5.5 TRANSFORMATION USING A PERSONAL LENS

This section backgrounds the institutional and interpersonal lenses to focus on activity using a personal lens. Through the personal lens, changes are observed in Rick's and the children's individual understandings, skills, dispositions and identity. This section identifies also focuses on changes in Rick's perspectives about teaching and learning, and how these shaped, and were shaped by, new forms of joint participation observed through the interpersonal lens, and new cultural practices and values observed through the institutional lens. The transformations of perspective for each target child are also identified.

5.5.1 Transformation of Rick's perspectives

Analysis of all data sources showed changes in Rick's perspectives about teaching and learning. Some of the perspectives Rick brought into the research were consistent with principles underlying a community of learners, such as: valuing children,

encouraging responsibility, and sharing their diverse cultural expertise. As the research evolved, Rick became more capable of articulating what had previously been his tacit perspectives, enabling him to confidently justify his practice:

Rick: This has forced me to think about what I do. I love reading these notes and lots of times I thought, "I didn't think I was doing that. But I do do that. That's a good idea I'm going to do that again".
(19.12.03RickINT:7)

While always a passionate Social Studies teacher, Rick came to realise the importance of this curriculum area to support understanding of a community of learners. His focus on an achievement objective, "ways in which communities reflect the cultures and heritages of their people" (Ministry of Education, 1997, p. 34), created opportunities for them to investigate their cultural practices and values from beyond the classroom and to see how these could contribute to the culture of their classroom. Subsequent conversation led to the following jointly written statement:

A community is like a jigsaw, it has pieces. Each piece relates to another piece. The pieces are people. You need to learn off other people. The pieces connect together to make the community. You can make your own puzzle/community. People bring skills, feelings and attitudes to their community. The glue is communication and the connections between people in the community. (2003wallposterDOC)

Soon after this jigsaw analogy had been co-constructed, Rick developed another analogy prompted by his mother-in-law sharing with the class their family's heritage which she had pieced together in quilts. Rick's quilt analogy was made up of: the patches representing each person's unique cultural identity, the stitches symbolising their ideas connected in conversation, the messy threads at the back representing their class as a 'jumble of people' at the start of the year, and the neat side of the quilt symbolising the coherence of learning together.

Interview data at the beginning of the research indicated that Rick also held traditional perspectives of learning and teaching. As the study evolved, a range of transformations in the way he thought about learning and teaching were identified. Table 5.4 describes these changes in the ways Rick came to think about learning and teaching. It is not possible to identify if shifts in Rick's perspectives instigated changes in his participation, or whether changes in his participation seeded shifts in his perspectives. Sociocultural theory contends that this chicken-egg question is not

important. What is important, however, is the mutually constituting nature of activity in which Rick's perspectives shaped, and were shaped by, changes seen through the interpersonal and institutional lenses.

Letting go of the idea that learning had to be always directed and controlled by him in a series of set activities, was a major shift in Rick's perspectives. He came to see learning as a social, emotional and intellectual process in which he trusted, valued, and shared power with the children. Rick also recognised that *if* learning was about joint participation, evidence of it would not be found in a product or a test; evidence would be in the dialogue within that learning journey. What came to matter most to Rick was what he and the children could achieve together, and the reflective conversations he had with the children about their learning.

Table 5.4 Shifts Rick's perspectives of learning and teaching

Initial perspectives (19.03.03RickINT)	Final perspectives (19.12.03RickINT)
Learning directions are established by teachers in advance of teaching. <i>'I tell my kids that my classroom is not a democracy.'</i>	Learning directions build on children's interests and continue to evolve. <i>'I work with children.'</i>
Learning happens as children do teacher set activities. <i>'You are a manager of learning.'</i> <i>'Children shouldn't disturb others when they are learning.'</i>	Learning happens when they participate with others. <i>'The children were listening to each other and learning off each other...being decent human beings with each other.'</i>
Learning is about cognitive outcomes taken from the curriculum. <i>'We plan as a team and I ensure that the planning is covered.'</i>	Learning is also about social and emotional outcomes. <i>'It's the community of learners...it's valuing each other.'</i>
Teaching is about being the boss, holding the power, controlling behaviour and making children feel safe. <i>'I'm the boss... I have to control the children.'</i>	Teaching is about trusting children, sharing responsibility and power. <i>'With behaviour I've really been open and...divulged power to everyone.'</i>
Teachers are not learners in the classroom. <i>'I don't have an expectation that I will learn subject matter.'</i>	Teachers don't learn content with the children but they can learn <i>'a process with the kids.'</i>
Teachers stand at the front of the classroom and talk, <i>'Teachers are in the hot seat.'</i>	Teachers can also sit with children and listen. <i>'They're actually listening to each other.'</i>

An interesting paradox occurred here. As Rick developed new perspectives of learning and teaching, he also began to doubt himself: he was *'battling with what a good teacher looks like'* (05.03.04RickCONV). Rick had taken professional risks to move from a comfortable place where traditional one-sided activity predominated, to

forge a new path toward unfamiliar places where he had begun to question taken-for-granted practices. He had also lived with the ambiguity of acting in traditional one-sided ways in public, to satisfy expectations of other teachers, yet participated collaboratively in the privacy of his classroom. Furthermore, he endured subtle criticism from some other teachers when he began to publicly talk about his new perspectives. These findings suggest that lingering doubt, and the need to be amongst educators who could affirm his new perspectives, were a consequence of his struggle to develop a community of learners.

5.5.2 Transformation of the target children’s perspectives

Analysis of all data sources revealed the target children’s new perspectives of learning and teaching. Consistent with earlier one-sided participation, the children’s initial perspectives reflected traditional views in which a good teacher helps children to receive and to retain information. As the children began to engage in shared endeavours, so too did their perspectives of teaching broaden to see that learning happened in shared social, emotional and cognitive activity. Extracts from initial interviews, shown below in Table 5.5, reveal a good learner to be one who can comply with teacher demands, listen to the teacher and get work finished. Over the course of the research, children developed more collaborative perspectives of learning.

Table 5.5 Target children’s perspectives of learning

	Initial perspective (14.03.03INT)	Final perspectives (08.12.03INT)
Sakura	<i>‘A good learner is good at finishing things on time and not rushing their work.’</i>	<i>‘My classmates and the teacher help me learn...you can share your ideas.’</i>
Ikani	<i>‘A good learner sits up properly and writes properly.’</i>	<i>‘A good learner sits beside people they can learn with.’</i>
Caleb	<i>‘A good learner listens very carefully.’</i>	<i>‘Sharing your mind and stuff.’</i>
Era	<i>‘A good learner would get on with their work and finish it at the right time.’</i>	<i>‘The learning intentions are really good to help you learn.’</i>

Table 5.6 reveals shifts in the children’s perspectives about teaching in which they came to recognise teaching as a social and emotional practice.

Table 5.6 Target children’s perspectives of teaching

	Initial perspective (14.03.03INT)	Final perspectives (08.12.03INT)
Sakura	<i>‘A good teacher explains it easily so I know what I am doing.’</i>	<i>‘A good teacher cares about us if we done wrong and stuff... and he like explains things.’</i>
Ikani	<i>‘A good teacher marks books and shows us how to do stuff.’</i>	<i>‘A good teacher makes you feel comfortable.’</i>
Caleb	<i>‘A good teacher gives us good ideas, explains things ...helps you concentrate.’</i>	<i>‘A good teacher let’s us have choices instead of saying do this and do that.’</i>
Era	<i>‘A good teacher makes sure we don’t get into trouble.’</i>	<i>‘A good teachers makes you feel happy...adds in humour in the learning.’</i>

Sakura’s transformation of participation: ‘You learn more from other people’

At the beginning of the research Sakura preferred to work alone. Observations at the end of the research showed her initiating and enjoying joint participation with others, including Rick. She came to value times they learned together, as seen in this extract:

Sakura: If you’re not keen to work with a group, like me because I wanted to work with myself. But then I found it really fun working in a group instead of by myself...I think it’s a bit lonely working with yourself, you learn more from other people. (08.12.03SakuraINT:8)

From solitary preferences, Sakura initiated leadership of a small group by listening to suggestions for their inquiry, sharing decisions about its direction based on their interests and skills, and arranging resources and extra time to work together. I observed her sitting with Ikani to draw him into the group’s conversation. She stood close by communicating her support and encouraging him to share responsibility. Sakura had learned a new way to be in the classroom as Rick later recognised: *‘At the end of the year Sakura was me! She had four kids at the front and we changed roles. I sat on the floor with the kids’ (05.03.04RickCONV).*

Era’s transformation of participation: ‘How fast do birds flap their wings?’

The target children in Room One were developing new identities as learners, who engaged with ideas instead of simply reproducing information. Era’s new identity was notable. When first given the opportunity to engage in genuine intellectual inquiry, Era could only ask trivial questions. One question was even taken from a chippie

packet: *'How fast do humming birds flap their wings?'* (08.10.03CO56/1). A week later Era was still considering trivia as my notes show:

Era finds it hard to think of something she really wants to learn about. She is not used to being asked this; the teacher usually thinks up the questions. Thinking about what she wants to learn is not her role in the classroom. (16.10.03CO60/1MEMO)

However, later participation saw her contributing ideas for a research focus:

Sakura: When Era suggested [we learn about] water snakes, some people didn't want to, but after a while they thought that water snakes would be a great topic...I wanted it to be unusual and if we share it with someone it would be interesting because they might not know about it. Then you teach them something. (05.12.03SakuraINT:18)

In participation with people she trusted, Era came to engage in genuine inquiry about water snakes: how they ate, moved, breathed and lived. Era was fascinated to learn that a water snake could open its mouth to swallow a whole ostrich egg. She pondered over Sakura's suggestion that if the water snake's tail bones could bend, enabling it to swim, maybe it was possible that its jaw bone could extend beyond its normal capacity to *'open their mouth as big as their victim'* (05.12.03SakuraINT:5). Era's engagement with Sakura's ideas was evident when she shared her expertise with the class about the fish diet of a water snake, linking its ability to eat whole creatures to its extendable bone structures. Era had not just reproduced and read information, her joint participation with published authors, and with her peers, had led her to confidently talk about her new understandings expressed in her group's co-authored book. Not only had Era learned a new way of learning, she changed the way she valued this collaborative process and its product. Eight months after her collaborative research with Sakura and Ikani, Rick happened to see Era in the playground carrying their co-authored book. Era told him that her group had decided to share ownership of it: she was on her way to find Sakura, now in another classroom, to pass the book on to her. The co-authored book was valued not only because of what had been learned, but because it represented their cognitive, social and emotional connections.

Caleb's transformation of participation: 'But that's cheating!'

Caleb had been genuinely fascinated to know why sharks killed people. Tension mounted for Caleb, however, when Rick encouraged the children to find out information about their focus question and to share what they had found out with their

peers. Caleb believed his ideas belonged to him. To use other people's ideas was tantamount to copying or cheating. The following extract shows Rick and the children engaging with Caleb's dilemma about sharing ideas and cheating:

Rick asks the class where they might find good information about the habits of sharks.

Girl 1: Find a website.

Caleb: But that's cheating!

Rick: But is another way of looking at it Caleb, that you are using the tools and resources available to increase your knowledge?

This sparks a wonderful conversation about cheating and finding and sharing information the gist of which goes ...

Girl 1: But if you were studying sharks you could go to www.sharks. They have information for people studying sharks.

Girl 2: You can get the whole stuff off the website, and that is cheating.

Rick concurs that they have to read information through and decide what is important for their question.

Era adds that some information might be wrong.

Sakura: You might just copy it...that would be cheating.

Rick gives his own example of learning about rugby and finding a website www.rugby. He would gain new information by reading it and then talking about it. That would be okay; it's not cheating.

Sakura: That's sharing your knowledge, not cheating. (08.10.03CO56/1)

Three weeks after this conversation, Caleb lay on the floor debating his friend's question 'why can't sharks be tamed?', insisting that a logical prior question should be 'can sharks be tamed?'. As Caleb shared his ideas, argued, questioned, and emailed staff at an aquarium, he came to understand these activities to be legitimate ways to learn. To 'share your mind' was no longer perceived as cheating, 'like if Sakura was telling me all the answers for a maths quiz' (08.12.03CalebINT:13).

Ikani's transformation of participation: 'We have to do this learning stuff.'

Initial analysis of Ikani's learning activity revealed little transformation through a personal lens. Ikani had trouble concentrating, following instructions and staying on-task. Era and Sakura seemed to intuitively understand him and often acted as his minder. Rick would attempt to draw him in to an activity with 'Earth to Ikani, are you with us?' (05.12.03RickCO80/1). Ikani mostly initiated one-sided participation by asking others what he had to do, or waiting until others told him. For Ikani, the classroom was his captivity until the home bell signalled his release, when he would make a gesture of 'yes!' (05.11.03IkaniCO72/1). The following extract records my

interaction with Ikani after seeing that he had copied information from a book instead of thinking about a question he wanted to inquire into:

Ikani: We have to do this learning stuff that [Rick] told us to do.

Ally (smiling): But what is it you really want to learn about?

Ikani: About porcupines?

Ally: But what is it that fascinates you about them?

Ikani (now smiling): They have prickles? (He asks this as a question as if I am going to judge his response, which is what teachers do.)

Ally: So is your question about the prickles?

Ikani: I want to know about the prickles.

Ally: What exactly do you want to know about them? (08.10.03CO56/1)

Later in the year, Ikani became intensely focused in the water snake shared inquiry. With Era and Sakura's guidance, and their belief in him, Ikani came to participate confidently with his peers as he describes:

Ikani: At the beginning of the year I wasn't much smart...but now I am working with a group that knows about water snakes and how they breathe... I found out about the skeletons and I actually agree with Era because I didn't know anything about it before...It is actually fun when you learn in a group and make our decisions (05.12.03IkaniINT:2/9).

Rick reflected that Ikani's shared responsibility with Era and Sakura 'had turned him on to learning' (17.09.03RickCONV). Also supporting his transformation of participation was the purposeful nature of the task, as well as an emerging classroom culture that authorised joint participation in which expertise could be shared; it was acceptable to be smart, as Rick noted:

Rick: It's the community of learners, that's what it is. It's valuing each other... It's OK to be smart! OK for Ikani to say in a loud voice – "I'm really good at spelling. If you need a hand with spelling, ask me." Sakura's comfortable to say in class – "I'm smart"... And that's that little model isn't it? [pointing to the community of learners diagram] That's that picture of kids saying "Hey I'm the one here, see me". (19.12.03RickINT:33)

5.6 REMAINING CONTRADICTIONS

Further probing of the children's use of phrases such as 'sharing ideas' and 'learning with others', revealed understandings that were sometimes more synonymous with one-sided activity, rather than with co-construction in a community of learners. For example, Sakura told me that 'if they don't know it...we can tell them' (08.12.03SakuraINT:44). Era reflected that learning with others meant they could 'get stuff done faster' (08.12.03EraINT:38) and Ikani believed that being in a group

worked well *'because sometimes you can work and talk'* (08.12.03IkaniINT:38). Sakura still focused on telling, Era still thought collaboration was a time efficient way to learn and Ikani still saw talk as separate from his learning. These contradictions may suggest that while these target children had begun to participate in a community of learners, and had talked about perspectives consistent with learning together, they still held fragile understandings of what it meant to learn together. Given that Rick and I struggled to find the words to describe early observations of a community of learners, it is possible that the children also had difficulty entering the discourse of a community of learners.

The children also found it difficult to perceive of their teacher as a learner. As the children and I jointly reflected on photographs taken of them learning with each other, and with Rick, we reached new understandings of Rick as a co-learner. The next extract reveals our thinking about teachers being learners and children being teachers:

Ikani: It makes us think that [Rick] is still a child as well.

Ally: Is that important, that you feel he is a child like you?

Ikani: Yes.

Ally: Why is that?

Ikani: Because we still feel comfortable.

Sakura: He does think he's one of us because he just doesn't think he knows everything, because like what Ikani said he is like us in a way. People think teachers know everything, but they don't really.

Ally: And he is very honest about things he is not sure about isn't he.

Sakura: Yes, and when we teach him something he doesn't know he seems very surprised with what we have to say.

Era: It makes us feel that age doesn't matter, just because you are older doesn't mean you know more.

Ikani: Size doesn't matter as well.

Ally: So what's important is that you all contribute something.

Sakura: Once I saw this sign that said 'no one can do everything, but everyone can do at least something'..., I think it is true because I can't do everything but I can do some things, same with the teachers... We are all learners and teachers in our classroom. (08.12.03INT:39)

At the end of the data generation period, Rick was reluctant to claim that he was a learner with the children. He acknowledged that he had learned the process of how to develop a community of learners with the children, but he was resolute that he had not gained any content knowledge with them. While not all learning can, nor should, be co-constructed in the classroom, some content knowledge, especially in areas like

Social Studies or The Arts can be co-constructed. Rick's discomfort at being perceived as a learner with the children is revealed below:

Rick: At my age I don't know whether I can genuinely say that I've learnt something with the kids. I've learnt a process with them ... maybe Sakura told me something about snakes which I never knew before. I don't view it as learning with the children like a classic "I'm learning something". I'm not learning like the kids are learning because I'm an adult. I guess what I'm not comfortable saying is that as a teacher I'm learning with the children...I'm teaching eight year olds, I should know. (19.12.03INT:1/5)

5.7 CHAPTER SUMMARY

Observations through the three analytic lenses revealed significant changes in participation as Rick sought to develop a community of learners in Room One. Transformation of participation observed through an *institutional lens* highlighted Rick's struggle to let go of one-sided activity; he developed complex schemes, initiated a pendulum swing, created an illusion of sharing and awarded children the status of proxy-teachers. As the study evolved, the data showed Rick genuinely interacting in four different forms of joint participation, which eventually came to co-exist alongside five forms of one-sided activity (see Table 5.2, p. 105 and 5.3, p. 108). These findings suggest that developing a community of learners is not an all-or-nothing endeavour; that its dovetailed interactions can occur alongside the stop-wait-go interactions of one-sided activity. Further evidence of transformation through an institutional lens in Room One was the emergence of a culture of learning which came to overshadow the original culture of doing. Transformation was also evident in their repeated cultural rituals for sharing and caring about each other's experiences beyond the classroom.

Transformation of participation observed through the *interpersonal lens* saw new learning relationships develop. These new interaction patterns were evident in their conversational discourse where ideas were shared and built upon to co-construct new understandings; in their new power-sharing relationships in which decisions and responsibilities were shared; and in their sensitive and caring relationships in which feelings were expressed honestly and their expertise valued. Transformation also revealed acts of compassion, sacrifice, humility and loving kindness. Finally, less hierarchical physical arrangements for learning became evident in which they positioned themselves to share learning roles.

Transformation of participation using a *personal lens* saw Rick's initial perspectives about teaching and learning shift to become consistent with sociocultural notions of joint participation. While Rick's struggle to let go of traditional teaching practices was evident, his joint participation in this research provided support for his journey to developing a community of learners. Also supporting Rick's transformation were the conceptual underpinnings of Social Studies and its emphasis on social participation. Rick came to understand learning as a social, emotional and intellectual relationship with the children. However, these new understandings raised dilemmas for Rick as he lived with the ambiguity, doubt and tension of seeing himself as a learner with children, as well as being their teacher; dilemmas born of his attempts to develop a community of learners.

Transformation of participation using a *personal lens* saw the target children's perspectives of learning and teaching shift away from traditional views of learning and teaching to consider emotional and social aspects. These children came to value, enjoy and initiate learning as something they were capable of. The children also developed new skills of asking questions to focus a genuine intellectual inquiry; they recognised the distinction between sharing ideas and copying ideas; and they developed skills to draw others into joint participation. In these new forms of participation, these children were developing identities as intentional learners who could learn together. However, the data also revealed tensions and fragile understandings of what it means to learn together.

It is argued that developing the personal capacities to learn together contributed to, and was constituted by, new forms of interpersonal and cultural activity (Rogoff, 1997). The mutually constituting nature of these transformations observed through the three lenses was revealed in this chapter. For instance, Rick developed new perspectives of learning and teaching that were consistent with sociocultural theories, as well as new skills to guide the children in shared activity. These transformation observed through a personal lens shaped his participation in new cognitive, social and emotional interactions in the classroom, and in this research, as well as being shaped by these new interpersonal activities. Furthermore, these transformations observed through personal and interpersonal lenses shaped, and were shaped by, new cultural

activities, systems and values that served to legitimise a community of learners (institutional lens).

The following chapter considers the professional development goals set by Amy, Tiare and Kelly and examines how these served to guide movement toward developing a community of learners in each of their classrooms. Evidence is then presented to show their transformations of participation through the institutional, interpersonal and personal lenses.

CHAPTER SIX

TRANSFORMATION ACROSS THREE CLASSROOMS

Variations across communities have to do with what is being learned, with differing values and practices...Goals of development have local variation according to local practices and values. (Rogoff et al., 1998, p. 245)

6.1 INTRODUCTION

Of interest to this sociocultural research is the variation in the ways teachers sought to develop a community of learners in their classrooms. As noted above by Rogoff et al (1998), the different professional development goals set by the teachers in this study stemmed from their differing values and practices which led to variations in their developing learning communities as well as in what was being learned. While results have been presented in the previous chapter for how a community of learners developed in Room One, this chapter presents the findings from Rooms Two, Three and Four. Each of the four classrooms had different settings, local contexts and teacher-set professional development goals (institutional lens) mutually constituting forms of transformation observed through the interpersonal and personal lenses. Nevertheless, all of the classrooms were embedded in the same wider culture of Jubilee School, which was itself embedded in long-held institutional assumptions about learning.

The same two research questions posed at the beginning of Chapter Five, guide the presentation of data generated and analysed from Rooms Two, Three and Four. As was the case in Room One, these data sets are explored through Rogoff's (2003) three lenses, making it possible to foreground certain aspects of learning and teaching activity, while keeping activity observed through the other two lenses in the background. Transformations of participation are discussed in relation to the goals set by each teacher and with reference to the one-sided and joint participation instructional models which emerged from the analysis of data in Room One (see Tables 5.2, p. 105 and 5.3, p. 108).

While findings in this chapter are drawn from the observations through the institutional and interpersonal lenses of the three teachers, Amy, Tiare and Kelly, and each of their four target children (n=12), the transformations observed through the personal lens are reported for each teacher but only *one* target child from that classroom. The decision about which of the four target children to choose from each class was made using three criteria: the quality of data generated about them, the triangulation of these data, and the ability of the data to reveal diverse aspects of community development. In Room Two, Aaron's perspectives of learning and teaching are reported as they revealed important information about the constraining factors of community development. In Room Three, Zac's participation is reported to illustrate how his perspectives were shaped by the cultural expectations of the classroom. In Room Four, Sarah's interpersonal skills and understandings of a community of learners are reported as important enabling factors. The results are first presented from Amy's classroom (Room Two), followed by Tiare's classroom (Room Three), and finally, from Kelly's classroom (Room Four).

6.2 TOWARDS A COMMUNITY OF LEARNERS IN ROOM TWO

Room Two was joined to Room One through a shared peg-bay and a back room. Diagonally opposite the single door opening into the classroom was an external door leading out to the grass playing field, and next to that was Amy's desk, her notice board and shelves. Twenty nine old wooden desks and plastic chairs were arranged in groupings of eight leaving a small carpeted area on which the class could meet with Amy who sat on her chair by her teaching station. Children's framed artworks covered one wall and were pegged to ropes suspended across the room. Natural light came in through two walls of north and south facing windows under which were storage shelves and cupboards. A white board, library, maths and computer area completed the classroom setting. Except for weekly library and hall sessions and playtime and lunchtime, the children stayed in this setting for the school day. The four target children in Room Two are Mere, Aaron, Wendy and Dan.

6.2.1 Observations using an institutional lens

As was the case in Room One, examination of activity using an institutional lens in Room Two considers Amy's and the children's participation in culturally organised

activity. This section first highlights Amy's professional development goals, and transformations thereof, which guided her efforts to move towards developing a community of learners. Data are then presented to reveal the persistence of one-sided instruction, as well as their enduring culture of 'doing' and 'finishing' work.

Amy's goals: Changing rooms

A consistent theme in Amy's goals, plans and reflections related to changing the physical setting of the classroom. Amy talked about the intense engagement of her class when they were free to choose where they sat to sew their class quilt. Moreover, she had listened with interest to Rick as he shared his need for space so that he and his class could come together as one. Amy set her first goal: *'to formalise a place and time for coming together as one, when all can share and respond to each other'* (08.04.03AmyRaP1:14). She accepted Rick's offer to help de-clutter her room so space could be made for a sharing circle.

Amy's focus on changing rooms intensified at our second RaP day when she talked about a recent television documentary about a classroom in which the desks had been pushed into the middle to allow space to engage in the real activities of the community such as making a *waka* (canoe), stripping car engines and building. This documentary had inspired her to move beyond her comfort zone, and to question the taken-for-granted practice of children's desks being used as official places for them to learn, as this extract shows:

Amy: All my desks do is take up space. I want to clear all my desks out and just have trays or boxes. I thought why do we have desks? We have desks to store our stuff in. Why else do we have them? Because it makes it easy at art time? ...So many times my desks just hinder. If I want to put kids in pairs or threes and I want them working together, they can't...there's no floor space... I'm excited about this because it's something I really want to do, rather than just thinking of something because I think I should. (27.06.03AmyRaP2:13)

Professional dialogue over this day saw the emergence of a second cycle of action research where Amy planned *'to create a physical environment that allows a variety of teaching approaches that give children choice to decide which situation best suits their learning'* (27.06.03AmyRaP2:85). Positive responses from the children and Jane, the new Principal, led to the removal of all but five desks, replaced by two low

round tables, which left a large area of open space. Each child had a container to store their books and clipboards to write on. Amy expressed her unease about this change, and her need to *'get used to how it looked and know that learning is going on'* (22.07.03CO32/2). Prior to our third RaP day I wrote the following reflection for Amy:

Seed 1. The desk-less layout of your room has made a difference in the way you and the children can participate together. I applaud your courage to take this brave step in developing a community of learners. It is amazing how different the classroom feels. Do you feel better about its messy look? Where do you want to go with this? (01.09.03AllyRaP3REFL)

At our third RaP day Amy was honest about how difficult it had been for her to cope with a desk-less classroom. Amy argued that *'if my room is messy, then my kids can't learn. You have to be organised to learn...tidy classroom, tidy mind'* (01.09.03AmyRaP3:61). Amy was also concerned that work standards had slipped and questioned whether the new layout was a contributing factor whereby children had begun to *'wander the class looking for an interesting conversation!'* (01.09.03AmyRaP3:55). Amy had shared her concerns with the children and, in so doing, learned that they too disliked their room without desks. After a class vote, ten weeks after the desks had come out, they were voted back in. This decision caused some anguish for Amy in terms of her professional goals: *'I can't bear the thought of just going back because we've come so far and it just seems such a waste'* (01.09.03AmyRaP3:54). After much honest sharing on our third RaP day, a third cycle of action research emerged: *'to refine the use of desks and workspaces by introducing a trust licence'* (01.09.03AmyRaP3:120), the holders of which would earn the right to learn in places other than their desks.

Amy reflected on her 'changing rooms' approach to 'changing participation'. While her trust licence had been too time-consuming to manage, the learn-at-a-desk norm had begun to relax; children simply chose a desk to work at, as this extract reveals:

Amy: Every now and again I have a bad day and I'll be looking for someone and they're not at their desk and I'd resort back to "Why are you sitting there? You didn't ask me if you could sit there." And they'd look at me as if I was mad but generally I was happy for them to be wherever, if they were working. (18.12.03AmyINT:22/23)

The persistence of one-sided instruction

Despite Amy's goal-directed efforts to develop joint participation, one-sided instructional models continued to dominate in Room Two. Amy's typical adult-run activity included: giving instructions, deciding the learning focus, scaffolding learning to a known place, controlling the timetable, finding resources, marking, testing, roving, reprimanding, insisting on hands up and awarding points. Amy was the conduit through which all official communication flowed: she gave *out* tasks for the children to finish and hand back *in* for marking. The following extract shows Amy deciding on an activity and getting the class to agree with her idea:

Amy: "I thought we could make gingerbread. Put your hand up if you'd like that." After a half hearted response Amy repeats her idea suggesting it would be fun. This time all the children put their hands up. (10.05.03CO24/2)

Children-run interactions occurred at times when Amy set a contract of open-ended activities for the children to choose from, or when set work had been completed and the children were free to choose a maths or language activity as a time-filler before the next teacher-led activity. Other one-sided activities included authorising a power shift to a child when Amy was otherwise pre-occupied (child as proxy-teacher). This happened in two ways: putting a child in charge: *'to rove like Amy does and remind the children of their duty to read'* (19.03.03CO11/2) or identifying experts to help others: *'If they need me, I would say "Mere, are you busy? Can you help him"?' (18.12.03AmyINT:19)*. Without exception, the target children assumed a telling, judging and controlling role when another child requested help (child-initiated transmission). The children's strong inclination to take on Amy's one-side teaching style was evident when Amy overheard a child saying, *'I'm going to point to you and you better be on task because if you don't know where you're at then I get a point'* (01.09.03AmyRaP3:64). Another extract shows Wendy taking the power as she sat at the computer with two boys:

From a distance this looks like shared activity, but Wendy dominates. She tells the boys what to write, how to write and reprimands them when they do not comply with her view. The boys finally give up trying to suggest their ideas and surrender to her authority. (27.11.03CO79/2MEMO)

Little evidence of joint participation between the children, between Amy and the children, or that initiated by a child, was found in the data set from Room Two.

Their new physical layout had not been enough to support the development of joint participation.

A culture of doing and finishing

A culture of doing activities and getting finished remained strong in Room Two. Amy often wrote lists of work to be finished; children being free to choose the order in which they completed it (contrived joint participation). Commonly heard phrases included *'I want to see you doing one of these things and finishing it'* (27.03.03AmyINT:26); *'do you need more time to finish'* (22.07.03AmyCO32/2); or *'I want to see some really hard work'* (12.08.03AmyCO41/2). Rather than using a language of learning, Amy's words continued to convey the importance of doing the tasks she had set and working hard to finish them. These words reinforced their one-sided culture. The children's motivation to work came from finishing activities rather than engaging with new ideas and, in so doing, learning. This extrinsic motivation was exemplified when Aaron, considering his journal of plant observations to be finished, submitted it, only to be told it was not yet finished. Glum faced, he returned to Mere who was chanting *'Finished! Finished it all, now I don't need to worry about it'* (12.08.03CO41/2). Aaron began to scrawl next to every journal entry *'because it had more sunlight'* (12.08.03CO41/2), so he too could experience the joy of being finished. Far from developing an understanding of optimal plant growth conditions, Aaron was learning about the importance of getting finished; his honesty about which is revealed below:

Ally: Why did you write 'because it had more sunlight' next to your journal entries. Weren't you testing how much water to give it?

Aaron: Yeah, I just made it up...I felt pretty annoyed.

Ally: Why was that?

Aaron: ...I just thought that I wanted to get it over and done with...I didn't really want to do it. (18.09.03AaronINT:13)

6.2.2 Observations using an interpersonal lens

This section presents data observed and analysed through an interpersonal lens. Three key themes are revealed: the development of caring and respectful relationships, the illusion of joint participation, and the dominance of one-sided discourse.

Caring and respectful relationships

Strong evidence was found for non-verbal joint participation in Room Two. Time was often made to share emotional responses to events and issues which saw them connecting in responsive listening, eye contact, nods, hugs, tears, touch and smiles. Amy listened to and empathised with the children's fears. She genuinely worried about them, respected their art creations, and shared her own feelings and emotions with them. The mutuality of this care and respect is revealed in the following extract:

Amy: The children aren't surprised anymore. I've always cried with my kids. They used to be like "[Amy's] crying!" and they'd be looking at me and now...like tears streaming down my face when those kids were leaving, Mere just went and got toilet paper for me. (18.12.03AmyINT:38/56)

The target children were also emotionally open and honest with each other. Aaron often moved behind Mere on the mat to trace faint shapes on her back and connect with her in this soft touching. Aaron confided in me later that Mere liked him to do this. He also talked openly about his shyness, anxieties and worries. Aaron was honest about his feelings with his peers as is seen here when he felt excluded:

*Mere: Where are you going to work?
Aaron: I'll just grab another chair and join you.
Wendy: There's not enough room here!
Aaron freezes, blinks and stares into space at the pain of being excluded.
Wendy: (noticing) I wasn't bossing you around!
Aaron: It felt like it. (29.07.03CO38/2)*

The illusion of joint participation

Most of Amy's attempts to develop a community of learners were contrived forms of joint participation because children individually chose from her pre-determined list of options, which gave only the illusion of sharing decisions. This way of sharing, through offering *her* choices was seen by Amy as a genuine form of sharing decisions 'because they had more input into what and how they went about things, ...it gave them the ownership' (18.12.03AmyINT:30). One example of this choice-based sharing was seen in the research contracts organised by Amy. The children were free to choose their own research topic and four activities such as: making a clay model, doing a word-finder, writing a poem or designing a book mark. Across three observations of the target children as they worked on their contracts, no evidence was found for negotiating new decisions, or of building on each other's ideas about content to co-construct new understandings. As the children completed

their individual activities, they had worked together physically, connected in talk socially about after school events, but they were disconnected intellectually. Their participation remained completely separate from Amy who used this time to test children's reading and spelling. Amy's praise: *'it's great to see you can do this without me'* (12.11.03AmyCO73/2) revealed her intention not to join in their learning.

The dominance of one-way discourse

Amy provided many opportunities for the children to tell their ideas but she indicated no expectation of, or support for, reciprocity where children could engage with the ideas of others. Classroom discourse was one-way, rarely connecting in conversation. The next extract shows a typical exchange where Amy tells or questions and the children listen and seek permission to talk in the stop-wait-go pattern:

Amy: We'll brainstorm settings that you might like to include in your own story. We're going to share ideas today, so no-one can say they don't know what to write about. Close your eyes and think about a setting. Turn to your neighbour and tell her or him.

Boy 1: Can I say something?

Amy: We'll wait until everyone is listening.

Amy asks Dan what his setting is and writes his reply on the board. She continues to write up ideas without engaging with them.

Amy: Nice to see hands up. I want to see some different hands up though. Dan has already contributed... I have only one rule for your story. You don't have to write about this, but if you don't have an idea of your own, you can use this. Off you go. (15.10.03CO59/2)

Amy later talked to Mere about her story by asking her questions. Mere's responses terminated their talk rather than initiating dialogue to develop new ideas. In the same way, when Amy worked in a group, her questions sometimes stimulated multiple responses from the children who, with arms waving, sought permission to speak, or simply spoke over one another. Amy liked this type of excited response where *'it's all coming out their mouths at the same time and everybody's got something to say'* (27.03.03AmyINT:9). But no-one was listening thus precluding sharing and building new meanings. In the main, talk about the content of learning that built on the ideas of others, was notable by its absence. Children's classroom talk was mainly about their out-of-school lives, procedural issues, asking for help, giving answers or instructions, threatening to tell, or accusing others of copying or wrongdoing. The

following extract highlights the dumbing down (Luke, 2000) that occurred when completing activities took priority over engaging in a knowledge-building dialogue:

Ally: Do you have questions about fish you want to find out about?
Mere: (as she paints her underwater world diorama) Not really.
Wendy: (mixing paints) Look what I'm doing!
Ally: (trying to refocus her learning) What's your research question?
Wendy: How do fish sleep?
Ally: That's an interesting question. Have you found out yet?
Wendy: No, but I found out how to mix this colour. (12.11.03CO73/2)

Amy was insistent that the children talk about their research findings with their buddy class: *'We said we would so we have to'* (27.11.03AmyCO79/2). While Wendy had not learned about the sleeping habits of fish, she was happy to share her artwork of an underwater scene. Mere, however, was reluctant to talk to the buddy class. My fieldnotes contained numerous recordings of Mere re-designing the cover page of her research contract, tracing pictures, colouring them in and chatting, without focusing on a research question, which left me pondering whether Mere's reluctance to share was in response to not having any new learning to share. Mere's later explanation, below, suggests my initial hunch was correct; her reluctance to talk stemmed from her focus on doing the task rather than co-constructing new understandings:

Ally: When are you doing your presentation to your buddy class?
Mere: We have to do it to the group but I don't want to.
Ally: Why not?
Mere: Even [Amy] doesn't like doing it.
Ally: But it's just sharing what you have learnt.
Mere: I don't care... I just don't want to. I just finished my contract sheet and I had heaps of time to do it, but first I was doing it in pencil, and there was heaps of mistakes, and then I had to go and find a pen, and then I had to erase out all the pencil that was underneath and then I had to draw a picture on the back. (09.12.03INT:17)

Mere's reluctance to talk about her learning contrasted with the motivation to share that I had observed at times when children *had* learned something new. For instance, when Mere designed a motif for her stitchery she was excited to engage in dialogue about it; when Aaron choreographed a new dance he danced it for me; when Wendy *'faced her fears'* (27.08.03CO45/2) she spoke animatedly about it; and when Dan learned about dinosaur eggs, he initiated conversation with me about it.

6.2.3 Observations using a personal lens

Observations of Amy's participation focused on through a personal lens reveal some transformations in, and perspectives of, teaching and learning. They also reveal some misunderstandings of a community of learners. Also presented, is an analysis of one target child, Aaron. Observations of Aaron's participation are used because the data showed that his perspectives constrained his ability to learn with others in the classroom. As demonstrated in the analysis of activity observed through the institutional and interpersonal lenses, Mere and Wendy also continued to participate in and to perceive learning and teaching as one-sided activities. Less data was generated with Dan as he was often absent from class at the times I observed.

Amy's new learning: 'It's been the biggest thing I've gained'

Initially, Amy believed other people were the teaching experts. She spoke of feeling incapable of expressing her views at professional meetings, allowing others to tell her what to think and what to do. As Amy began to contribute her ideas at our RaP days, and to listen to others in this research, she began to develop her own theories of practice. She came to see that she did have worthwhile things to say and that she was capable of speaking out about them: *'This is the first year I've actually sat in a meeting and had ideas rolling around in my head and verbalised them...I don't always agree with others now'* (18.12.03AmyINT:6/50). She attributed this transformation in her participation to the trust, honesty and respect that developed in the research from *'the same five of us...who fed [her]'* (18.12.03AmyINT:7) and who valued her perspectives. Amy also overcame her fear of having an adult in her room: *'You made me feel comfortable...you cared'* (14.12.03AmyRaP4:48). Participation in this research supported her to move outside her comfort zone, removing desks, challenging the use of timetable, and addressing the Board of Trustees about changes she was seeking in her teaching.

While data taken from the first and final interviews revealed some changes in Amy's perspectives of learning and teaching, other perspectives remained unchanged as shown in Table 6.1. Amy came to believe that teachers don't always *'meet the mark'* (14.11.03AmyRaP4:32), and to see mistakes as steps in her learning with others guiding her, rather than standing in judgement. Her perspectives about teaching took on some sociocultural insights, such as understanding that teaching was a relationship

that required teachers to listen to children. However, Amy continued to see that finishing tasks and following instructions so that children could become independent were important: *'that's how children grow isn't it? Giving them a little bit more and a little bit more and a little bit more until they can do it for themselves'* (14.11.03AmyRaP4:21). Tensions are also evident in her belief that listening to children is important, but that to do so wastes time.

Table 6.1 Amy's perspectives of learning and teaching

Initial perspectives (27.03.03AmyINT)	Final perspectives (18.12.03AmyINT)
Good learners have self-control, finish their work and seek help from others. <i>'They are able to focus themselves on to something and work at it until it's finished...they know when to ask someone else to give them a hand.'</i>	Good learners get their work finished without needing teacher assistance. <i>'I need them to work independently and actually achieve...if they needed help they would come to me and I would say, 'see so and so.'</i>
Teachers know what's best for children. <i>'I love being able to decide what we're going to do.'</i>	Teachers should consider children's decisions. <i>'All year everything we did I just felt like they had more input into what and how we went about it.'</i>
Teachers can learn from the children. <i>'And I go 'Shh I don't know this stuff either. Let's just listen and find out'.'</i>	Teachers need to allow time to listen to children even if it does waste time. <i>'I wanted to listen but I've spent less time listening because I've been conscious of the time we're wasting doing that.'</i>
Teachers should not make mistakes – to make a mistake is to fail. <i>'I don't tell people when I do something new in case it fails.'</i>	Teachers can make mistakes. <i>'I'm going to make mistakes in my job. As the year has gone on having you not be critical of my mistakes and laugh along with me has helped.'</i>
A good teacher respects children and expects them to work hard. <i>'I always say to my kids I'm firm but fair...100% effort has got to go in.'</i>	A good teacher develops a relationship with children but knows when they're not needed. <i>'I love dancing ..., I start off with them and we work together and then they don't need me anymore.'</i>

Contradictions arose in the analysis. Amy spoke of perspectives that were consistent with the principles of a community of learners: *'for me it's not a physical thing. It's not where you sit or where you are in the classroom, it's whether you are with them'* (14.11.03AmyRaP4:31). Amy also viewed her classroom as a community of learners: *'I feel that I run my classroom like a community'*, (18.12.03AmyINT:18). Furthermore, she openly criticised the notion of busy work and the *'stand at the front kind of teacher'* (18.12.03AmyINT:6). However, the activity observed through the

three lenses showed that Amy's participation was not conjoint with the children's. The contradictions between what Amy believed and how I observed her, suggest that she was misunderstanding the concept of a community of learners. Amy interpreted the principle, '*we are all learners*' to mean that sometimes the children learned from her telling, her questioning or her activities, and that at other times, she learned from the children telling or correcting her mistakes. She had not understood that learning could also be a process of co-construction where meanings were shared to reach new knowledge that neither of them had previously understood. She interpreted the principle, '*sharing decisions about learning*', as designing a contract with options from which children could choose. Furthermore, Amy's interpretation of the principle, '*sharing responsibility for learning*', saw her shifting her power to authorise a child as a proxy-teacher or encouraging independence from her. Misinterpreting three of the four principles provides an explanation for Amy's predominantly one-sided participation.

On one occasion, Amy spontaneously joined in with the children in a dance rehearsal. I took photographs of this joint participation in which they physically danced together, shared responsibility for each other's placement, movement and timing. They also shared the same thrill of moving together to music; the rhythm holding them as one. My motivation for showing Amy these images was to reinforce the look and the feel of joint participation, and to seed the idea of dancing *with* the children at the upcoming concert for parents. Amy's shocked response to my suggestion revealed her steadfast commitment to one-sided models when she declared: '*Oh no I couldn't. It's theirs...it belongs to them!*' (12.11.03AmyCO73/2). Participating with children in a public forum was simply inappropriate; breaking the most sacred of bounds in teaching. Amy justified her stance by arguing that the children would interpret her participation with them as her not believing in their competence to dance:

Amy: The children see that I do less and less with them until they don't need me anymore. So if I was to stay with them their idea [would be] "We can do it by ourselves, you don't need to help us anymore".
(18.12.03AmyINT:20)

Further evidence for Amy's one-sided perspectives were seen in her earlier choreography of the dance. She had hoped Aaron, a talented choreographer, would

contribute his ideas, but Amy did not invite these, nor did Aaron offer them. Amy attributed Aaron's reticence to his shyness. She could not see that for him to join her in a joint choreography of dance, of which he was very capable, would have required him to contravene the intensely one-sided culture of Room Two.

Aaron's perspectives: 'She's supposed to be the know-it-all'

Aaron's response to the prospect of dancing with his teacher was as negative as Amy's, and justified in the same way. The thought of doing so made him *'feel like a baby because people would think we couldn't really dance and that we needed our teacher on stage with us'* (09.12.03AaronINT:50). His reasoning reflected his one-sided perspectives in which teachers' participation should be separate from children's. Aaron's initial perspectives of a good learner included: listening to Amy without interrupting her, following her instructions, and needing to be told things only once. A good teacher was someone who *'tells us what to do...and gives out points for being good on the mat'* (12.03.03AaronINT:10). The idea of Amy being a learner *'felt weird. She's supposed to be the know-it-all and teaching us'* (12.03.03Aaron3INT:18).

By the end of the research, Aaron still held one-sided perspectives despite using words associated with joint participation. Aaron told me that *'learning is exchanging your knowledge. We tell [Amy] something and she tells us something'* (09.12.03AaronINT:53). While this exchange recognised Amy as a learner, it did not convey the reciprocity inherent in a community of learners. When asked to recall a time when Amy had joined in his learning, Aaron recalled working on his contract and Amy *'looking at what everyone had done'* (09.12.03AaronINT:11); 'joining in' was synonymous with 'looking at'.

Aaron's initial response to his desk-less classroom was positive. He liked being able to move around and talk with his friends: he liked the feeling of space, and being able to *'work with different people...and sit or lie down'* (22.07.03AaronCO32/2). His positive response to this physical change was confirmed in my fieldnotes:

I am amazed at the different positions the children take up. It looks so natural. Everyone has their place; sitting, leaning or lying with a clipboard. There is a feeling of calm...it looks less like a classroom and more like a place to learn together. (22.07.03CO32/2MEMO)

However, the new layout brought difficulties. The flipside of being able to choose where to sit was inability to choose and exclusion. The increased noise level had distracted Aaron and the loss of his belongings had frustrated him. Not finishing his work was a constant problem because ‘*we chatter a lot when we work*’ (18.09.03AaronINT:5). While Aaron wanted the desks to come back into the classroom, he also wanted the option of learning on his own or with a friend who could help him.

6.2.4 Summary of Room Two

Despite unintentional forays into joint participation, analysis of observations through the *institutional lens* revealed the continued prominence of the five forms of one-sided instructional models. Their new physical environment had been insufficient to normalise the joint participation instructional models seen in Room One. Changing the room layout had provided a context to be social, rather than a social and cultural context in which to learn together. The cultural practices and values of doing activities and getting these finished persisted, prohibiting the sharing of expertise.

Activity observed through the *interpersonal lens* highlighted an enduring emotional connection between Amy and the children. However, cognitive and social forms of joint participation were not evident. Also evident through this lens was one-way communication in which directives were given, questions asked or ideas told, rather than shared in sustained conversations. Some children’s reluctance to talk about their findings with a new audience was argued to be in response to their intense focus on doing and completing tasks which prevented opportunities for learning.

Activity observed through the *personal lens* revealed Amy’s increased confidence to talk about, to challenge and to share her practice with others. Observations also showed that Amy had retained many one-sided perspectives of learning and teaching, and that she had misinterpreted the principles of a community of learners; her difficulty in understanding explained her predominantly one-sided participation. Aaron’s perspectives of teaching and learning remained one-sided and were consistent with his one-sided participation. For Aaron, a teacher’s participation

should be separate from his: joint participation with a teacher was a sign of his dependence and incompetence, rather than a legitimate means to learn.

6.3 TOWARDS A COMMUNITY OF LEARNERS IN ROOM THREE

Room Three, sometimes referred to as Lab Three was in the adjacent wing to Rooms One and Two. An empty classroom lay on one side with Room Four on the other. The door into Room Three led off a covered deck area, with another door opposite opening out onto the grassed playing field beyond. West and east facing windows let in light but little fresh air. Colourful teacher-made displays, whiteboards and shelves covered the other two walls. Tiare's desk with its coveted prize cupboard *'for people being good and getting on with their work'* (15.10.03JonahCO61/3) was obscured from view by a computer and her teaching station. As was customary for Tiare, she regularly changed the layout of the classroom depending on their learning theme. Except for regular sessions in the library, assembly hall and outside areas this setting remained their place to learn. The four target children in Room Three are Michelle, Jonah, Zac and Rena with Mike replacing Rena who left at the end of Term One.

6.3.1 Observations using an institutional lens

This section considers the culturally organised activity in Room Three as observed through an institutional lens. Tiare's goals are presented first and are followed by data to show the emergence of joint participation co-existing with more predominant one-sided instructional models.

Tiare's goals: 'Walking the talk'

Tiare's initial interpretation of the principles of a community of learners led to establishing a sharing circle as her first goal in the research. Intrigued by Rick's *What's on Top*, Tiare asked if some of his children could talk with her class about its unique participant processes. Observations over this first cycle of action research saw the children make brief contributions in their *What's on Top* circle in which Tiare remained elevated on her teacher chair. There was little evidence of deep sharing, empathetic listening or non-verbal joint participation. At our second RaP day, Tiare reflected that while the children, and even some parents, had enjoyed participating in *What's on Top*, *'it was a waste of time...when everything is running smoothly and the*

kids are happy' (27.06.03TiareRaP2:67). Tiare also revealed how Term Two had been a *'write off'* with bereavements in her family. Our conversation motivated Tiare to consider whether these family bereavements had interfered with her ability to connect emotionally with the children. Tiare initiated a second cycle of action research with goals to develop more responsive listening and sharing in *What's on Top*. Tiare also began to think about other ways of sharing. She recognised that *'usually kids get to make decisions after we've planned'* (27.06.03TiareRaP2:37). Discussion about the constraining effects of their planning process, resulted in Tiare also deciding to *'include the children in her planning prior to and during learning'* (27.06.03TiareRaP2).

Observations over this second cycle revealed that *What's on Top* had become a more revered participant structure to connect at an emotional level; the children reminding Tiare if they had forgotten to do it. With Tiare and the children being regular contributors, the nature of their talk had become more personal with issues of death, marriage and divorce shared. The pain or joy of these disclosures reflected on most faces and some were later followed up in respectful conversations. Tiare reflected that *What's on Top* had helped strengthen *'relationships children have with each other'* (17.12.03TiareINT:10) as well as helping her understand the children as individuals. Tiare's goal of sharing decisions with the children prior to planning was achieved by generating questions that fascinated them about their impending unit on plant growth.

Tiare's reflection on our third RaP day was embedded in her emotional response to changes happening in her classroom: her joy at the success of their shared inquiries, her confidence in the children to make a difference at school, her disappointment that senior staff had not supported her proposal to participate in a beautification project, and her feelings of inadequacy to *'walk the talk'* and to actually participate with the children, as the next extract reveals:

Tiare: I don't know how I'm going to attack it if the kids continue in this line of being socially responsible and putting things into action. How am I going to be able to help them through that? (01.09.03TiareRaP3:8)

A third iteration to develop a community of learners evolved. Children were to use their knowledge of plants *'to develop a real outcome where they could care for the school environment'* (01.09.03TiareRaP3:5). In the final term, Tiare adapted a Social

Studies process called Social Decision Making, after the children had identified the issue of wanting their own garden at the school. Tiare and the children together suggested possible solutions and planned to act on one; to create a garden of their own using tractor tyres, new topsoil, seeds, and protective screening. A second joint venture saw Tiare and the children walk round the school to identify and photograph spots in need of beautification. The children wrote letters to a local business to request native seedlings, and with Tiare dug holes, painted stakes, planted, fertilised and cared for their seedlings to beautify a wasteland. The children's sense of ownership was evident as Zac showed me *'his tree'* and shared his new learning about gardening which had developed in their community of gardeners.

Seeds of joint participation emerge

Analysis of the data set from Room Three showed a dominance of one-sided instructional models over the duration of the research. The stop-wait-go control characteristic of one-sided transmission was evident where children sat on the mat, raised their hand, waited for permission to speak, and listened to Tiare's instructions often prefaced by *'what I'm going to get you to do for me now is...'* (06.03.03TiareCO8/3). Widespread use of children as proxy-teachers was also seen when Tiare authorised children who had finished their work to help others; the nature of this helping predominantly of a one-sided nature, or when she divided the class into groups with an assigned leader who gave instructions and controlled in a directive manner. Equally widespread were child-initiated transmission models where a child asked another for help. Contrived joint participation was evident when Tiare designed individual contracts for children, labelled as being independent, to choose the order in which they completed their activities.

While a landscape of one-sided participation continued, seeds of joint participation did begin to emerge; a transformation fuelled by the children's enthusiasm for it being *'different to normal school'* (12.08.03MikeCO40/3), and protected by Tiare's recognition that it was evidence of developing a community of learners. Examples of joint participation between the children included sharing the meaning of content when they *'talk to people about their work'* (17.09.03JonahINT:6). Joint participation between Tiare and the children was seen when they participated as a community of gardeners, and in the dovetailing nature of conversation in these real-

world activities. Numerous examples of non-verbal joint participation were evident when Tiare and the children connected silently in responsive listening in *What's on Top*; in body language as they gathered round the computer; in eye contact; in flushed cheeks and other tacit gesturing. Child-initiated joint participation only occurred *outside* the classroom as portrayed below:

Their community of players has fluidity to it; people coming in, going out, laughing, talking, knowing where the other is and co-ordinating with them as they play together. (13.05.03CO21/3MEMO)

From role playing to taking a real role

Analysis of the data revealed a cultural change from pretence to authenticity in three distinct ways. The first change was observed in Tiare's realisation that she engaged in pretence with the children, tricking them into thinking they were being involved in decisions, when really she knew she was '*push[ing] them in a certain way*' (27.06.03TiareRaP2:42). Tiare had always disliked the pretence involved when teachers hid their mistakes from children: '*you've got to be honest with kids. If you're not honest, they know*' (26.03.03TiareINT:16). Observations revealed Tiare's honesty with children as the following extract shows:

Tiare reveals her uncertainty about a word she has spelt on the blackboard. A child thinks it looks wrong, gets a dictionary to clarify it and shares the correct spelling. Tiare looks happy to admit her mistake; the child looks satisfied to have helped her to find the right spelling. It all happens so seamlessly. (03.04.03CO18/3MEMO)

The second cultural shift toward authenticity came about in Tiare's design of a creative classroom setting that took on elements of everyday reality. For instance, Tiare made identity cards to be worn when children entered the classroom, which came to be known as Lab Three. This new cultural system negated the need to take a roll. Six mini labs within Lab Three focused on specialist plant science research with computer and digital technology used to find information and present new learning. They worked with a university plant scientist and trust licences were earned to learn in designated areas beyond the classroom, and revoked for failure to adhere to the terms of their licence. The third shift toward authenticity was seen in activity that valued the children's voice. The children's voices were listened to in *What's on Top*, when they created curriculum together, when they proposed new playground markings, and when Tiare defended the children's right to be heard in the school's

decision making processes. The children's delight in being listened to was captured in an email: *'The figure 8 wasn't quite what we had thought when we asked for a car track, the kids were excited that it had come from their idea'* (02.09.03TiareEMAIL).

6.3.2 Observations using an interpersonal lens

This section presents activity observed through an interpersonal lens which focuses on the emergence of new interaction patterns in Lab Three. Key themes identified in this analysis include: children's propensity to control rather than to co-construct learning, the unexpected consequences of sharing learning decisions, and children's excited anticipation to share their learning which became a means of assessment.

Children's propensity to control: 'He's not the boss!'

The one-sided practice of an authority figure exercising complete power over others was so ingrained in Lab Three that when Tiare first provided opportunities for the children to collaborate with others, they jostled for their place to be the boss. These ways of interacting without Tiare's actual presence had been appropriated through her own one-sided interaction with them. For instance, in response to Tiare's efforts to set up a collaborative activity, children worked in groups to draw what a plant looked like above and below the ground. Michelle was their appointed artist, who was *'not allowed to draw unless you tell her'* (22.07.03TiareCO31/3). The extract below shows the excessive power-over nature of children in this drawing activity:

Boy 1: Put another line across there. STOP!

Boy 2: Make another one of those going up...

Jonah: STOP!...Go down there and up to here...put it down further.

Boy 3: What's that? (deep sigh)

Michelle (looking stressed): You do it!

Girl 1: No you have to.

Boy 1: I'd draw it but I'm not allowed to.

Jonah: Here, I'll do it for you.

Boy 1: He's not the boss.

Boy 2: None of us are...

Michelle: Is that right? Tell me when to stop?

Jonah: Be quiet, you're not allowed to talk. You're not telling anything!

Michelle: I know. (22.07.03CO31/3)

The children were also required to help others if had finished their work early. Evident in this helping activity was participation consistent with child-initiated transmission and child-as-proxy teacher (see Table 5.2, p. 105). In response to a

request for help, the helper told, validated or, as the following case in a drawing lesson shows, completed the work for the child:

Mike: Do you want me to help you? Can I sit down?
Boy gets up to give Mike his seat and hand over his crayons.
Mike: I know what we should do!
Boy looks away while Mike draws on the boys picture.
Mike: You want a bit of yellow over here eh? That looks good eh?
Boy: It's better! But yours is all black.
Mike: That looks good eh? eh? eh?
Boy: Yeah, yeah.
Mike: Do you want me to do all of this black?
Boy: Yeah, just don't colour the lights in black.
Mike: I'll do them all black cos I'll do it good.
Another boy asks for M's help.
Mike: Yeah, I'll be there in a minute...wait man! (15.10.03CO61/3)

Mike later confided that he enjoyed helping others in this way 'because you don't have to sit there and wait for [Tiare] to check [your work]. You can actually be doing something... and it is better for him' (04.12.03MikeINT:52). When asked why it was better for the boy seeking help, Mike said that Tiare would be happier with his work.

While these two examples show one-sided participation, seeds of joint participation were seen when one target child, Michelle, had been asked by Tiare to help a non-English speaking boy to write a story. Tiare believed that Michelle had the skills to 'draw out' rather than 'tell him what to say' (27.06.03TiareRaP2:71). Overt and non-verbal forms of joint participation were evident as they constructed a story when language created a serious barrier to sharing meaning. Michelle's sensitivity to the boy's need to join in her English speaking world led her to slowly articulate each word for him, patiently listen to his sounds and write them down, while maintaining intense eye contact with him. He listened to her prompts, adding in words where he could, all the while holding her in his eyes. Their commitment to sharing meaning is depicted below:

Michelle: What did you do after that?
Boy: Wake up and eat breakfast. (Michelle writes this)
Michelle: What did you do after that?...What did you do after that?
Boy: I get dressed. (Michelle writes this)
Michelle: And what else? Boy looks thoughtful.
Boy: I wake up. I get dressed.
Michelle: What did you do? Watch TV? Play on the computer?
Girl sings next to them but it doesn't break their intense connection.
Michelle: Anything else now? ...Watch TV?

Boy nods and Michelle writes.

Michelle [imploring him to respond to her]: Anything else?

Boy: I eat lunch. I go to sleep. (They chuckle together)

Michelle: Anything more? (03.06.03CO29/3)

Their joint participation continued as they stood together in front of the class to read their story. Michelle stood behind him yet with him, responding to his subtle cues for help. Keeping her finger on each word, she prompted him, joined in or withdrew in response to his cues. Their flushed, smiling faces suggested the intense pleasure of this joint participation. Interestingly, Michelle later confided that while she liked helping this boy, she would not want to do it again *'because it was a waste of learning...waste of time'* (20.06.03MichelleINT:16). Michelle was so focused on getting her own work completed that she had not recognised, nor valued her transformation of participation as constituting learning. Instead of participating as a reclusive child, she was being responsive to and guiding sensitively the participation of another.

Unexpected consequences of sharing decisions

Unexpected consequences of a positive and negative nature arose as Tiare began to share decisions about learning with the children. The first of these unexpected outcomes was the inspiring nature of children's ideas for learning such as:

- how and why plants make different seeds;
- how and why some flowers close at night;
- why buds differ from flowers; and,
- how flies die in fly traps.

Tiare acknowledged that on her own, she would not have been able to think of these questions; she was now able to incorporate them into her planning. The target children's reaction to sharing decisions with Tiare varied. While Jonah disliked doing so, because it meant he had to think, Mike liked it *'because normally you don't get to choose what you do, you just come to school and see what's on the board and do it'* (16.09.03MikeINT:5). A second less obvious consequence was the disillusionment some children felt when Tiare made compromises. For instance, Mike and Jonah joined others in their shared interest in cars, breaking this focus down into questions including:

- How do cars steer?
- How do gears work?
- How do cars move?
- How do wheels grip?
- How does an engine work?

However, rather than engage with the children to determine these questions, Tiare simply stated ‘*I need to know what **you** want to answer*’ (07.10.03TiareCO55). Mike had been unable to pursue his original inquiry into how an engine works: his sense of powerlessness at having this decision taken from him is evident below:

Mike: We didn’t really get to choose what we wanted to do.

Ally: What do you mean?

Mike: Tiare would change us around a bit... and like we didn’t get to learn about what we wanted to learn about.

Ally: But, you wanted to learn about cogs didn’t you?

Mike: I wanted to learn about engines. She changed it to steering.

Ally: Did you tell her how you felt?

Mike: She would have just said “oh well, too bad”. So, I don’t really bother...it felt like she wasn’t really caring. (04.12.03MikeINT:22)

Sharing activity as a means to learn and to assess learning

In contrast to activity in Room Two, the prospect of sharing learning was eagerly anticipated by Lab Three children. Tiare created opportunities for them to share their learning with experts because they could ‘*take that next step, of not just producing data, but have a way of sharing it*’ (17.12.03TiareINT:16). Tiare, who later confided she knew ‘*zippo about plants*’ (24.02.04TiareINT:18) accepted my offer to arrange for a plant scientist from the local university to join the children in this sharing session about plant growth. Having puzzled over why a plant grown in a dark cupboard had grown taller than one left in the sun, the children sat in a circle with the plant scientist to share their knowledge as this extract shows:

Scientist: So what might happen to that plant?

Boy: It will grow well in there because it is warm.

Scientist: Well maybe for a while.

Most children suggest it will die.

Scientist: Why do you think it will die?

Girl: Because there is no sun in there?

The scientist builds on their ideas to introduce accepted theories of plant growth. He explains that plants need sunlight and if there’s not enough the plant will initially grow fast to find some light before its stores of carbohydrates deplete and it dies. (12.08.03CO40/3)

While not recorded in the above extract, hearing the scientist's use of technical language seemed to authorise the children's use of it. My fieldnotes recorded animated talk about carbon dioxide, oxygen, sunlight, roots, veins, stems, shoots, fertilisation, bees, pollen, stamens, carpels and chlorophyll. In this exchange of expertise the children had not only learned together, but had revealed their understandings lifted to a new level with the contributions made by the visiting scientist: *'I didn't know they'd understood as much'* (01.09.03TiareRap3:18). The children also recognised how their participation had reflected that of the university scientist. They both: read, talked, wrote and presented findings, pressed plants to preserve them and helped each other to learn: *'that's what researchers do, they help each other'* (12.08.03scientistCO40/3).

Tiare was also keen for the children to share their learning with the children in the other Year 3 /4 classrooms. Using a video camera, Tiare had guided the children to use prompt cards so they could talk about their learning rather than just read it. Michelle had been *'real nervous because we weren't allowed to read it'* (04.12.03MichelleINT:34). The following extract shows a change in Michelle's participation as she began to talk fluently about her new learning:

Michelle stands in front of the camera, smiling with nervous anticipation. She talks about the koala's superior sense of smell and their two thumbs! This intrigues her audience. Smiling, she sits down and is joined by a boy who continues talking with her about it. (21.10.03CO63/3)

6.3.3 Observations using a personal lens

Observations of Tiare's participation through the personal lens are presented to reveal transformation in her participation, interests, motivation and perspectives. Despite Tiare's efforts to develop a community of learners, Michelle, Mike, Jonah and Zac continued to hold perspectives of learning in the classroom as a one-sided activity, and they continued to participate in predominantly one-sided ways. The decision to further analyse Zac's participation through the personal lens was based on his perspectives of how learning and teaching happened in the classroom, and the contradictions this held with how he understood learning to happen beyond it. In short, Zac fascinated me. Closer analysis of these data was the only way to sort out these contradictions, and to better understand the processes of developing a community of learners.

New directions for Tiare: 'I've never done that before!'

Early in the research, Tiare spoke about her feelings of defensiveness when her ideas for innovation had been rejected in previous teaching at the school's Māori Immersion Unit. Taking new steps towards innovation in this research had, therefore, been a daunting prospect for Tiare as feelings of rejection and failure still lingered. The following extract shows Tiare renewing her confidence to share her innovative ideas in our research:

Tiare: It doesn't matter whether it works or not because you are trying it and you are talking about it. So it is valid to give things a go and for them not to work as opposed to thinking it has to work for it to be valid. (17.12.03TiareINT:31)

Analysis across the data set for Room Three showed Tiare becoming less concerned about small failures and the uncertainty inherent in not knowing how things might work. She began to initiate new forms of participation in the classroom and in the research process including: acting as an advocate for the children, reaching out to parents, and inspiring her colleagues to contribute their experiences of developing a community of learners to the Board of Trustees. Tiare attributed the positive way she had begun to feel about herself, and her successful application to join the membership of a Māori Trust Board, to her participation in this research, explained below:

Tiare: And it came from what we were doing in our classroom. I mean the whole research process lifted my confidence as a teacher...the honesty we shared, it was genuine. We valued each other's ideas as people, as teachers and as friends... Even talking with my peers I felt more confident. Whereas before I'd sit there and think of something but didn't say it because what if somebody thought it was stupid? ...So with that confidence and self-esteem...I acted on the thought that I could make a contribution [to the Māori Trust Board]. (24.02.04TiareINT:25)

Table 6.2 below identifies Tiare's initial and final perspectives of learning and teaching. She continued to believe in children's competence and she began to provide opportunities for children to contribute to planning decisions that before had been her decisions. Tiare also continued to hold that the learner, be it herself or a child, was responsible for his or her learning. Her perspectives of learning and teaching changed in her belief that learning was not about becoming independent from others, but about working with others and sharing ideas in a learning relationship.

Table 6.2 Tiare’s perspectives of learning and teaching

Initial perspectives (26.03.03TiareINT)	Final perspectives (17.12.03/24.02.04TiareINT)
A good learner is receptive to new ideas, takes some in and decides what not to accept. <i>‘It’s like pumice takes in some water, then it will discharge what it doesn’t need.’</i>	A good learner thinks about new ideas and wants to share it. <i>‘Instead of regurgitating information they are actually thinking about it and keen to share it.’</i>
Children have valuable opinions. <i>‘The best learning is when it is coming from the kids and they’re teaching you something... they feel comfortable if you learn with them.’</i>	Children are more competent than we give them credit for. <i>‘If you give them the opportunity they will come up with ideas and solutions as valuable and as complex as the older students.’</i>
Learning is about becoming independent. <i>‘When you can stand back and watch the kids because they’re at the point of...doing it themselves.’</i>	Learning is about a relationship. <i>‘If you’re learning as well you become more enthusiastic about the topic as opposed to something you’re just regurgitating... it’s genuine because you’re really learning.’</i>
Teachers and children are both responsible for different aspects of learning. <i>‘I’m responsible for their safe keeping and for them having everything they need to learn...but they’re responsible for learning.’</i>	Teachers and children are both responsible for their own learning. <i>‘For kids to become responsible for their own learning, and to take risks, they need to know that I’m still learning too.’</i>
Teachers need to ensure coverage of the curriculum. <i>‘We’ve got these little boxes... that need to be ticked.’</i>	Teachers need to listen to children and be part of deciding the curriculum. <i>‘As a class you can decide... this is the objective we have to cover. How can we do it?’</i>

Like Rick, Tiare’s initial attempts to develop a community of learners saw her move from adult-run transmission to children-run acquisition; both one-sided instructional models. Tiare’s initial understandings of joint participation included: children telling her things, groups *‘doing their own thing with a contract’* (27.06.03TiareRaP2:44), or arranging resources so *‘the actual teaching is off you’* (26.03.03TiareINT:19). While, she later began to speak about mutual engagement, *‘it’s about how we help others learn by sharing’* (01.09.03TiareRaP3:74), my observations of her practice did not reveal strong and sustained evidence of the reciprocity inherent in joint participation instructional models. Tiare’s participation, as observed and reported through the interpersonal lens, more often revealed one-sided activity, or the seeds of joint participation, despite her perspectives as shown in Table 6.2 appearing to point to some sociocultural perspectives. This finding reveals Tiare’s difficulty in understanding the sociocultural principles that underpin a community of learners.

Zac's spiders: 'I watch them do stuff'

Zac was known and observed as a drifter who engaged in his own world separate from official classroom activity. For instance, instead of framing his picture he imagined his pen, eraser, ruler and items of clothing as props in a battlefield, or in a heavy metal band; instead of listening to Tiare's instructions for practising their dance item, he tried to catch the wind in his sunhat; and instead of asking questions in his group, he looked out of the classroom's misty window to the flooded playground and drew symbols to keep dogs away. His interests lay not in the official curriculum, but in the real world which lay a few tantalising metres away where he learned '*outside at lunchtime cos there's a long time until class time*' (20.03.03ZacINT:6).

Like the three other target children in Room Three, Zac's perspectives of learning and teaching reflected the norms of one-sided participation. In his view, Tiare was responsible for his learning and he was responsible for sitting on the mat, concentrating, listening, obeying, working hard to get his work done '*and if we are good most of the day, we get a treat*' (20.06.03ZacINT:7). Talking about his learning with his peers was perceived to be unhelpful '*because it means you're not concentrating*' (20.03.03Zac3INT:9). Asked how he might teach me something, he said he would '*tell*' me so '*you could lock it in your memory*' (20.06.03ZacINT:16).

As the seeds of authenticity and joint participation began to emerge, small changes began to occur in Zac's participation. One instance saw him intensely focus on justifying who should receive a class certificate. Instead of his usual escape into fantasy, Zac got on with his task, even ignoring a relentless intrusion into his space as recorded in my fieldnotes:

Zac has already written 'I think that J should get the sitificat because he is the best drerer and grop leber.' A boy is leaning over to see what he is writing. Zac pulls out a scrap book and stands it up to shield his ideas from prying eyes. He crouches down behind his protective wall ignoring his neighbour's persistent intrusion. Zac remains focused as he writes about how a good leader listens to people's ideas. (29.07.03CO35/3)

Later in the research, Zac reflected that he liked Tiare listening to his ideas and including him in decision-making because '*it makes you feel you are one of the big children*' (17.09.03ZacINT:3). Zac liked participating in purposeful activity in and beyond the classroom: in his Herbology Lab, planting '*his tree*', or finding any

opportunity to chat with me about my research notebook. Notable in the data was the difference between Zac's mature participation in these authentic activities, and his withdrawn and uncooperative participation in one-sided activities when he once murmured *'I wish I could just have a finished stamp on this'* (03.06.03ZacCO29/3). It seemed his participation changed depending on the context, just as a chameleon changes colour in response to its changing environment (Bourke, 2000).

Despite this transformation of participation and his preference for authentic activity, resembling everyday life, Zac continued to maintain his strong one-sided perspectives about learning *in* the classroom, where learning happened by *'listening to the teacher, sitting on the mat nicely and um doing what the teacher says'* (17.09.03ZacINT:9). However, *outside* the classroom, Zac knew that he learned how spiders *'make their webs...have a baby...and um tie its silk stuff'* (17.09.03ZacINT:12) by observing them everyday. Interestingly, his participation in these everyday activities of an arachnologist were not reflected in the overtly one-sided way he thought it best to teach his peers about spiders inside the classroom as this extract shows:

Zac: By standing up at the front and talking at them about spiders. And they've got to look straight at your face... everyone looking at me. I'd tell them and if they looked away I'd clap in their face...and I'd give them worksheets. (20.06.03ZacINT:17)

6.3.4 Summary of Room Three

Participation observed through the institutional lens revealed the progression in Tiare's professional goals which aimed to *'walk the talk'* of developing a community of learners. The analysis of data, however, indicated the continued dominance of one-sided instructional models despite the emergence of some new forms of joint participation. These early seeds of joint participation included: talking about their learning, gardening together, making non-verbal connections, and sharing decisions about a focus for learning. The analysis also identified a shift towards authenticity in which being listened to and sharing their learning became valued activity.

Participation observed through the interpersonal lens showed Tiare and the children beginning to engage in some shared activity, the seeds of which began to migrate into purposeful and real-world participation. However, Tiare's and the children's interactions remained predominantly one-sided: their propensity to want power over

another and to control activity rather than to share it was revealed. Also observed through this lens was the mixed response to opportunities to share: some children reacted positively, others negatively. These emerging forms of joint participation required extensive guidance which Tiare was not always able to provide.

Participation observed through a personal lens revealed that Tiare came to value the honest, trusting and respectful relationship in this research which had enabled her to sow the seeds of a community of learners. Tiare overcame long-held feelings of rejection, to become more confident to talk about her teaching practice and to initiate new forms of participation in the research process, in her classroom, and in her personal life. While Tiare came to talk about joint participation in ways that indicated she understood its authentic and reciprocal nature, the data revealed her difficulty to *'walk the talk'*. Zac's participation in the classroom did change from daydreaming to more mature activity in response to his perception of its authenticity. However, he continued to hold staunch one-sided perspectives of learning and teaching inside the classroom despite his perspectives of learning outside the classroom resembling "intent participation" (Rogoff, 2003). Realising that learning in school is qualitatively different from learning beyond it, Zac accepted his duty to follow the deeply ingrained one-sided routines of the classroom knowing that they interrupted his learning.

6.4 TOWARDS A COMMUNITY OF LEARNERS IN ROOM FOUR

Room Four was situated at the far end of the L shaped block of research classrooms and backed on to Room Three. One door led off the enclosed deck area into the classroom with another door opposite, opening out onto the field. The enclosed deck area contained a peg-bay, low seating and a long table for children to work at. As with Room Three, west and east facing windows let in light, but little fresh air. Art displays, whiteboards, shelves and cupboards covered the other two walls. Kelly's desk, in one corner, was used as a place to store resources rather than to sit at. The children's new green and red plastic desks were arranged in clusters of six to eight and occupied by children who Kelly deemed could work together. A wet area, book area, computer, teaching station and Kelly's chair completed the classroom layout leaving just enough space for a sharing circle. Except for weekly sessions in the

library and assembly hall, this setting remained their place to learn. The four target children in Room Four are Alice, Tahu, Sarah and Keith.

6.4.1 Transformation of participation using an institutional lens

This section considers the culturally organised activity observed through an institutional lens. Observations are first made of Kelly's professional development goals followed by data that indicate sustained movement toward the development of a community of learners which came to co-exist with one-sided instructional models.

Kelly's goals: Letting go

Kelly found the readings given on our first RaP day to be helpful in visualising a community of learners. One phrase from those readings, "let it go" (Seaman, 2001, p.140), resonated with her. Kelly talked about how hard it had been to let go of her traditional practices, yet she knew that to do so was essential if she was to learn with the children. Kelly began her first action research cycle by taking one small step: to introduce the idea of a sharing circle for *What's on Top*.

On our second RaP day Kelly reported back: *'well my circle didn't last for very long because my kids didn't enjoy it...It wasn't my decision, it was a class decision' (27.06.03KellyRaP2:29)*. Kelly only used their sharing circle at the start and end of the week to reflect on their learning because the children had liked to see each other's faces when they shared. Kelly believed she was including the children in more decisions than she used to: *'I wouldn't call them big things but they're important to them and how the classroom runs' (27.06.03KellyRaP2:33)*. Spurred on by the success of these first small steps, Kelly decided to set new goals which saw her second cycle of action research spin off in four directions: to continue using a sharing circle, for learning to have a purpose, to display learning intentions, and to share decisions about seating arrangements.

While Kelly acted on all these goals, it was the first two she talked about most passionately on our third RaP day. Their sharing circle had become a repetitive participant structure to discuss social issues that mattered to the children. Kelly reflected on one problem that had arisen when a senior class joined them in their fitness routine and had acted insensitively. The circle provided an ideal forum to talk

about this problem. Inspired by the children's emotional honesty, Kelly asked the senior class to participate with them in one big sharing circle. As Kelly supported the children to share their feelings, not only did the children's minds meet, but their tears flowed in the intense emotional honesty: *'It was good for them to see how the circle solved issues like that...we do a lot of decision making together in them'* (01.09.03KellyRaP3:39). Kelly then set in motion another cycle of action: to make her learning intentions and success criteria more explicit (Clarke, 2001); to create curriculum with the children (Turkanis, 2001), and to introduce reciprocal teaching (Palincsar & Brown, 1984).

Classroom observations over the following term showed Kelly writing more explicit learning intentions. At first she wrote these using formal curriculum language such as, *'we are learning about persuasive arguments'*, but then re-phrased them in the children's own words such as *'we are learning to give reasons for our thinking'* (06.03.03KellyCO6/4). The deeply embedded cultural practice of pre-planning made it difficult for Kelly to realise her second goal of creating curriculum with the children. While Rick, Tiare and Amy suggested ways she could do this, and Kelly read how other teachers had negotiated curriculum, it was not until she talked with the children about ways to share planning decisions that she found a way forward. Kelly's ability to withstand uncertainty and to include the children in the development of their learning community is revealed when she said: *'I don't know exactly how I want this to work, I'll have to discuss it with the kids and talk it through'* (01.09.03KellyRaP3:43).

On Kelly's request, I provided her with more professional readings to help her to develop her third goal of developing dialogue to co-construct the meaning of text in reciprocal teaching. Kelly began to guide this new form of participation with children in two reading groups. Tahu and Alice's group had been *'a real struggle and effort... they like to do it their way'* (06.11.03KellyEMAIL). In contrast, Sarah and Keith's group were responsive to this new approach: they showed respect for one another, encouraged others to participate and to build on each other's ideas. Kelly asked another child to sit with the group as an external reviewer. He reported back that *'a great team effort was happening'* (19.11.03CO76/4). Sarah preferred reciprocal teaching to *'normal reading'* because instead of *'just reading the whole thing and*

getting sent to your desk to do something...you ask questions, summarise it and do the clarifying...sort of like helping each other' (05.12.03SarahINT:17).

I asked Kelly whether the success she had had reaching her goals was in part due to her thinking about the principles of a community of learners.

Ally: I suppose my question is, did the principles help you to 'let go' of the traditional ways of doing things?

Kelly: I think so...Yes, they did...And, it didn't feel too bad letting go either... you could sort of fit things under each principle like 'we are all learners'. (17.12.03KellyINT:15)

A new collaborative culture

Analysis of the data showed evidence of both one-sided and joint participation instructional models operating in Room Four. As had been the case in Room One, these instructional models changed rapidly and co-existed quite naturally. Evidence for one-sided transmission was seen in the interactions that Kelly controlled, such as asking questions to take children to a pre-determined point, or giving instructions for tasks she had designed. Evidence for child-initiated transmission was indicated by a child asking for task requirements: *'What do we need to do?' or 'I don't get what to do'* (23.05.03TahuCO27/4). Kelly used children as proxy-teachers to cope with the demands of 31 children, and to cope with constant disruptions. The delighted response from a child who sat in Kelly's chair to take the roll, count the absences, read a book or lead a maths group was strong evidence for the children's enjoyment of having the teacher's power. These one-sided activities began to mutate into shared activity as Kelly reflects:

Kelly: What has been really cool in the last few weeks is that Sarah does the roll and then other children started introducing handwriting and the agenda, and all of a sudden there would be another child up there, they organised who did what: someone to pronounce the Maori language; someone else to let the groups go... It was all organised by them...and it was neat to see them so focussed and showing respect...the class was running without me. I wondered how to get back in. (17.12.03KellyINT:50)

Numerous examples of joint participation between the children, initiated by children and in non-verbal forms were recorded, particularly in the latter part of the research. While the interaction patterns of joint participation are discussed through the

interpersonal lens, the following excerpt shows the dovetailing in verbal and non-verbal forms as Sarah and her friends engaged in a role play:

They're laughing as they share ideas for changing the original script which fuels more ideas. They take turns to be the gingerbread man; their words dovetailing together with each listening to the previous speaker. There is an intense connection in their talk, action and laughter. (23.05.03CO27/4)

Joint participation also developed between Kelly and the children including:

- supporting collaborative research (12.08.03CO42/4);
- participating in the sharing circle (01.09.03RaP3:39);
- guiding reciprocal teaching (19.11.03CO76/4);
- singing together (02.04.03CO15/4);
- listening and responding to their problems (12.08.03CO42/4);
- negotiating consequences (01.09.03KellyRaP3:39) and,
- planning together (17.12.03KellyINT:20).

Valuing the processes of learning

At the beginning of the research a language of doing was heard and a focus on product was seen when children rotated activity stations, completed activity sheets and talked about 'doing' science. Indeed, one of Kelly's early attempts to include children in her planning saw her pin up a blank sheet headed '*Gingerbread Man Morning: Add in pen or pencil your activity ideas*' (23.05.03KellyCO27/4). Only six children responded to her invitation to give their ideas, all of which had focused on an activity such as making gingerbread men. As Kelly began to appreciate the importance of focusing on learning, her participation changed which helped to shape a culture of learning. Kelly introduced research contracts where children formed groups of their own choosing to develop inquiry questions. She wrote learning intentions with the children, and she used a sequence chart to map the processes to guide the children's learning. Furthermore, Kelly's expectation that the children would share their new learning with other classes was shared by the children: '*my kids are looking forward to it*' (14.11.03KellyRaP4:62).

6.4.2 Transformation of participation using an interpersonal lens

This section presents observations through the interpersonal lens to focus attention on new interaction patterns. Three themes are identified: the children's struggle to overcome their propensity to work alone, the change in discourse from giving an idea to building upon ideas, and the depth of emotions in shared activity.

The struggle to overcome propensity to work alone

While children had a natural tendency to participate collaboratively in settings beyond the classroom, and in informal contexts within it, they had a strong desire to work alone in teacher-directed activity in formal classroom activity. Kelly described how getting children to work together in the classroom was *'like pulling teeth'* (23.05.03KellyCO27/4). One example points to their natural propensity to work alone in formal classroom activity. Kelly divided the class into four groups to answer questions in their Social Studies learning. Her instructions follow:

Kelly: Okay, what we do now is get a sheet. Sit in your groups around the room and think about the question written at the top and write your responses. Then we'll share your group's ideas to the whole class. You have three minutes to do each sheet. Go. (21.05.03KellyCO25/4)

Sarah took on a leadership role by reading out the questions to her group and ensuring they followed Kelly's instructions. But instead of engaging together, their ideas were secretly written. One by one, with heads down as added protection against copying, their secret ideas were passed on like a hot potato to the next person amid cries of *'she stole my idea!'* (21.05.03AliceCO25/4). On another occasion Alice took the pen and wrote while Tahu looked away waiting his turn. Their participation was intensely one-sided, with the thought of sharing an idea synonymous with stealing or cheating, despite Kelly's reminder that *'it's a group thing, not an individual thing'* (12.08.03KellyCO42/4).

Later in the research, evidence of joint participation in formal learning activity emerged. Reciprocal teaching provided a context in which their interactions changed from children as proxy-teachers to genuine joint participation. Further evidence was seen in Kelly's tireless efforts to join in with ten small groups to guide them to ask questions of genuine interest and to support their learning together. When asked how

they had learned together Sarah replied: *'well, we worked together on the computer and we talked about stuff...and we chose stuff we needed'* (05.12.03SarahINT:6). Kelly's efforts were paying off but not without a cost: *'So much energy goes into it. Sometimes it's just really hard to maintain a community of learners. It's easier to stand up there or do a worksheet'* (14.11.03KellyRaP4:49).

A discourse of co-construction

The nature of discourse also varied in response to different settings and contexts. In settings beyond the classroom and in informal contexts within it, discourse was reciprocal in which meanings were built up over successive turns in a "dialogue of knowledge-building" (Wells, 2001b, p. 15). Such dialogue was exemplified outside the classroom as the children and I planted trees to mark the end of my time at Jubilee School. Another example occurred in my final interview with children in Room Four after I had asked the target children from Room One to join us. Sarah initiated a conversation: *'I've got a question for Era. How did you come up with the water snakes thing?'* (04.12.03SarahINT:13). Era's response inspired another question from Sarah: *'But did you all want to do the same thing?'* (04.12.03SarahINT:13). Sakura's reply prompted Sarah again: *'So what did you feel like? Did you feel like a teacher?'* (04.12.03SarahINT:13) Sakura's response led Alice to share her experiences of joint participation. Sarah's lead had inspired others to talk in reciprocal exchanges, which left me wondering, like Kelly had before: *'How can I join back in?'* (05.12.03DIARY).

Discourse in *informal* classroom contexts also carried these "dialogic overtones" (Wells, 2001b, p. 186). The following extract exemplifies responsive words and gestures as children painted and talked about being an artist:

Ally (surveying the tools on their desks): Artists use these tools.

Alice: We're not artists! We're just doing it for fun.

Sarah: No...our whole class are artists!

Boy: We're not real artists. We don't send our pictures away off to other schools and stuff.

Sarah: Well, I think we're artists. We're using texture, sponges and cardboard instead of paintbrushes. And my art is on the wall.

Tahu (joining in from another table): I am a professional artist!

Sarah smiles and nods her confirmation at Tahu's response.

Alice gives them both a dismissive glare muttering to herself as she continues creating textural effects. (25.07.03CO34/4)

At the beginning of the research, the discourse in *formal* classroom contexts consisted of short one-off responses, rendering it useless for knowledge-building. If Kelly asked the children to share their ideas, they did so without developing intersubjectivity. Initially, I coded this as joint participation, but I came to see these one-off disconnected thoughts as simply handing over ideas rather than engaging with them. My reflection to Kelly seeded a way to help the children to share their ideas:

Seed 2: Their contributions are happening in a group setting but they are separate from each other. Would it be useful to extend this by asking the children to build on something that had been said earlier? Instead of justifying their own opinion, they would have to listen to and build on ideas already expressed. (20.06.0AllyRaP2REFL)

Earlier observations recorded children going immediately to Kelly if they did not understand what to do: *'Every time they'd get to another step they'd come over to me and ask 'what do we do?'* (27.06.03KellyRaP2:30). A discourse of co-construction to seek understanding of *procedural* matters was first evident in formal learning contexts as exemplified in the following extract:

Boy 1: What if we have two questions, what do we do?
Tahu (overhearing): Vote
Alice: Or we could split into two groups?
Tahu: You could say your idea and then go in that group.
Sarah: We'll all write one [question] down and we'll get [Kelly] to tell us the best one. We won't tell her who wrote it.
Boy 1: Shall I tick which one?
Sarah: Oh no no! You write one down!
Alice: Which one do you think's best? Let's tick. (12.08.03CO42/4)

A discourse of co-constructing *content knowledge* was slower to develop. Sometimes this occurred as children invited others into the group's thinking without disrupting the flow. The excerpt below shows children building meaning together about constellations in their reciprocal teaching:

Dialogue Leader: Are there any words you didn't understand?
Child 1: Constellation.
Dialogue leader: Anyone know what that means?
Child 2: Stars.
Child 3: Yeah a cluster of stars.
Dialogue leader: Does anyone have any other questions they'd like to ask the group?
Alice: Yeah! How come there are 700 stars?... (19.11.03CO76/4)

Emotional connections in shared activity

Also observed through the interpersonal lens was an intense emotional connection in joint participation instructional models. When Kelly and the children shared their feelings and emotions, they acted as signs in the analysis process that joint participation, in any of its forms, might be happening. The following extract, written after observing Kelly and a child laughing together, reveal my initial hunch that sharing emotions had something to do with developing a community of learners:

Classrooms are usually emotionally sterile places. We take on the persona of a 'student' whose learning is arranged by a 'teacher'. Yet learning outside the classroom embraces every human emotion. The culture of one-sided classrooms seems to disallow the sharing of feelings. (02.04.03CO15/4MEMO)

Emotional connections were also evident when Kelly and the children became intensely focused in their learning. These connections manifested themselves in words and gestures such as: winks, nods, dismissive glares, smiles, tears, hugs, giggles, laughter, shrugs, back-rubs, eye rolling, arguments and caring words. Emotional and physical connections are seen in the intense focus described below, when Keith, Tahu and their friends looked at a library book:

They lie over each other on the library couch looking at a book, sharing pages that fascinate them. This intimate focus continues for ten minutes, the degree of which I have not seen before. Their talk is excited and conversational as they giggle over new discoveries; nothing disturbs their intense focus. (09.09.03CO49/4)

Kelly noted that as children began to reveal more about their lives beyond the classroom, a mutual respect and caring developed for each other. Kelly's caring for the children was evident from the beginning of the research: *'You've got to be a kind person to be a teacher...show you care...it builds trust'* (27.03.03KellyINT:12). The respect Kelly showed for the children was heard in her caring conversations and seen in her hugs and smiles. These emotional responses were reciprocated: *'they needed to look after me'* (14.11.03KellyRaP4:49). When asked how the classroom might be a better place to learn, Sarah only reflected on emotional factors:

Sarah: I think we should make the classroom a better place to be...you know how I've got a sense of humour, I could make people happier...people giving good comments...talking nicely...being kind...smiling. (05.12.03INT:15)

6.4.3 Transformation of participation using a personal lens

Observations of activity through the personal lens focused attention on changes in Kelly's perspectives of and participation in learning and teaching. Findings are also presented to show how one target child, Sarah, changed her participation as a community of learners began to develop in Room Four. The decision to report on Sarah was based on the ease with which she could talk about a community of learners; her insightful understandings of joint participation and her exceptional ability to learn with others and to guide others in doing so. As such, Sarah's participation came to be an important factor in the development of a community of learners in Room Four. Alice retained her one-sided perspectives about learning and teaching; her preference for controlling rather than for sharing activity is discussed in the following chapter as a constraint in the development of a community of learners. Less data were collected for Keith and Tahu; both were on behaviour contracts and both were less comfortable talking with me about their learning.

Kelly's sense of self: 'Being more who I am'

Kelly always saw herself as a learner: *'you've got to be a learner I think first of all' (27.03.03KellyINT:12)*. She attached the greatest importance to the community of learner principle *'we are all learners'*. Kelly also came to understand learning as happening in shared activity. Coming to understand the reciprocal notion of sharing enabled her to see that good teaching was about being *'in there with the children, learning...I sit with them and be a learner with them' (17.12.03KellyINT:14)*. Kelly was developing a new learning relationship by sharing procedural and content issues with the children and helping them to engage in these joint participation models.

Table 6.3 summarises Kelly's initial and final perspectives of learning and teaching as she sought to develop a community of learners. Some of the perspectives which Kelly held at the beginning of the research pointed to a sociocultural view of learning and teaching such as the importance of dialogue, being a learner with children and caring about their emotional needs. As the research evolved these initial perspectives strengthened and Kelly became more convinced that sharing learning activity with the children was good teaching practice. Table 6.3 also shows some of Kelly's initial perspectives were more traditional, such as prioritising whole class teaching and

controlling the direction and organisation of learning. These one-sided views transformed to a more collective focus on learning, assessment and planning.

Table 6.3 Kelly’s perspectives of learning and teaching

Initial perspectives (27.03.03KellyINT)	Final perspectives (17.12.03KellyINT)
A good learner is motivated to learn, asks questions and talks about their learning. <i>‘They’d look for chances to learn...I don’t mind talk because that’s how we learn.’</i>	A good learner shows respect and engages in dialogue. <i>‘For learning to happen they need to talk about it – you develop an understanding when you are talking and doing things with it.’</i>
The final product is assessed. <i>I had three assessment items: an oral, a written and a visual.’</i>	Assessment needs to focus on the process of learning. <i>‘Assessment as is as you are going, it is not on what, it is how.’</i>
A good teacher has to be a learner, know the children and care about them. <i>‘You’ve got to be a learner...and show compassion and empathy for kids.’</i>	A good teacher develops a relationship with children and learns with them. <i>‘I think it is the connection with the kids... I am more who I am, and I learn with them... I think I always have thought that.’</i>
Teachers are the planners. <i>‘I make the decisions as to what they’re going to be learning.’</i>	Teachers need to include children in planning. <i>‘I don’t go in with a set plan...I talk with the kids...they give me ideas.’</i>
Teachers mainly engage in whole class teaching. <i>‘I do whole class teaching for everything except Social Studies.’</i>	Teachers should develop a community of learners. <i>‘It gives children power and ownership, and values children.’</i>

As the research evolved, Kelly also began to contribute more confidently in our RaP day discussions and in meetings with school management: *‘I’m more reflective in my teaching. I’ve developed a real concept of who I am as a teacher’ (01.09.03KellyRaP3:51)*. The changes in Kelly’s perspectives of learning and teaching shaped, and were shaped by her successful joint participation with the children, observed above through the interpersonal lens. Her new perspectives also shaped and were shaped by changes in Room Four’s culture observed through the institutional lens. These institutional and interpersonal changes also prepared her for future involvement in related activity, some of which involved personal tension.

One tension occurred after Kelly told senior staff how much she valued teaching in a community of learners. The decision was then made by these staff to place Kelly in a new team for the following year which ran an enterprise programme, believing that this programme *‘took the idea of a community of learners further’ (16.12.03KellyCONV)*. Because Kelly understood the reciprocal nature of sharing

between teachers and children in a community of learners, she was frustrated that these decision-making staff had likened the competitive relationships of this enterprise programme where *'teachers [were] on the outside'* (17.12.03KellyINT:17) to a community of learners. Feeling that this programme was being thrust upon her along with other units of work (institutional lens), Kelly gave up arguing the point in the belief that, *'there are some people you can't tell...they won't listen'* (16.12.03KellyCONV) (interpersonal lens). Kelly's reaction to these tensions was: *'grrrr I just can't be bothered...it affects me...I just walk away'* (17.12.03KellyINT:41) (personal lens). And walk away she did, to teach the following year at a secondary school. Kelly knew she was walking away from what mattered most to her about teaching: *'connection with the kids, but I am giving that away to be able to survive teaching'* (16.12.03KellyCONV).

Sarah's new understandings: 'You can be part of it'

Sarah saw herself as a good learner who concentrated and took responsibility for her learning by *'just getting on with it and do[ing] it quickly'* (12.03.03SarahINT:14). Initially, Sarah thought that children who talked were *'naughty ...[and] make a fool of themselves'* (12.03.03SarahINT:11). A good teacher *'gives us things that we want to do ...tells us instructions and if someone is not listening says can you please tell me what they said?'* (12.03.03SarahINT:25). Sarah's early responses reflected these one-sided perspectives in which she does what Kelly asks, listens to her, helps her, wins her praise and earns her ticks; a boundary separating them.

However, Sarah brought personal qualities to Room Four that proved to be invaluable in the development of a community of learners. Sarah was intuitively sensitive to others, always inclusive of others' expertise, and led with warmth, humour and well-honed organisational skills: *'she connected deeply with people in her caring and reaching out; there is something special about the way she inspires, brings people in and keeps them together'* (27.11.03CO78/4). These personal qualities contributed to her successful participation as a proxy-teacher: *'It's my job to do the roll now'* (20.06.03SarahINT:46), but more importantly her personal traits initiated joint participation and helped others to learn together.

Of all the target children in this study, it was Sarah who most accurately understood the distinctive nature of a community of learners. At the end of the research Sarah talked about her preference for times when they ‘*worked together in the research*’ (05.12.03SarahINT:3) or when ‘*you have a chance to learn*’ (12.11.03SarahCONV) in reciprocal teaching. When asked why she liked learning with her peers and Kelly, Sarah was able to articulate some of the subtleties of a community of learners such as: sharing decisions and responsibility, having choices, having her opinions listened to, being trusted by Kelly. Sarah was also able to distinguish between one-sided models and joint participation as seen below:

Ally: What do you do when you are the dialogue leader?

Sarah: You have to tell the people what to read. You ask if there is anything unusual or they don’t know. You open it up to others, and you, to answer.

Ally: What does that feel like?

Sarah: It feels like being a leader, being a teacher. I like it.

Alice: You get to be the teacher. It feels like power over the group, like telling them what to do.

*Sarah: It doesn’t have to be the **telling**, you can **be part of it**...you are sort of helping each other to understand. (12.11.03CONV)*

In this final sentence Sarah captured the essence of a community of learners that some of the teachers, and many of the children, had found difficult to understand. Telling creates a boundary between the one who tells and the one who is told: being part of a dialogue dismantles the boundary because people’s contributions build on previous responses to form new understandings. Sarah liked working in situations where she could participate in these collective ways. She also liked ‘*sitting there peacefully and working it out [her]self*’ (05.12.03SarahINT:8).

A tension was observed through the personal lens when Sarah realised that Kelly would not be her teacher the following year. She became very distressed, openly crying in the classroom at the prospect of losing her relationship with Kelly. It is possible that Sarah’s distress was attributable to losing someone who had empowered her to contribute her exceptional personal and interpersonal qualities in the classroom. Sarah may have been coming to terms with the reality that learning in her next classroom would revert to one-sided interaction, requiring her to leave so much of who she was “at the door... or at the school gate” (Bishop & Glynn, 1999, p. 166).

6.4.4 Summary of Room Four

Activity observed using the institutional lens showed that Kelly's goals focused on letting go of traditional one-side practices. While one-sided instructional models remained strong cultural features of Room Four, Kelly included children in collaborative rituals such as sharing circles, mutual decisions about learning such as learning intentions, and in other shared activity such as reciprocal teaching. Over the duration of this research the cultural activities and values of Room Four changed from a sole focus on product to include the processes of learning and of doing so together. Joint participation in its four forms, was beginning to co-exist alongside one-sided instructional models.

Activity observed and analysed through the interpersonal lens focused attention on the children's struggle to change from one-sided participation in the classroom despite abilities to collaborate in settings beyond it. However, Kelly's perseverance in guiding children to share their ideas began to pay off. As joint participation normalised, the analysis showed changes in discourse patterns in the classroom, and in this research process, from the one-way communication initiated by Kelly or by me, to the dovetailing of dialogue in which ideas about procedure and content built upon earlier contributions. In addition, intense emotional connections were observed in their respectful, caring and trusting relationships.

Activity observed through the personal lens revealed important changes for Kelly. As she let go of one-sided participation and sought ways to learn with the children, her personal and professional values began to align. She developed a strong sense of who she was as a teacher and saw herself as a learner with the children. Kelly's perspectives also came to align with a sociocultural view of learning and she developed skills to guide joint participation. Sarah also made important shifts in her perspectives of learning and teaching. For instance, she came to understand, and to talk about the meaning of a community of learners. Furthermore, her highly tuned interpersonal skills enabled her to learn with others and to guide others in shared activity. In these ways, Sarah played a key role in sustaining the ongoing development of a community of learners. Both Kelly and Sarah experienced tension as a consequence of their transformations of participation.

6.5 CHAPTER SUMMARY

Bringing together findings from Rooms Two, Three and Four identifies the diverse ways in which a community of learners can develop in primary classrooms, as well as the struggle to do so. Also indicated was the mutually constituting nature of this development whereby activity observed through one lens shaped, and was shaped by, activity observed through the other two lenses. For instance, these findings suggest that the development of a community of learners required: a culture that authorised joint participation (institutional lens), teachers and children to understand the notion of shared activity and to hold perspectives that were consistent with sociocultural theory (personal lens), as well as teachers and children to engage with each other in shared cognitive, social and emotional activity (interpersonal lens). The data presented through the three lenses showed commonalities and differences in the development of a community of learners across the three classrooms.

Using the institutional lens, the findings common to the three classrooms included the continued dominance of one-sided instructional models in which cultural practices such as ‘doing’ and ‘finishing’ remained important. Contrived forms of joint participation were also developed as early attempts to develop a community of learners were shown to represent swings from adult-run to children-run participation. Differences observed through the institutional lens included: the different professional development goals that teachers set and the progressions therein, different collaborative rituals that were developed, and the different degrees to which joint participation emerged and was able to be sustained.

Using the interpersonal lenses, the findings common to the three classrooms included their relationships of care, honesty and trust, yet the struggle to engage together in cognitive activity in formal classroom learning. In addition, the children’s propensity to work alone, or to control rather than to share activity was common in all three classrooms. All the target children were able to participate collaboratively in settings beyond the classroom, and in informal activity within it. Differences observed through the interpersonal lens included the different shared activities, different degrees of knowledge-building discourse, and the different ways power was shared.

Common findings for the teachers observed through the personal lens included: their openness to the idea of a community of learners, their initial one-sided perspectives and their struggle to work through the tensions of developing joint participation. All the teachers grew in confidence to: take pedagogical risks, take on new roles in and beyond the classroom, to develop and to share their new theories of practice, as well as to question their taken-for-granted practices. The teachers all attributed this personal and professional growth to their participation in the trusting and respectful relationships in this CAR. Commonalities observed using the personal lens at the target children included: their initial one-sided perspectives of classroom learning, the tenacity with which they clung to these perspectives, their belief that sharing was a form of cheating, and their struggle to learn with others in the classroom. Commonalities were also seen in the way children appropriated the most dominant cultural activities and values in their classroom.

Differences observed through the personal lens at each teacher's individual activity included: different initial perspectives, different fears, strengths and background experiences which shaped different understandings of a community of learners, and different changes in their perspectives. Furthermore, the teachers had different creative ideas and abilities for developing a community of learners, and they each experienced unique tensions as they did so. Variations observed through the personal lens at the children's individual activity included: different ways they understood, valued and responded to joint participation. The children also brought unique interpersonal skills to participate in, to guide and to sustain joint participation. Like the teachers, the children also experienced tensions as they began to learn together.

Chapter Seven presents the findings in relation to the third research question. Activity observed through institutional, interpersonal and personal lenses reveals the constraining and enabling factors for teachers and for children as a community of learners develops.

CHAPTER SEVEN

CONSTRAINING AND ENABLING FACTORS

One builds a learning community...by engendering commitment in individuals, not by manipulating control. (Prawat, 1996, p. 101)

7.1 INTRODUCTION

Findings presented in the previous two chapters showed that while it was possible to develop a community of learners in a primary classroom, to do so was a demanding and difficult process for the teachers and the children. In line with Prawat's (1996) claim above, these findings showed that the teachers' efforts to manipulate joint participation were unsuccessful; a community of learners developed when teachers and children showed individual and collective understanding of, and commitment to, learning together. The present research found a wide range of other constraining and enabling factors in response to the third research question:

What factors enable or constrain Year 3 / 4 teachers and children to develop and participate in a community of learners?

Accordingly, this chapter identifies the constraining or enabling factors by foregrounding activity through an institutional, interpersonal or personal lens. The factors that proved to be constraints for the teachers as they sought to develop a community of learners are presented first, followed by those that constrained the children's joint participation. Subsequent to this, the factors that proved to enable teachers to develop a community of learners are presented, followed by those that helped children to learn together. The results are reported for each of these four sections first through an institutional lens, then an interpersonal lens and finally through a personal lens. While some reference is made in this chapter to the research literature, the most important constraining and enabling factors are selected for discussion in Chapter Eight.

7.2 CONSTRAINING FACTORS FOR TEACHERS

Using an institutional, interpersonal and personal lens, themes are identified which constrained the teachers' ability to develop a community of learners. These factors are identified in Table 7.1 and structure the following subsections.

Table 7.1 Factors constraining teachers

Institutional constraints	Interpersonal constraints	Personal constraints
<ul style="list-style-type: none"> • pre-planning units and curriculum coverage. • division of learning into time slots and regular disruptions. • inflexible school organisational practices. 	<ul style="list-style-type: none"> • one-sided perspectives of children, parents, and some other teachers. • lack of a wider discourse community with colleagues. • pressure of <i>'bottle-necking'</i>. • children's over-excitabile responses. 	<ul style="list-style-type: none"> • the teachers' initial one-sided perspectives. • difficulty to understand joint participation. • difficulty to let go of one-sided perspectives and practices. • difficulty to sustain development. • lack of relevant skills for joint participation. • heightened sensitivity to non-inclusive practices.

7.2.1 Constraining factors for teachers using an institutional lens

Accepted practice at Jubilee School was to *pre-plan units* of work from a pre-determined long term scheme to ensure *curriculum coverage*. Findings showed that these planning practices and coverage responsibilities constrained the development of a community of learners because they encouraged a culture of doing, getting finished and of delivering a curriculum. The teachers recognised that by using these terms and by rigidly adhering to a predetermined sequence of activities they unwittingly reinforced the separateness of teachers' and children's activity: *'it implies we have to give something to someone'* (08.04.03TiareRaP1:8); and *'it dictates what you should be doing...it locks you in...and takes you away from the kids'* (17.12.03KellyINT:20). Acknowledging this tension, however, did not help the teachers to change their pre-planning practices. Their first efforts to negotiate the curriculum were thwarted by complexity and the ingrained ritual of holding meetings *after school* to plan a unit, to prescribe its content, or to discuss its coverage. The teachers' efforts were also constrained by their initial struggle to "acknowledge the

capabilities and resourcefulness of children” (Fleer et al., 2006, p. 184) and to enable them to contribute to a co-construction of curriculum *during school*.

The daily *division of learning into time slots* written on the whiteboard also acted to constrain joint participation by keeping the teachers “prisoners of time” (Hargreaves et al., 2001, p. 164). The timetable provided a visual reminder of what they should be doing, as well as engendering a sense of duty to follow it. As teachers became more responsive to emergent events, timetables were sometimes arrowed, or in some cases, ignored. The inflexible time-tabling of the hall and the library also created physical and emotional barriers to learning together: *‘so many things had come up and swallowed our hall time...I just wanted to shelve it’ (17.12.03TiareINT:9)*. Efforts to ensure curriculum coverage left little time to listen to others and to engage in dialogue: *‘I know what I want to cover in my day...I’ve spent less time listening because I’m conscious of the time we’re wasting’ (18.12.03AmyINT:35)*. Regular disruptions in the classroom added to these time constraints. These interruptions included: announcements on the intercom system, telephone calls, unexpected visitors or messengers bearing notes requiring immediate attention. Responding to these disruptions required teachers to disconnect from children’s thinking, and the effort required to reconnect was sometimes too much: *‘Irritated at the fifth disruption ...Kelly takes the book back from a child, and with it, the power’ (19.11.03CO76/4)*.

Inflexible school organisational practices also acted as institutional constraints because they set teachers up to participate in one-sided activity. These one-sided practices included: writing reports to parents to tell them about their child’s independent achievements, assessing literacy and numeracy skills by administering tests, rewarding improved behaviour with the privilege of sharing responsibility, and requiring teachers to attend professional development courses where they were cast in the role of one-sided learners. Annual changes of class membership also acted as an institutional constraint because it disconnected learning relationships which had taken the year to develop: *‘It seems crazy that at the end of the year you just cut it off’ (24.02.04TiareINT:5)*. Noddings (2005) argued a similar point when she called for children and teachers to stay together singly, or in teams, for three or more years; continuity that would see relationships flourish. Jubilee School’s high teacher-child

ratios acted as a further constraint to developing a community of learners. While all the teachers voiced their frustration about this, it was Kelly who spoke to Jane, the new Principal, about how high ratios constrained her ability to connect with the children. Her recollected words follow:

Kelly: "I've got 32 children in my class and a special needs child. Do not expect me to reach every child, because it is not doable! You're compromising my ability to teach well." (17.12.03KellyINT:10)

The lack of time, high teacher-student ratios, and pressure to cover a required and broadly defined curriculum, noted in the present study, was also identified by Zeichner and Liston (1996). They argued that these constraints both increased the complexity of teachers' work yet decreased the time available for reflection on practice. For the teachers in the present study, these increased complexities were additional to the complexities involved in developing a community of learners.

7.2.2 Constraining factors for teachers using an interpersonal lens

The dominance and pervasiveness of *children's one-sided perspectives* about learning and teaching, shaped by previous one-sided classroom experiences, constrained the teachers' ability to develop a community of learners. At the beginning of the research, all the target children held one-sided views of learning, such as listening to the teacher, getting the right answer, locking information in their memory and getting finished. These one-sided views created some degree of resistance when teachers attempted to engage children in shared activity.

The *one-sided perspectives of some parents* also created constraints. Rick reflected on how demanding it was to talk with parents and their children in parent-teacher-child conferences because *'school wasn't a great place for them and they're nervous being around me'* (22.08.03RickCONV). Both he and Amy were cautious of parents who wanted to see evidence of their child's learning in an exercise book. Amy preferred to keep her practices from them for fear of their criticism: *'if only they knew how I teach, I just don't tell them what I do in the classroom'* (12.04.03AmyCONV). While talking with parents was important to Kelly, she did not actively invite them to participate in the classroom. Tiare was the only teacher to invite parents to share their expertise in the classroom or to visit them in their homes. Parents were welcome to join them in *What's on Top*, in their gardening activity or to

share their expertise. Tiare's Māori values of developing ongoing *whanaungatanga* or reciprocal relationships with the wider *whānau* may explain her desire to make connections with parents.

The one-sided perspectives of some other teachers at Jubilee School also constrained the research teachers' efforts to develop a community of learners. Subtle expectations to conform to traditional practices were created by the attitudes of these other teachers who criticised the research teachers' early efforts to develop collaborative initiatives. For these other teachers, sharing learning and management decisions with the children simply went against the grain of being a teacher. As disciplinarians, they could only see chaos and interpreted it as a sign of losing control; their one-sided perspectives blocking out the dove-tailing that was emerging.

The lack of a wider discourse community among the teachers at Jubilee School also constrained the teachers' efforts to develop a community of learners. While participation in this study brought the four research teachers together as a group, it also served to set them apart from other teachers at the school. As criticisms of their efforts to develop a community of learners were heard, second-hand, the research teachers responded by keeping silent about their practice: *'there are not many people at school that I would feel comfortable sharing this with'* (14.11.03RickRaP4:41). Earlier, we had discussed the possibility of opening up this research to other teachers in the school, but it soon became apparent that to do so could jeopardise our developing sense of professional community in which we began to *'sing from the same hymn book'* (01.09.03TiareRaP3:82).

The *pressure of 'bottle-necking'* was another interpersonal constraint. Rick recognised that he could not *'be with all the kids. I'm the bottle-neck'* (21.10.03RickCO64/1). He worried about the down time for children as they waited for a chance to talk with him about their inquiries. Some time later, Rick reflected that these bottle-necks had actually helped him to recognise how a community of learners might develop: he began to appoint experts to support other children in their inquiries. When bottle-necks occurred in Rooms Two and Three, children were authorised to help others, but this help mainly occurred when children acted as proxy-teachers, appropriating the dominant cultural interaction of their classroom.

As the teachers began to share learning and management decisions, and the power that went with it, the *children's over-excitability responses* constrained joint participation. These responses were interpreted by the teachers as a sign that control had been lost and that their efforts to develop a community of learners had failed. Their perceptions of the situation acted as a potentially serious constraint because they reacted by taking back the power and reverting to the security of one-sided activity. Rick and Kelly gradually came to see this excitability as a natural response to a new cultural practice and developed effective ways to manage it, such as: letting children run their energy off, reinforcing the need to stay calm, being honest about inappropriate responses, encouraging self-regulation and trusting the children's ability to act maturely. In his synthesis of research, Brophy (2002) concluded that learning outcomes are increased when teachers approach management as a process of establishing a collaborative culture.

7.2.3 Constraining factors for teachers using a personal lens

Of all the constraints analysed through a personal lens, the most pervasive was the *teachers' initial one-sided perspectives*. At the beginning of the research, the teachers held mostly one-sided perspectives, and engaged mainly in one-sided interaction. Their one sided perspectives shaped their responses to events, as indicated above, as well as prioritised goals of *independence* rather than *interdependence* as revealed in the following excerpts:

Rick: I'd really like the children to be learning from and with each other and moving away from me ...and send on 30 kids that are taking control of their own learning and being independent. (19.03.03RickINT:32)

Kelly: Developing independent learners. I really think it's important. That's what you're really trying to do. (27.03.03KellyINT:23)

Amy: I grouped them with children who work independently, children who work hard and aren't distracted by others. (27.03.03AmyINT:18)

Tiare: I find teaching to be the most enjoyable when you can stand back and watch the kids. (26.03.03TiareINT:18)

The dominance of teachers' one-sided perspectives made it *difficult to understand joint participation*, a finding also noted by Matusov and Rogoff (2002). The coherence of a community of learners was hard to discern amidst its chaotic looking activity. It took time to readjust one's eyes to see the formation of a new interaction pattern form. The next memo records my need to refocus my eyes:

One sided models of learning and teaching are easy to understand because they're on one continuum and we've all grown up with them. But a community of learners comes off that continuum. Sometimes we get glimpses of what it might be like to share activity and learn together; but then we lose it again...like losing the image in a hologram...to see it we have to refocus our eyes to let go the image we're used to seeing. It's so hard to do. (21.05.03CO26/1MEMO)

The teachers' difficulty to understand a community of learners was manifested in their initial pendulum swing on the one-sided continuum from adult to children-run models. For instance, Amy told the children how proud she had been that they could work without her (children-run), Kelly had appointed children to be in charge (proxy-teachers), and all the teachers had allowed children to choose the order in which activities were completed (contrived joint participation). Tiare came to understand the social and emotional connections of a community of learners, but there was less evidence to suggest she understood the importance of making cognitive connections, which might explain her defence of helping activity that took over another child's work. Amy did not come to understand the mutuality of a community of learners, interpreting the principles as either/or or give/take concepts:

Amy: I actually read it differently. I read it like sometimes it's the learner's responsibility and sometimes it's the teachers. Sometimes it's meet in the middle. And sometimes you give more or they give more...You give them a little bit more until they can do it themselves. (14.11.03AmyRaP4:21)

Both Rick and Kelly did come to understand and to appreciate the importance of the mutual interactions, argued in section 7.4.3 as enabling the development of a community of learners. Kelly, who came into the research with some sociocultural perspectives understood the notion of co-construction: *'you're constructing something together, whereas here [looking at the diagram of one-sided activity] you give it to them already constructed like a building'* (14.11.03KellyRaP4:21). Kelly also valued her role as a co-learner: *'I learn so much from my kids and I always tell them that'* (17.12.03KellyINT:17). While understanding and participating in

cognitive, social and emotional exchanges, Rick was less open to seeing himself as a learner with the children; an attitude that has the potential to impede the ongoing development of a learning community.

Also constraining a community of learners was the teachers' *difficulty to let go of one-sided perspectives and practices*. As a 'control freak' (01.09.03RaP3:14) one-sided participation was simply too appealing for Amy to let go. Exceptional focus was required of the teachers to overcome their routine to control the learning, and to change their automatic one-sided responses to events in the classroom. Part of the difficulty of letting go was coping with the tensions arising from developing practices that ran counter to previous forms of participation and to their perspectives of learning and teaching:

- teachers were used to controlling the learning process and being in control, yet a community of learners required them to share power;
- teachers were used to pre-planning a sequence of activities to known end points, yet a community of learners required flexibility and responsivity to emerging ideas;
- teachers were used to learning as doing activities, yet a community of learners was about taking a co-constructed journey;
- teachers were used to assessing a product as evidence of learning, yet a community of learners required evidence of transformation of participation;
- teachers were used to being the knowers and the tellers, yet a community of learners required teachers to learn *with* the children; and,
- teachers were used to adopting traditional classroom practices, yet a community of learners required teachers to question these traditions.

All teachers found it *difficult to sustain development* of a community of learners. Rick referred to his 'head space', these being concerns he had about other issues in his life that eroded the energy required to learn with children in the classroom. These headspace issues sometimes created a "living contradiction" (McNiff & Whitehead, 2002) when what he valued was compromised:

I find Rick slumped in a chair in the staffroom. The bell has gone and he has no energy to return to his class. He is unwell and 'lost it' earlier with the children and is unusually distant. Today Rick simply can not connect with the children. (28.10.03CO67/1MEMO)

The teachers were united in their view that developing joint participation instructional models required far greater effort than one-sided models as shown in these excerpts:

Amy: It's easier to be a traditional teacher...to plan the stuff, teach the stuff and the kids listen...cos you've got an endpoint. (18.12.03AmyINT:40)

Tiare: And the adult-run is the tried and true, easy ... It's also the thing you fall back on. (24.02.04TiareINT:20)

Rick: It would be far easier management wise to be traditional and say "sit down and shut up. Today we are doing..." because that's easy and safe. (01.09.03RickRaP3:1)

Kelly: Because so much energy goes into joint participation; sometimes it's just really hard to do it. (14.11.03KellyRaP4:49)

A community of learners was initially constrained by the teachers' *lack of relevant skills for developing joint participation*. These pre-requisite skills included: being sensitive and responsive to children's ideas and feelings, being able to support children in joint participation, being capable of managing uncertainty and multiple activities, and coping with criticisms. The data showed that, as the teachers began to include children's ideas, to respond to them, and to support them in being responsive to others, their interpersonal skills further developed. The teachers' capacity to participate in a community of learners was developing in joint participation.

Towards the end of the research, the teachers' *heightened sensitivity to non-inclusive practices* created personal and professional tensions. Exclusion from school organisational decisions caused outrage especially when these decisions affected their children: *'I care and it worries me that Sakura got to this point...proud to be different and expert and I've got to let her go. [The teacher placing Sakura next year] just didn't get it' (19.12.03RickINT:47)*. The teachers expressed concern that subsequent teachers would not respect the children and might misread their classroom participation as being rude: *'They're used to being listened to. I'm feeling I need to...tell the teacher, "she's going to call out and want some control but it's because I've let her"' (19.12.03RickINT:24)*. This finding is consistent with research by Brown and Renshaw (2000) showing that teachers described students as argumentative when they had engaged in the collective argumentation programme.

The teachers also reacted differently to institutional and interpersonal constraints. Rick was sensitive about other teachers' judgements of his children's forthright manner, apparent informality and his supposed lack of control: *'The thing that really hurts me is those teachers aren't nice to kids...you don't have to be mean to have control'* (19.12.03RickINT:27/32). Tiare was sensitive to receiving mixed messages from management who she felt didn't always share full information with her: *'there are so many walls to break down'* (17.12.04TiareINT:19). Kelly was sensitive to having decisions, which she really wanted to be part of making, taken from her by management. For Amy, it was her fear of being seen to fail that most worried her: *'I know I won't share anything for fear I'll fail at it'* (01.09.03AmyRaP3:19).

7.3 CONSTRAINING FACTORS FOR CHILDREN

Using an institutional, interpersonal and personal lens, themes were identified that constrained the children's ability to participate in a community of learners. These constraining factors are identified in Table 7.2 and structure the following subsections.

Table 7.2 Factors constraining children

Institutional constraints	Interpersonal constraints	Personal constraints
<ul style="list-style-type: none"> • previous experience of a traditional classroom culture. • obscured structure of joint participation. • interruptions and distractions. 	<ul style="list-style-type: none"> • difficulty collaborating within the classroom. • traditional discourse patterns. • effort required to learn together. 	<ul style="list-style-type: none"> • persistence of children's one-sided perspectives. • difficulty understanding a learning community. • collaborating was a form of cheating. • negative feelings and emotions.

7.3.1 Constraining factors for children using an institutional lens

Children's *previous experience of a traditional classroom culture* created one-sided perspectives that constrained their participation in a community of learners. The cultural rituals of paying attention while the teacher tells, answering the questions to which the teacher already knows the answers, raising hands, staying in, lining up, paying up for the wrongdoing of others, working alone, and *'getting the hang of sitting down and listening for hours'* (20.06.03CalebINT:6) were accepted ways of

learning in a classroom. Sharan and Sharan (1992) also attributed children's difficulty learning together to their familiarisation of a classroom managed by the teacher. Even when joint participation began to develop, the children's early efforts to learn with others were curtailed by their automatic reversion to one-sided interaction. This next extract shows the robustness of one-sided cultural rituals and how even I had unwittingly reinforced them:

As the bell rang a girl came to me worried that she had not finished all her set tasks having become engrossed in her science. Her automatic response to ask an adult triggered another automatic response from me...I suggested she complete the unfinished task during playtime. Why did I do that when she had been learning with others? She asked...I told...and she accepted it; unwittingly I reinforced a one-sided relationship. Why didn't I think to say "but it was great to see you learning together"? (12.08.03CO39/IMEMO)

The *obscured structure of joint participation* acted as another constraining factor. Children liked the familiarity of one-sided instructional models: they understood their requirements and they knew their role and responsibilities in them. Just as had been the case for the teachers, and for me, the children found it hard to discern the coherence of joint participation, to define it and to enact their new roles as co-learners. Sarah and Sakura were the only target children to form a clear image of joint participation: *'It doesn't have to be the telling, you can be part of it'* (12.11.03SarahCONV); *'You're learning from other people but you're also teaching others'* (08.12.03SakuraINT:19).

Interruptions and distractions constrained some children's attempts to learn with others. While most children spoke of their frustration at stopping an activity because the timetable dictated that they move onto another, many appeared resigned to this stop/start feature of classroom life. The children reacted differently to distractions, be it chatter from other children, the shrill ring of the classroom telephone or intercom message. Sakura blocked them out, Caleb moved away, and Mike simply used them as a time to rest.

7.3.2 Constraining factors for children using an interpersonal lens

Participation in a community of learners required new kinds of relationships. Observations through an interpersonal lens showed that the target children had

difficulty collaborating within the classroom despite collaborating in settings and contexts beyond it. It was not until later in the research that Era, Sakura, Caleb, Sarah and Michelle began to use their interpersonal skills to collaborate with others and to actively draw others in and guide them to learn together. Despite support and encouragement by the teacher to ‘*share your ideas*’ (22.07.03TiareCO31/3), to ‘*move as a group*’ (28.05.03RickCO28/1), or to see it as ‘*a group thing*’ (12.08.03KellyCO42/4), the remaining target children continued to work alone or to tell others what to do. The following extract shows Rick’s reflection with the children about the interpersonal skills he was finally seeing:

Rick: You just said a really wise thing... it is the best group even though I had to talk to people. In the end, it all came together because you worked together. Before, you all worked but not at the same thing, but today you worked together, you talked together, you listened, you asked each other questions, you completed your book together. (05.12.03RickCO80/1)

The children were also constrained by *traditional discourse patterns* in the classroom. The supremacy of teacher controlled stop-wait-go discourse patterns prompted them to answer questions, to argue about being right, to tell or to read their work word-for-word, rather than to talk about it. The children’s ability to use their conversational skills, heard in the playground, to co-construct new understandings in the classroom, seemed contingent on the teacher’s own use of a knowledge-building dialogue. Some target children distrusted dialogic processes to find *a* right way forward, preferring to simply ask the teacher to find *the* right way.

Just as the teachers had found it difficult to sustain the *effort required to learn together*, so too did the children. The target children’s struggle to think of genuinely interesting research questions and to engage with the ideas of others, be they ideas of peers in face-to-face interaction, or the ideas of distal authors, was evident. Some children chose the easy option of copying text from books or doing theme-related craft activities, instead of investing effort to engage in an intellectual debate. This aversion to investing effort in shared activity is revealed below:

Ally: Did you like it when you could choose your research questions?

Jonah: No.

Ally: Would you rather be told what you're learning? Why is that?

Jonah: ...it's lots quicker and you don't have to think (04.12.03JonahINT:9).

7.3.3 Constraining factors for children using a personal lens

As had been the case for teachers, the persistence of children's one-sided perspectives was one of the most pervasive constraints to learning together. All the target children came into this research with one-sided perspectives of learning and teaching. Teachers were perceived as people who *'just stand up straight and tell us the things'* (12.03.03KeithINT:25) and students were perceived as *'sitting up properly'* (14.03.03IkaniINT:10) and *'listening to instructions'* (12.03.03MereINT:13). Learning was perceived as doing fragmented tasks and getting them finished on time: to learn with a teacher was for some children a sign of immaturity and a forbidden activity *'cos she's in charge'* (09.12.03WendyINT:37). Learning together simply went against the grain of what it meant to be a student. These one-sided perspectives were noted by Pramling (1988) as representing restricted conceptions of learning. To develop a conception of learning as understanding, she, like Rogoff (1998) argued that children need to engage in dialogic and metacognitive activity.

Letting go of one-sided perspectives created tensions for the children, some of which are listed below:

- children were used to being told, yet a community of learners required initiative to contribute new ideas;
- children were used to developing *independence*, yet a community of learners also required *interdependence*;
- children were used to being told to stop talking, yet a community of learners required active listening and dialogue to build on previous responses;
- children were used to locking information in their memory, yet a community of learners required them to co-construct understandings;
- children were used to doing solo activities, yet a community of learners required an intellectual inquiry with others; and,
- children were used to the teacher being the know-it-all, yet a community of learners required teachers to be learners too.

Holding one-sided perspectives also made it *difficult to understand a learning community*. At the end of the research many target children still talked about ‘giving’ thoughts, ‘helping’ others, even ‘*agreeing with everyone else*’ (15.10.03EraCO60/1). They did not understand that learning together was more than handing over ideas to another, it was to engage in dialogue in which ideas were exchanged, in which alternative views were a rich source of new learning. For children in Rooms Two and Three, learning together was mostly understood as doing their own work in a group while chatting about out-of-school events. While most target children used words such as learning from or off others, when probed, these words were often more synonymous with one-sided interaction, rather than learning *with* others to pursue new understandings. These findings suggest the validity of the argument that “socialising students to the point of functioning as a learning community requires starting early and taking time” (Brophy, 2002, p. 337).

Also constraining children’s participation in collaborative activity was their perception that *collaborating was a form of cheating*. The children believed that *they owned their ideas and to share them with others was dishonest activity*. Cries of ‘*she took my idea*’ or ‘*he stole my idea*’ (21.05.03AliceCO25/4) were initially widespread across the four classrooms. The children’s concern for individual competition was in conflict with the community ethic of individuals contributing ideas and skills in the community. Recognising this as a tension for a community of learners, Rick and Kelly talked with their children about the difference between sharing ideas and directly copying ideas from people or text (see section 5.5.2).

Finally, children’s *negative feelings and emotions* inhibited joint participation. Fear of an idea being wrong, of not being good enough, or of being told off by the teacher for talking, a formerly unauthorised activity, resulted in children’s reluctance to share ideas, despite being invited to do so. Some children’s first experiences of joint participation left them feeling excluded, hurt or disillusioned: ‘*I was wondering what those licences were for...I had a licence, but now I’m not allowed to go outside*’ (08.12.03MikeINT:37). Children’s participation in a community of learners also heightened their sensitivity to perceived injustices. While the suffering of natural consequences of inappropriate behaviour became a

more typical and jointly decided response, occasionally, children still had to ‘pay up’ for the misbehaviour of others. Their indignant voices at this injustice are captured below:

Caleb: If one person stuffs up the whole class doesn't get to do it!
Sakura: I don't like it when people keep on doing things and we have to pay even though it wasn't our fault.
Ally: What would be a better way?
Sakura: Well, he could just...
Caleb: ...punish those kids that haven't...
Sakura: ...that haven't been good, like if you are doing sport and you keep on talking he could just send them out to watch.
(08.12.03INT:11)

7.4 ENABLING FACTORS FOR TEACHERS

Activities identified as assisting the teachers to develop a community of learners are identified in Table 7.3 through the three analytic lenses. These personal, interpersonal and institutional observations structure the following subsections.

Table 7.3 Factors enabling teachers

Institutional support	Interpersonal support	Personal support
<ul style="list-style-type: none"> • school value of collaboration. • flexible school management practices. • close proximity of the research classrooms to each other. • participation in this research. 	<ul style="list-style-type: none"> • professional learning relationships that are: trusting, caring, respectful, dialogic, honest and humble. • successful joint participation. 	<ul style="list-style-type: none"> • willingness to learn about a community of learners. • develop sociocultural perspectives of learning • courage to reveal personal issues and to overcome obstacles. • intense satisfaction at seeing children learn. • teacher efficacy. • aligning professional and personal values.

7.3.1 Enabling factors for teachers using an institutional lens

Assisting the teachers to develop a community of learners was the publicly stated *school value of collaboration*. Hugh, the retiring Principal’s appreciation of the emotional and motivational needs of learners, advocated practices of relationship-driven teaching. He argued that ‘*if you haven't got relationships then you have nothing*’ (11.12.02HughINT:15). Jane, the new Principal’s view that teachers need to ‘*know they are parallel with the kids and be learners at the same time*’

(28.05.03JaneINT:23/25) upheld the value of collaboration at the school, as well as the values of diversity, risk-taking, respect, caring and community, all of which permeated official documents (e.g. 2003ValuesDOC; 2003StrategicPlanDOC). These official values of the school had positioned Rick, Tiare, Amy and Kelly to being receptive to developing collaborative initiatives. However, the criticism of these initiatives from some other teachers, noted above as an interpersonal constraint, suggests that collaboration was not a shared value.

While the school's organisation and management practices, such as testing children and writing reports, were noted as constraining factors, other school practices enabled the development of a community of learners. *Flexible school management practices* assisted the teachers to seek and to sustain changes. One of the most significant examples of flexibility was management's decision to waive submission of long term plans prior to teaching. This flexibility, and the sense of trust it engendered, enabled teachers to be responsive to children's ideas for the direction of learning. Jubilee School also had systems to create a safe environment (e.g. 2002EROREportDOC) with plans to develop social skills and learning innovations (e.g. 2003StrategicPlanDOC). Analysis of these documents confirmed the research teachers' overall conclusion that the school had provided support for their efforts to develop a community of learners:

Rick: Another thing that has helped is management.

Tiare: Yeah! They have been so supportive.

Kelly and Amy: Yeah. (14.11.03RaP4:48)

The *close proximity of the research classrooms to each other* provided social cohesion and the opportunity for teachers 'to head in the same direction' (14.11.03RickRaP4:36). Being physically close together enabled the teachers to support each other throughout the research if problems arose in the changes each teacher was seeking to make. This finding reflects research by Hargreaves et al (2001) who found that close physical proximity strengthened social, emotional and cognitive connections. Furthermore, the physical isolation of these research classrooms from the rest of the school proved advantageous, because the teachers felt free to 'keep it running the way we want it' (14.11.03KellyRaP4:45). However, their isolation also set them apart from other teachers, as noted above as an interpersonal constraint. These findings align with Sergiovanni's (2000) claim that community is

both inclusive and exclusive: it can bring some people together while alienating others.

Participation in this research also provided support for the teachers. Talking about the principles, diagrams and excerpts of a community of learners at the start of the research had been useful in inspiring their own ideas and goals. Reading and responding to my fieldnotes and memos had also assisted the teachers to engage in reflective critique of their new practices as the following extracts show:

Kelly: I think we've all been reflective with that reflection process we go through. Sometimes you need another point of view, another way of seeing it. (17.12.03KellyINT:15)

Amy: I am one of those people that finds it difficult to step out and I've needed this [research] because it's made me view teaching in a completely different way. (14.11.03AmyRaP4:1)

Tiare: [I am] always a little reserved as to what [I] say and how it might be taken ...but we didn't mind voicing our concerns and what was happening. (14.11.03TiareRaP4:37)

Rick: Your feedback and your notes. I love reading them. They're like soul food...I've put myself out there and I've grown in confidence and self-belief. (19.12.93RickINT:7)

The teachers also regarded the four RaP days as supporting their efforts to develop a community of learners. These off-site days provided a safe place to reflect on their practice, as well as to provide the time and space to affirm and to challenge one another and to plan new steps in their learning:

Amy: I'd come back thinking, wow I'm ready to go. (18.12.03AmyINT:7)

Tiare: We went away... and it was ongoing. It takes a long time to break through with me. (24.02.04TiareINT:28)

Kelly: To have four days where you have time to think. You have to get away from school to talk rationally before you go on. (17.12.03KellyINT:15)

Rick: It has been professional development ... as a group...there's a framework for discussion. (14.11.03RickRaP4:1)

Rick's comment above acknowledges the professional development that this research came to be. Indeed, the most enabling institutional factor for teachers was their joint

participation with trusted colleagues in this research. Its dialogic features, discussed below, had enabled us to co-construct new understandings about a community of learners; a point that I had earlier reflected upon with Hugh, the retiring Principal:

Ally: I think having our Reflection and Planning days off-site will enable us to develop a sense of “together we’re doing this”. It will give us a space to share what’s happening in their classrooms, reflect on what’s going well or wrong and support a move forward.

Hugh: And I think we are very privileged to be involved in this. I think it is great professional development. (11.12.02HughINT:20)

7.4.2 Enabling factors for teachers using an interpersonal lens

Professional learning relationships were observed as being trusting, caring, respectful and humble; characteristics which enabled the development of a community of learners. The teachers’ professional relationship with Jane, the new Principal, helped them to sustain the changes they were beginning to make. Jane showed her support of the teachers by being open to their ideas, communicating her belief in them, applauding their courage and challenging them to question their perspectives and practice because *‘until they change their philosophy not a lot is going to change’* (28.05.03JaneINT:25). Rick talked about the effects of Jane’s affirmation of him: *‘She gives me the confidence in me that I know what I’m doing...I couldn’t do it otherwise’* (14.11.03RickRaP4:12/48).

The professional relationships in our team among *‘the same five of us who’ve always been so supportive and caring’* (18.12.03AmyINT:7) enabled honest talk about ourselves, our perspectives and practices. We were each *‘interested in hearing what each other was learning...sort of affirming each other’* (17.12.03KellyINT:47). By challenging one another, yet also backing one another, the teachers took pedagogical risks that alone they may not have taken. Tiare spoke of our professional relationship in terms of a community of learners:

It came back to the principles we’ve had; the valuing of community, of being honest and open with each other and building relationships. We haven’t just done that with our children, we’ve done it more with us than we would have if we weren’t in this research. (14.11.03TiareRaP4:37)

Living the principles of a community of learners in CAR also provided support to each other to meet individual goals. The following condensed extract shows the support Amy received to move forward at a point when she felt she was failing:

Amy: I can't bear the thought of just going back...when those desks come back in I still want development. We've come so far.

Rick: What about getting those moving desks?

Amy: But the thing is with them...

Tiare: Who decides where your desks go?

Amy: I'll decide first then they can. I don't know how to do it.

Tiare: But could you not ... [talk over]

Amy: Do you think that would work? ...

Kelly: They'd be too big in that space.

Amy: I want those other tables desperately. I hate my desks.

Tiare: What about kids who didn't want desks? Maybe tape off an area?

Amy: You mean like what you've got in your room?

Ally: Or could you ask the children how to use the desks?

Amy: Yeah. I'd like to do that...maybe have a talk.

Tiare: That's good that they feel they can be so honest...

Ally: There's an article about trust licences...would that be useful?

Amy: Well since I've had no desks I've seen those I can trust...It's a bit sad really [too quiet].

Ally: Why is it sad? Isn't that your 'failing' talk again? You're putting back desks but it'll be different...it's not failing, it's moving forward.

Amy: I was getting down about going back to the same old thing... (01.09.03RaP3:55/65)

The teachers saw their relationship with me as being different to other professional relationships they had. The quotes below capture the teachers' view of my relationship with them. They perceived me as a co-learner, as a participant in their classroom, as a dialogue partner and as an interested and critical friend:

Amy: But the relationship we've had with you is different Ally because you are not sitting here saying you know everything. You've made it clear that you are learning with us. (14.11.03AmyRaP4:45)

Rick: And having you in my classroom was so relevant. It's a fat lot of use if we just had RaP days...but to have you in here saying "what's happening here?" was more important to me. (19.12.03RickINT:30)

Kelly: You came in, saw our classrooms and stayed and talked and you knew where we were at. (14.11.03KellyRaP4:46)

Tiare: You had a genuine interest in what we were doing and the input that you put into it was genuine as well. (24.02.04TiareINT:8)

Successful joint participation was itself an enabling factor. For instance, as teachers began to successfully share management decisions (interpersonal lens), children developed a greater sense of responsibility for their own behaviour (personal lens), and for each other's (interpersonal lens). Their improved ability to make responsible choices enabled further joint participation (interpersonal lens), and contributed further to a culture of collaboration (institutional lens). Similarly, as the teachers began to listen to the children's ideas and to make more on-the-spot decisions in response to these (interpersonal lens) the children appropriated collaborative skills and values (personal lens). These findings support Rogoff's (1997) argument that, as new understandings develop through their own participation in them, they are preparing to engage in similar subsequent activities.

7.4.3 Enabling factors for teachers using a personal lens

Data from the first RaP day identified the teachers' *willingness to learn about a community of learners*. They listened respectfully to each other's practices and perspectives, and they responded enthusiastically to the readings about a community of learners. To '*keep being a learner*' (08.04.03RaP1:5) was one of their jointly decided goals. It was in these conversations that the teachers questioned some of their taken-for-granted assumptions and confronted their tensions of practice arising from holding one-sided views of learning while trying to develop joint participation (see section 7.2.3). When teachers were able to confront these tensions and *develop sociocultural perspectives of learning*, enduring forms of joint participation emerged in the classroom. As identified in the previous results chapters, Rick, followed by Kelly developed the most stable learning communities; these were the teachers who developed and strengthened sociocultural perspectives and understood the reciprocity of learning together. Tiare's difficulty in walking the talk of the sociocultural principles only enabled the seeds of a learning community to begin to emerge. Amy's misinterpretation of the sociocultural principles was noted as constraining her ability to develop a community of learners.

Also enabling a community of learners was the teachers' *courage to reveal personal issues* to each other that affected their practice including: health concerns, personal relationships, personality, fears, frustrations and anxieties. Furthermore, the teachers' capacity to be vulnerable in the classroom and to reveal to the children their lives

beyond the classroom also enabled them to learn together. In addition, the *courage to overcome obstacles* that arose in the course of making changes acted as an enabling factor. These obstacles (see Table 7.1, p. 179) could have curtailed their efforts to develop a community of learners, but the *'safety net'* (Tiare), *'soul food'* (Rick) *'team'* (Amy), or *'forum'* (Kelly) that this research came to be known as gave these teachers the courage, insights and stamina to continue moving toward their goals.

The teachers' intense satisfaction at seeing children learn was also observed through the personal lens as an enabling factor. This source of motivation to work collaboratively with children has been reported elsewhere (e.g. Daws, 2005; Hargreaves et al., 2001). The teachers in the present study expressed their sense of satisfaction from different kinds of transformation as these excerpts show:

Rick: We've been a part of a growth in leadership skills...It's the community of learners. It's valuing each other. It's made some kids really shine...that's like soul food. (19.12.03RickINT:32/34)

Kelly: Children initiated it. They showed respect...we were all part of it. When it's working, it's such a good feeling. (17.12.03KellyINT:18)

Tiare: The thing that is driving me is that the kids have a voice. (01.09.03TiareRaP3:47)

Another enabling factor for the teachers was their sense of *teacher efficacy*. A high sense of teacher efficacy helped the teachers: to see their practice in a new light, to develop resilience in the face of failure and criticism, to speak out about constraining factors, and to live with the uncertainty of joint participation. As their sense of teacher efficacy increased, so too did their persistence to set more challenging goals, seeing mistakes not as *'stuffing up but...trying something new'* (24.02.04TiareINT:18).

The teachers' alignment of their professional and personal values also enabled a community of learners. For instance, Kelly saw a one-sided role as being *'upper and proper'* but a community of learners meant she could *'be more who I am...that's what I am very comfortable with'* (17.12.03KellyINT:15/19). Rick came to see a community of learners as a way to teach: *'I like teaching like that and I like living like that'* (14.11.03RickRaP4:34). A community of learners became a way to affirm his valuing of children, *'I take kids personally'* (05.03.04RickCONV). Rick and Kelly came to know that "we teach who we are"

(Palmer, 1998, p. 1). Teaching from the integrity of who they were, and feeling more efficacious about their teaching ability, sustained their efforts to develop joint participation. By the end of the research, Kelly felt confident and competent to disagree with management about the school's enterprise programme because she could argue that it positioned *'teachers on the outside standing back watching...teachers need to be part of it too'* (17.12.03KellyINT:35). While Rick commented privately on the traditional one-sided participation of some teachers: *'I see some teachers just being lazy now, standing on the sideline and not taking a role'* (19.12.03RickINT:2); he also took a public stand against the school's assessment policy and practice.

7.5 ENABLING FACTORS FOR CHILDREN

Activities identified as assisting the children to participate in a community of learners are identified in Table 7.4 through the three lenses. These personal, interpersonal and institutional observations structure the following subsections.

Table 7.4 Factors enabling children

Institutional support	Interpersonal support	Personal support
<ul style="list-style-type: none"> • emerging cultural rituals and tools. • a culture of mutual caring. • participation in the dialogic processes of this research. 	<ul style="list-style-type: none"> • joint participation. guided by the teacher • knowing each other. • emotional connections. • humorous connections. • connecting in a physical sense. 	<ul style="list-style-type: none"> • developing sociocultural perspectives. • understanding a community of learners. • exceptional interpersonal skills. • feel good factor.

7.5.1 Enabling factors for children using an institutional lens

Emerging cultural rituals and tools provided assistance for children to learn together in the classroom. Evidence of a collaborative classroom culture was seen in repeated dialogic rituals such as: *What's on Top*, sharing circles, sharing learning intentions, collaborative research and reciprocal teaching. As had been reported by Brown and Campione (1998) these repetitive participant structures provided cultural prompts for the children to learn together, and sanctioned the children's individual and collective contributions in learning.

A culture of mutual caring provided emotional support which helped children to learn together. This “ethic of caring” (Brophy, 2002) was apparent when teachers genuinely worried about the children: ‘*I feel like they are my children...I’ll be devastated when [they] go to new classrooms*’ (18.12.03AmyINT:9); when children showed concern for their teachers: ‘*we really cared about [Rick] being sick’...he cares about us if we done wrong and stuff*’ (08.12.03SakuraINT:33); or when children showed respect for each other: ‘*Be quiet, she’s still reading*’ (05.11.03CalebCO72/1). The importance of emotional support to assist learning was also found by Darling-Hammond (1997).

The target children’s *participation in the dialogic processes of this research* also helped them to learn with others in their classroom. My conversations with the children about a community of learners, with photos to stimulate recall, drew their attention to what was meant by joint participation, as well as my endorsement of this as a way to learn in the classroom. Indeed, my interest in listening to the children’s views about their classroom participation positioned them as knowers and signalled my belief in their competence to co-construct new understandings. Children who became adept at joint participation in the classroom, also began to initiate and to sustain conversations in this research by either building on the ideas of others: ‘*like pretty much saying what Sakura said*’ (08.12.03CalebINT:8), or by supporting other children to express themselves: ‘*No, what I think Era means is...*’ (08.12.03SakuraINT:28)

7.5.2 Enabling factors for children using an interpersonal lens

The children’s participation in a community of learners was facilitated by a range of interpersonal factors which shaped subsequent collaborative interactions. *Joint participation guided by the teacher* was a critical factor in enabling children to learn together. As the children were guided to contribute their ideas in shared activity, and as their individual responses had been listened to, some children began to express their ideas more confidently, and to see that to do so was a valid way of learning. Daws (2005), whose research aimed at developing a Reggio Emilia approach in a Year 7 Australian classroom, also found that children were more likely to express an “authentic voice” when their contributions were listened to (p. 110).

While the data in the present research showed Rick and Kelly successfully guide participation, the question remains as to why only four of their eight target children, Sakura, Caleb, Era and Sarah, regularly initiated and engaged in joint participation. It is possible that Alice's dominating personality, Keith and Tahu's behavioural difficulties, and Ikani's concentration difficulties interfered with their ability to use opportunities given them to learn together. In Room Two where one-sided instructional models continued to dominate, and in Room Three, where only the seeds of joint participation emerged, the children did not have the same opportunities to learn how to learn together.

The development of a community of learners rested on *knowing each other*; a finding that the children themselves were quick to recognise. The sharing circle and *What's on Top* became a rich source of self-understanding and of coming to understand each other's cultural knowledge and experiences beyond the classroom. As this awareness developed, children became less self-conscious and less boastful of their expertise; they simply had expertise to share, felt humbled by sharing it, and were valued as important contributors to other people's learning. The importance of getting to know each other as a pre-requisite for learning together has been noted elsewhere (e.g. Sato, 2003; Schon, 2005).

As children came to know each other, they developed *emotional connections* which further encouraged joint participation, indeed, it constituted it. For instance, the children became more informal in their interactions with others, including the teacher, gaining immense pleasure from sharing a whisper, a chuckle, a smile, a knowing look, a hug or a soft touch. Ikani often talked about the importance of '*expression...he smiles and you feel comfortable*' (08.12.03IkaniINT:14). The children also became more sensitive to, and respectful of, the needs of others: they wanted to support others, even if to do so was the more difficult option: '*It's best to say someone in the group wasn't working...they will secretly know and do it better next time*' (04.12.03SakuraINT:10). As the children began to trust each other, they shared more openly and honestly, even if this meant disagreeing. These findings are consistent with research reported by Brophy (2002) in which discussion was more likely when a sense of community had developed featuring trust, respect for one another and feelings of personal safety.

Evidence also showed that developing *humorous connections* enabled joint participation by reducing anxiety and ‘*adding in fun*’ (14.03.03EraINT:7). The target children liked having fun: ‘*having a laugh [was] the best part of the day*’ (20.06.03EraINT:20). In humour, a rich connection formed because understanding a joke or a comical gesture required sharing social, cultural and historical meanings. Laughing was a way to bring people together (Kessler, 2000), a kind of social glue that “evolved as a signal to others – almost disappearing when we are alone” (Provine, cited in Douglas, 2004, p. 72). *Connecting in a physical sense* also enabled children’s ability to learn with others. The children liked to sit at the same level as their teacher because it reinforced their less hierarchical relationship. They also preferred to sit in a circle formation because it connected them with the speaker and they could ‘*see what people [were] doing*’ (18.09.03SakuraINT:11). Being able to choose where, how and with whom they sat also enabled joint participation: ‘*you get to stretch...and talk about it with people you like, and get away from people that distract you*’ (20.06.03CalebINT:43).

7.5.3 Enabling factors for children using a personal lens

Developing sociocultural perspectives allowed children to make sense of and to defend their new roles and responsibilities required in a community of learners. These perspectives, including the importance of listening to one another, respectful turn-taking in conversation, supporting each other, negotiating a way forward, caring about others and ‘*sharing your mind*’ (08.12.03CalebINT:13), came to be seen by some children as legitimate school learning activity. When children developed these perspectives they took on new identities as learners who engaged with others in order to co-construct new understandings. This critical enabling factor, discussed in the next chapter, saw children value collaboration as a means to lift their learning above that which would have been achieved alone:

Sakura: If you actually combine all your skills, then you end up with one really good book...We are all learners and teachers...you learn more off other people...instead of trying to do it all by yourself, and thinking I want to be independent. (04.12.03SakuraINT:1)

Sarah: One person will have an idea and another person will have something different and you put it together and make a really good idea. (05.12.03SarahINT:3)

As children began to *understand the reciprocity of a community of learners*, they were better able to engage in its reciprocal processes. For instance, when children understood that sharing ideas meant building on the ideas of others, they began to engage in these co-constructive processes. Unravelling the confusion between copying ideas and sharing them also enabled joint participation, and in so doing, gave children permission to learn with others. Children who had *exceptional interpersonal skills* also facilitated other children's participation in a community of learners. As joint participation was sanctioned in the classroom, Sakura, Era, Caleb and Sarah were able to use and develop further their exceptional skills of listening to others, of taking turns to build on each other's ideas, of being sensitive to others, of encouraging others, and of drawing people into conversation with them. These target children appropriated the collaborative roles of their teachers, guiding others to learn together, and in so doing, supporting Rick's and Kelly's efforts to sustain a community of learners. In this way, developing a community of learners became the joint effort of teachers *and* children.

Finally, observations through a personal lens revealed that children liked participating in a community of learners which motivated ongoing joint participation. This *feel good factor* was associated with the following shared activities: being listened to, hearing about the lives of others including their teacher, sharing responsibility for learning, working together in genuine intellectual inquiry, sharing decisions about learning and management, sharing their learning as an expert, and simply having fun together.

7.6 CHAPTER SUMMARY

The results presented in this chapter identified the obstacles that constrained or enabled the development of a community of learners. Some of these factors only related to some teachers or to some children. However, other factors were identified as being common to all teachers and children. The most critical constraining factors common to all teachers and children were the dominance and persistence of one-sided perspectives, the effort required to let go of these, and to understand a community of learners. The most critical enabling factors for teachers and children were their

guided participation in the dialogic and shared processes of this research and of those classrooms operating as a community of learners.

These results again illustrate the mutually constituting nature of developing a community of learners whereby an enabling activity, observed through one analytic lens, contributed to and was constituted by enabling activities seen through the other two lenses. For example, the collaborative culture of this research (institutional lens) enabled Rick and Kelly to let go of their one-sided perspectives and to develop sociocultural perspectives (personal lens). Backgrounding these personal and institutional transformations reveals new interaction patterns to learn together and to guide joint participation (interpersonal lens). Bringing back into focus activity through an institutional lens reveals collaborative rituals and tools that constitute a community of learners.

Chapter Eight brings together the results reported in this, and the previous two chapters. Key findings from these three chapters are discussed in relation to the research questions and with reference to contemporary theory and research.

CHAPTER EIGHT

LEARNING TOGETHER AS A COMMUNITY

Quality teaching is a co-construction with students. (Alton-Lee, 2003, p.8)

8.1 INTRODUCTION

This chapter brings together key findings in relation to the three research questions stated in Chapter Three and discusses these with reference to contemporary literature. Consistent with Sergiovanni's (2005) claim, the findings from this research showed that a community of learners develops from shared understandings "that provide members with a sense of identity and involvement" (p. 32). These new understandings, identities and perspectives (personal lens) contributed to, were constituted by, new forms of interaction between the teachers and the children (interpersonal lens), as well as new institutional ways of working together in the classroom and in our *'research net that we were part of...that brought our ideas together...[creating] a common focus to share'* (17.11.03TiareKellyRickRaP4:37).

Table 8.1 below provides the overall structure for the discussion in this chapter. The first question focused on the transformations in the teachers' and children's participation as a community of learners developed in their classrooms. Discussion of this question is made in relation to new learning relationships and identities across five dimensions of connectedness. The second question focused upon the impact of the teachers' and children's perspectives of learning and teaching on the development of a community of learners. Through the analysis process these perspectives were shown to be major constraining factors in the development of a community of learners. Consequently, discussion of this second question is combined with the first part of the third question concerning constraints. The second part of the third question focused on the enabling factors, and these are discussed in relation to the teachers' participation in their own professional learning community, and to the children's guided participation in a community of learners.

Table 8.1 Key findings of the study

Research questions	Findings for teachers	Findings for children
Q1. How does the participation of Year 3 and 4 teachers and children change as a community of learners develops in their classroom?	8.2 The teachers developed new learning relationships with children in which cognitive, social, emotional, spiritual and physical reciprocal connections evolved.	8.3 The children developed new identities as learners who co-constructed new understandings and who learned a new way of relating to people in the classroom in cognitive, social, emotional, spiritual and physical connections.
Q2. In what ways do Year 3 and 4 teachers' and children's perspectives of learning and teaching shape the development of a community of learners? Q3a. What factors constrain Year 3 and 4 teachers and children to develop and to participate in a community of learners?	8.4 The persistence of the teachers' one-sided perspectives of learning and teaching constrained their ability to let go traditional practices, and to make the paradigm shift required to understand and to develop a community of learners in which they were learners too.	8.5 The persistence of the children's one-sided perspectives of learning and teaching constrained their ability to understand learning in the classroom as a shared activity, and to learn to engage in such joint participation.
Q3b. What factors enable Year 3 and 4 teachers and children to develop and to participate in a community of learners?	8.6 Participation in this collaborative action research enabled teachers to develop, or move towards developing, the cultural values and practices of a community of learners in the classroom.	8.7 Guided participation by the teacher and other children in a classroom culture that authorised joint participation enabled some children to resolve their tensions of perspective and to learn together.

8.2 RECIPROCAL CONNECTIONS IN A COMMUNITY OF LEARNERS

Data generated across the four classrooms provided evidence that developing a community of learners involved teachers and children changing their participation across five dimensions: cognitive, social, emotional, spiritual and physical. This section discusses the nature of these five forms of reciprocal exchange in relation to the literature. Evident in the discussion is the coherence and meaning that these five reciprocal dimensions give to a community of learners, thereby distinguishing it from traditional one-sided instructional models.

Reciprocity was the hallmark of the communities of learners that developed or began to develop across the four classrooms; a finding supported by a robust set of research (Brown & Campione, 1998; Dalton & Tharp, 2002; Englert & Mariage, 1996; Moll & Whitmore, 1993; Renshaw & Brown, 1997; Rogoff et al., 2001). The notion of reciprocity builds on Dewey's (1916) emphasis on conjoint activity and Vygotsky's (1978) interest in the mutual embeddedness of the individual and sociocultural world. Rogoff's (1994, 1995, 1997, 1998, 2003) research, which discussed the development of a community of learners, also revealed mutuality to be the heart of learning together. Her work dismissed the notion that a community of learners was a "compromise between models emphasizing adult control or children's freedom but, rather, relies on the active involvement of adults and children *together*" [italics added] (Rogoff et al., 2001, p. 7). Wenger (1998) used the term *responsivity* in his discussion of a community of practice, as did the writers of New Zealand's Early Childhood Curriculum *Te Whāriki* (Ministry of Education, 1996) who argued the importance of responsive and reciprocal relationships in children's learning. The implication of reciprocity is that each member of the classroom is "at once a teacher and a learner" (Sato, 2003, p. 8), as captured in the Māori concept of *ako*.

This study also revealed the interdependence of mind, feeling, body and spirit. This finding is also well supported in the literature, and challenges Western practices of individualism with its major focus on cognition (Csikszentmihalyi, 2002; Noddings, 2005; Palmer, 1998; Rogoff, 2003; Sergiovanni, 2005). Cognitive interactions combined with social, emotional, spiritual and physical interactions constituted the joint participation of a community of learners (see Table 5.3, p. 110). Developing a community of learners in this study, did not require the elimination of one-sided instructional models that separated individuals (see Table 5.2, p. 107): a community of learners was able to co-exist with one-sided instructional models. This co-existence is consistent with claims made by Rogoff et al (1998), who argued that just as Mayan children could become fluent in adult-run schools and still retain their complex, multidirectional and shared engagements with others, so too could North American children learn these forms of joint participation in a community of learners and still engage in the dyadic interactions of adult-run models. Results from their research, and those from the present study, suggest that teachers and children can and should become fluent in more than one instructional model. Furthermore, rather than aim to

substitute one-sided models with a community of learners, attention needs to focus on developing a sociocultural approach as another means to structure learning and teaching in the classroom. The co-existence of joint participation and one-sided instructional models in the present study suggests that it is possible for teachers to “move back and forth between learning communities modes of discourse and other forms of teaching” (Brophy, 2002, p. 337).

The co-existence of a community of learners with one-sided traditional practices also heeds Sfard’s (1998) warning of “theoretical distortions and undesirable practices” (p. 4) when only one metaphor for learning is chosen. The distinctly different metaphors underpinning one-sided instructional models, which stress the “the individual mind and what ‘goes into it’”, and joint participation models, which stress “the evolving bonds between the individual and others” (Sfard, 1998, p. 6) and the creation of knowledge (Paavola et al., 2004) *can* be brought together in one classroom setting.

Findings from the present study showed that cognitive reciprocity was the most difficult dimension of a community of learners to develop. The data showed little evidence of cognitive reciprocity in Amy’s room, yet there was strong evidence of emotional connectedness. Some cognitive reciprocity was evident in Tiare’s room, but more stable forms of social and emotional were observed. Kelly and Rick eventually developed more stable forms of cognitive reciprocity. Kelly developed four of the five dimensions of a community of learners (there being no evidence of a spiritual dimension) and Rick developed all five reciprocal dimensions. These five reciprocal dimensions are now discussed.

8.2.1 Cognitive connections

Cognitive connections occurred mainly when ideas were shared in a dialogic discourse which mediated the co-construction of new understandings (see Appendix C2 for specific examples). When I first detected these dialogic qualities in the classroom, evident in phrases such as *‘I agree with that but... I’d like to pick up on...what do you think?’*, I coded them as *‘dovetailing’* to isolate them from the more typical one-way initiation-response-evaluation patterns in which the teacher controlled the flow of information. The dovetailing principle was also found by Belenky, Clinchy, Goldberger and Tarule (1997) in their notion of “connected

teaching” in which both teacher and student roles merged as they talked out their thoughts publicly and “nurture[d] each other’s thoughts to maturity” (p. 221). Dovetailing is also consistent with Wells’ (2000) principle of responsivity. These terms indicate the turn-taking of conversation in which earlier responses are built upon. The dovetailing, or responsivity, differed distinctly from telling children to pay attention, issuing instructions or giving procedural details; one-way communication identified as the most typical teacher talk in New Zealand classrooms (Nuthall, 2001). The use of dialogue as a tool to facilitate co-construction is the basis of a wide range of research programmes aimed at developing a community of learners (e.g. Brown & Campione, 1998; Elbers & Streefland, 2000a; Englert & Mariage, 1996; Renshaw & Brown, 1997; Rogoff et al., 2001; Wells, 1999).

As noted, developing a dialogue of knowledge building, and the responsivity this implies, proved to be a difficult and slow process in the present study; a point also noted by Wells (1999) in his research to conduct education as a dialogic inquiry. He argued that this difficulty was in part due to the teachers’ reluctance to abandon one-way talking patterns or what Tharp and Gallimore (1988) dubbed the recitation script. When dialogue did begin to develop in classrooms in this study, it did so in relation to the procedures of learning. Crawford et al (1999) also found this procedural focus of dialogue in their study of a community of learners in a science classroom. It was not until the end of the present study that dialogue was heard about the content of learning. Dialogue about content was mainly contained within “ritual and familiar participant structures” such as collaborative research and reciprocal teaching which enabled children to “understand the [dialogic] role expected of them” (Brown & Campione, 1998, p. 159).

Distinguishing features of the dialogic patterns in Rick’s and Kelly’s community of learners included: following the children’s verbal leads to unknown destinations, drawing on their experiences beyond the classroom, building on previous learning, listening to one another and taking turns to negotiate and re-negotiate ideas. Amy, and in some cases Tiare, were more pre-occupied with reaching a pre-determined destination and, while accepting children’s ideas, did not usually respond to these: nor did they encourage others to respond. These quite different teacher responses can be understood in terms of the distinctions between directing learning to a pre-determined

goal and co-constructing learning to unknown destinations. Rick and Kelly created “spaces for classroom dialogue” (Jennings, O’Keefe & Shamlin, 1999, p. 1) in which wide areas of shared meaning formed (Jordan, 2003). In contrast, Amy’s and Tiare’s interactions created smaller areas of intersubjectivity.

8.2.2 Social connections

Social connections occurred as the teachers and children shared decisions and responsibilities in the classroom, as well as sharing aspects of their lives beyond it. Rick, Kelly and Tiare included children in decisions about learning using a range of repetitive rituals such as sharing learning intentions, meeting in a circle or contributing to an ideas booklet (see Appendix C2 for specific examples). Rick and Kelly also began to share responsibility for classroom management. All the teachers talked with the children about their out-of-school lives, with Rick most committed to this aspect of creating social connections. Sharing decisions, responsibilities and their out-of-school lives created a socially supportive and culturally responsive context in which teachers and children could learn together.

Findings from this study revealed the importance of providing opportunities for children to take responsibility and to share decision-making in the classroom. Developing these power-sharing relationships was the basis of Rudduck and Flutter’s (2000) research which aimed to improve the conditions of learning in British secondary schools. Their findings reveal the importance of recognising children’s social maturity and experience, and giving them opportunities to share in decision-making where their perspectives are heard. A North American longitudinal research project to develop primary schools as caring communities also indicated the importance of providing opportunities for children to take on greater responsibility for classroom life and to collaborate in learning (Battistich, Solomon, Watson & Schaps, 1997).

Findings from the present research revealed the constraining effects of the teachers’ need to be in control, as well as their perceptions of the children’s ability to share decisions. Initial attempts by all the teachers to share power proved difficult, leading them to believe control had been lost. However, when Rick and Kelly believed in the children’s social maturity, were prepared to share power, and to accept that their

initial perception of over-excitement might be a natural consequence of change, joint participation was able to develop. In contrast, when Amy and Tiare held the view that over-excitement was proof of the children's social immaturity, the consequent restriction of opportunities to *'give them some rope'* (17.12.03AmyINT:16) constrained joint participation. The prospect of losing control is particularly hard for some teachers (Goodlad, 1984). Amy and Tiare's goal for the children to take some control conflicted with their need to be in control; a "living contradiction" (McNiff & Whitehead, 2002) that might explain why they experienced more difficulty in developing a community of learners.

8.2.3 Emotional Connections

Emotional connections occurred when the teachers and children shared a wide range of feelings and emotions about their lives in and beyond the classroom. Examples of emotional connections included: mutual caring and trust, respect for individual expertise, the use of humour, and the expression of feelings ranging from anxiety and nervousness to joy and encouragement (see Appendix C2 for further examples). This study revealed these emotional connections as comprising an essential aspect of a community of learners, a finding confirmed in a synthesis of research about features of a learning community (Alton-Lee, 2003). Responding to each other's emotions enabled the teachers and the children to know themselves, to know each other, and to confidently make visible their individuality in their community. In so doing, the rich pool of expertise was made known to, and could be shared with, others.

These findings portray teaching in a community of learners as a relational practice (Noddings, 2003). The importance of caring relationships in the classroom was also argued by Rogoff, Mosier, Mistry and Goncu (1998), whose research identified that developing intersubjectivity between people who hold unequal understandings, required the same warmth and responsiveness of a parent-child or friendship relationship. Teaching as an emotional practice was also the focus of research by Hargreaves et al. (2001). Their research revealed the commitment of teachers to developing emotional relationships with children, and the energising effect of these on reform efforts. These findings were confirmed in the present study with all four teachers committed to developing strong emotional connections and all energised in these responsive processes. The power of emotional connections to develop the

confidence required to sustain learning innovations is well supported in the literature (e.g. Darling-Hammond, 1997; Mahn & John-Steiner, 2002; Noddings, 2003).

While Jubilee School endorsed relationship-driven teaching as a means to fulfil emotional needs and to enhance student engagement (Rogers & Renard, 1999), the teachers varied in their appreciation of this and in the degree of emotional responsivity they created. While Amy developed respectful relationships with children and engaged in caring conversations in which *'you can support them and they can support you'* (14.11.03AmyRaP4:14), she often used mat time to tell the children how she felt without expecting a response. Kelly, in contrast, deliberately convened a sharing circle when problems arose, regarding this as a way to support children in an honest and open dialogue about their feelings. Rick and Tiare used *What's on Top* as a means to form and sustain emotional connections. However, Rick's perception of *What's on Top* as the 'glue' holding their community together contrasted with Tiare's view that it was a *'waste of time when the kids [were] happy'* (27.06.03TiareRaP2:67). Their different perceptions explain their different levels of responsivity in the circle, with Rick connecting deeply with the feelings and emotions expressed issues. Rick's and Kelly's belief in the importance of emotional expression helped them to care, to respect and to trust children.

8.2.4 Spiritual connections

Spiritual connections occurred when the teachers and children developed a strong sense of self, from which they reached out to others, thus creating authentic expression, and a sense of unity and oneness. This spirituality, or *wairuatanga*, is exemplified in a saying of the South African Xhosa tribe: "I am because we are; we are because I am" (Tisdell, 2003, p. 190). Initially, I was uncomfortable making sense of data generated from a secular setting in terms of a spiritual dimension, especially when its definition is elusive and contested (Eaude, 2005). I began to code data as spiritual when they appeared to be outside the realm of cognitive, social and emotional dimensions. However, in the ongoing analysis process, I came to recognise the legitimacy of a spiritual dimension, as distinct from religious, as comprising another essential aspect of a community of learners. As the teachers and children began to learn together, the communal nature of their knowledge construction (cognitive); their shared decision-making and experiences (social); and their caring,

respectful and trusting relationships (emotional) enabled some children and teachers to embrace a more authentic identity, to connect deeply with others and to feel connected as one (spiritual).

These cognitive, social and emotional connections have been argued elsewhere as nurturing a spiritual dimension in the classroom (e.g. Csikszentmihalyi, 2002; Fraser & Grootenboer, 2005; hooks, 2003). In her work exploring spirituality and culture in education, Tisdell (2003) argued, that encouraging connections with others had a spiritual component and concluded that “it is the community of learners...that makes learning transformational and that occasionally results in spiritual experiences for some” (p. 232). In like manner, Myers (1997) proposed that pedagogies of connectedness, such as a community of learners, created hospitable space within which children’s innate sense of spirituality could develop. Palmer, (1999) pointed out that spirituality, or “the human quest for connectedness” (p. 8), is evoked in the classroom by connecting the big stories of the discipline with the little stories of children’s lives. These writers recognised, as did I, that spirituality is ever-present and emergent in a community of learners.

Spirituality was expressed in the research classrooms in a range of ways. For example, spirituality is described as being fully in the present moment (hooks, 2003) or as experiencing transcendence or flow (Csikszentmihalyi, 2002) which was observed when the children became so immersed in their learning that they lost track of time and place: *‘They didn’t even look up when I came in’ (17.09.03RickCONV)*. Spirituality is also about making personal sacrifices to contribute to something greater than self (Kessler, 2000) which was observed when Sakura chose to work with children she knew would require considerable support. Spirituality is also about relational consciousness (Hay & Nye, 1998) which was evident when the children related to each other with integrity *‘we really cared about Rick being sick...’ (08.12.03SakuraINT:33)*. Terms such as calm, connection, love, compassion and humility are also associated with spirituality (Palmer, 2003), and were evident in What’s on Top: *‘there’s a calm that comes from connecting in the circle as one and sharing their lives...there is no boasting or seeking attention, there is compassion and love, it has the power to lift’ (25.11.03CO77/IMEMO)*. These shared activities evident in the developing community make it a “place where spirit matters, where all

that we learn and know leads us into greater connection, into greater understanding of the life lived in community” (hooks, 2003, p. 183).

While Noddings (2005) argued that spiritual development gets little attention in schools, it has been argued that spirituality can be nurtured through a classroom climate that fosters connections (Fraser & Grooenboer, 2005). The findings from the present study also suggest that it is nurtured in the connections of community of learners. It is suggested, therefore, that the predominance of one-sided instructional models in primary classrooms, in which the separation of adult and child activity is sanctioned, teaches children a disconnected or alienated way of being with others. As argued by Kessler (2000) many classrooms are “spiritually empty, not by accident, but by design” (p. xii). However, in a community of learners the “sacred ties of reciprocal obligations” (Sergiovanni, 2005, p. x), be they in cognitive, social or emotional dimensions, honours the spiritual dimension of our being.

8.2.5 Physical connections

Physical connections developed when the teachers and the children formed less hierarchical configurations and moved more freely within the walls of the classroom. The controlled space and movement of traditional classrooms, likened to an ant’s nest (Gordon & Lahelma, 1996), transformed into a more intimate gathering where the teacher *‘sits down with us’* (08.12.03CalebINT:42). Era talked about these new forms of physical connection in terms of one body *‘we are the feet, he is the ankle... it just feels like he is not the head anymore... he is one of us’* (08.12.03EraINT:42), and Sakura noticed that Rick *‘actually sits down and helps us instead of looking at people’* (08.12.03SakuraINT:42). With less teacher dominance there was more freedom to move about and interact with others in spaces that had previously been out-of-bounds: *‘I’ve let go of my desk and now let children use it...it used to be a no-go zone’* (14.03.03RickRaP4:6).

Evidence from photographic records taken in this study showed that physical connections manifested themselves in different ways across the four classrooms. In Room One, Rick created spaces for listening by sitting with children every day in a circle, and kneeling, squatting or lying on the floor in various combinations so as to be at the same eye level. At other times, Rick sat with the children on the mat looking

up at a child who read or talked from his chair. Instead of walking in two straight lines as “ant soldiers looking after order” (Gordon & Lahelma, 1996, p. 305), they moved as ‘*a messy glob of humanity*’ (15.10.03CO60/1). In Room Two, desks were replaced with low round tables for the children to work at, or they worked on the floor. When the desks were brought back in, some children were trusted to work at another child’s desk, but Amy never gave up her teacher’s chair and station. In Room Three, Tiare and the children swiped a card to enter the room, and worked at desks arranged together in groups. They also sat in a circle with Tiare sitting on her chair or they worked outside on the covered deck. In Room Four, the children began using a work bench on the covered deck, and they re-positioned chairs to sit in small circles, they sat on the floor in one large circle, or they sat at their desks arranged in clusters. Rogoff et al (2001) also described a similar variety of informal arrangements for learning in the *OC* community of learners.

Findings from the present study showed that while the physical environment promoted reciprocal relationships (Fleer et al., 2006), simply changing the physical arrangements while one-sided practices dominated, was insufficient to develop a community of learners. Using an interpersonal lens, closer physical configurations appeared to emerge from cognitive, social and emotional connections. Using a personal lens, these new physical connections constituted the development of teachers’ sociocultural perspectives, as well as the development of a collaborative classroom culture (institutional lens). The mutually constituting nature of these changes illustrate the power of perspectives, and of culture, to transform physical interactions; simply changing the layout or “knocking down walls...is not enough to bring about change” (Fullan & Hargreaves, 1992, p. 22). It follows that the look and sense of community “is an outward and visible sign of an inward and invisible grace” (Palmer, 1998, p. 90). In the present study, it was not until the unfolding rhythms of such invisible grace across cognitive, social and emotional dimensions had evolved, that new physical connections were evident.

A conceptual model illustrating how the five reciprocal dimensions of teachers’ and children’s participation combine to comprise a community of learners is shown in Figure 8.1. This model comprises teachers’ and children’s shared ideas, activities and meanings (cognitive), the shared decisions, responsibilities and experiences (social),

and the shared feelings and emotions (emotional). Emerging from these cognitive, social and emotional connections, is a deep sense of connectedness to self and to others (spiritual), as well as a collective and informal configuration for learning together (physical). These spiritual and physical dimensions then helped to sustain ongoing cognitive, social and emotional connections, hence the arrows feeding back into the spiral of learning together. Conceptualised in this way, a community of learners in this study was not a blend of *'the teacher dominant way, or just letting kids do it on their own'*. Instead *'we found a way of learning together'* (14.11.03AllyRaP4:24) that lies beyond the traditional one-sided continuum (see Figure 1.1, p. 2). A community of learners is thus seen as being in harmony with the Māori pedagogies of *whanaungatanga* and *ako* argued to nurture the spiritual, intellectual, social, emotional and physical dimensions of learning (Tangaere, 1997).

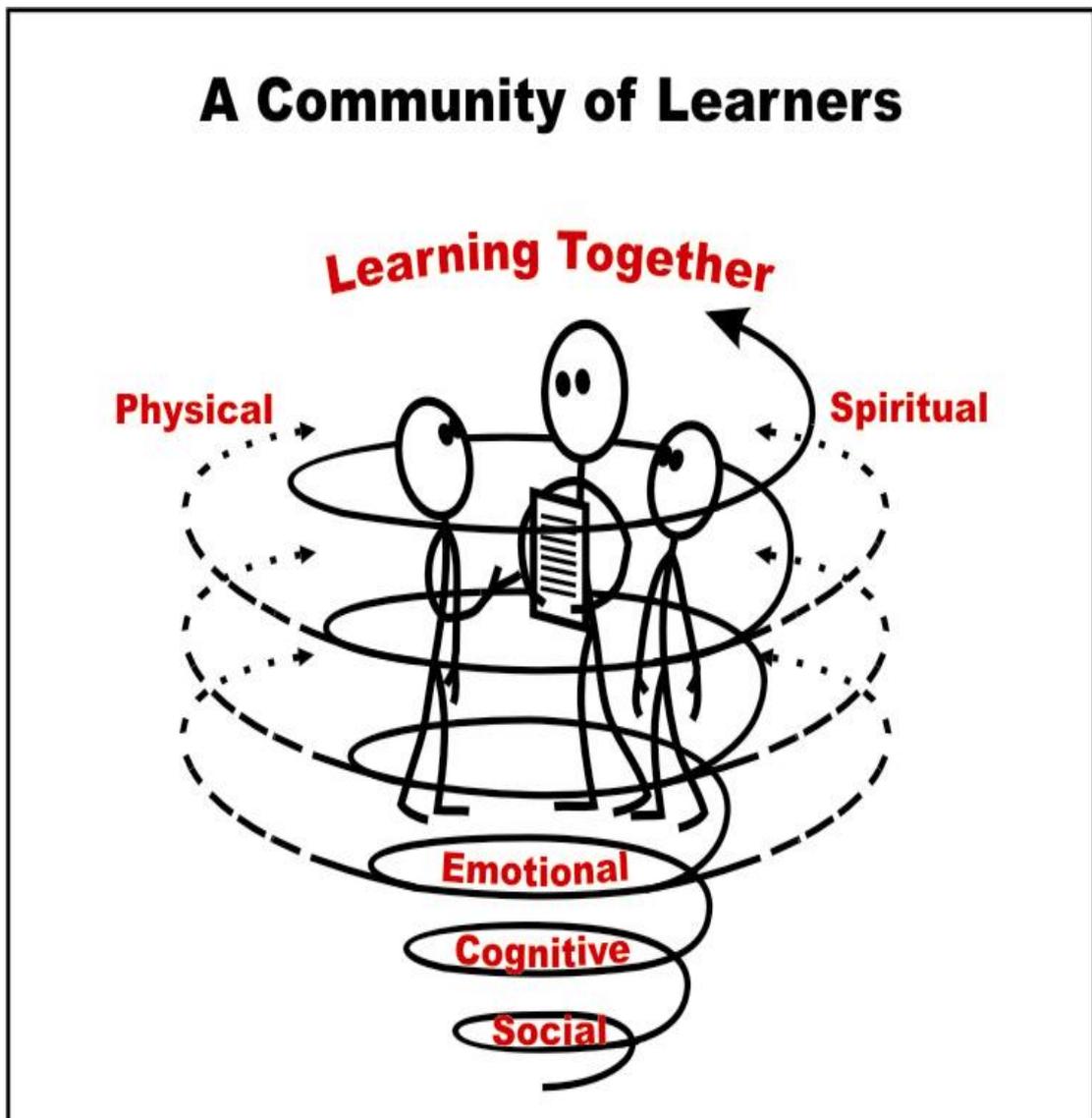


Figure 8.1 A conceptual model of a community of learners

8.3 CHILDREN'S NEW LEARNING IDENTITIES

This section discusses children's transformations of participation as they began to engage with their teachers and peers in the reciprocal connections described above as constituting a community of learners. Specific focus is given in the discussion to the children's new learning identities, their new ways of sharing their learning, and to their new ways of relating to each other in the classroom.

8.3.1 Developing new learning identities

This study showed that, given the opportunity to participate in a wider range of roles made available in the reciprocal exchanges of a community of learners, children established new identities as intentional learners (Rogoff, 2003; Wells, 1994) who asked their own questions, engaged with the ideas of others and reached new understandings. Those target children who had these opportunities moved beyond seeing themselves as containers in which teachers deposited information (acquisition metaphor), to seeing themselves as learners with others (participation metaphor). Furthermore, some children saw themselves as knowledge-builders who co-constructed new understandings, (knowledge-creation metaphor). Elbers and Streefland's (2000a) research also found that children's participation in a community of mathematicians "created an awareness of their new identities as co-researchers" (p. 47). Participation in a learning community provides the "texture to negotiate identities" (Wenger, 1998, p. 269).

When children were afforded roles in a learning community, and took on new learning identities they became intensely focused and interested in their learning. This intense focus is consistent with results noted by Turkanis (2001) whereby their "joint effort curriculum...[created a] wealth of energy" (p. 95). Similarly, Hanrahan (1998) noticed an "upsurge in energy" (p. 320) when children were able to contribute to learning decisions and when learning became personally meaningful and culturally relevant. In the present study, the target children's intense focus was seen in their refusal to be distracted or drawn into activity operating separately from the official classroom programme. This intense focus was also seen in learning conversations and the passionate debates in which new understandings about content were co-

constructed over time. Engle and Conant (2002) termed such ongoing debate as evidence of “productive disciplinary engagement”. They concluded that the intensity of this engagement was fostered by: problematising meaningful content, authorising children to resolve it, and holding them accountable to the contributions of others.

As Rick and Kelly sought to develop a community of learners, they provided opportunities for children to engage in a knowledge-building inquiry. As children debated with others, be it about the differences between cheating and collaborating, the skeletal structure of water snakes or the possibility of taming sharks, they came to recognise that their influence and contribution could extend a developing argument; changing their identity from consumers of knowledge to creators of it. Data also showed that a sense of group expertise developed as children shared their individual expertise with their peers: a finding also noted in Engle and Conant’s (2002) work to develop a community of learners. When teachers vested authority in children to address their own inquiry questions, and when they guided their attempts to do so, some children in the present study, came to view learning as more than searching for other people’s knowledge, it came to be about ‘*sharing their minds*’ with their peers, their teachers and outsiders to create new knowledge.

Rick, Kelly and Tiare commented on their new appreciation of what children could achieve when they participated with others to co-construct new understandings. They noted a greater depth of thinking about content and everyday issues arising in the classroom. They also noticed increased confidence in the children to share their learning, and their motivation to continue learning rather than to be interrupted. Another sign of the quality of children’s work was their perception of the value of learning together and of importance of sharing ownership of the collective work that emerged from doing so (see section 5.5.2). Some sociocultural theorists would argue that the teachers’ perception of the children’s enhanced learning outcomes in a community of learners is a consequence of individual performance or understanding being lifted to a higher level in the co-constructive processes (Rogoff, 1998). This view is also supported by research which shows children’s retention, comprehension, argumentation and creative thinking skills are most advanced in caring, inclusive and cohesive learning communities (Alton-Lee, 2003; Brophy, 2002; Brown & Campione, 1998; Rogoff et al., 1996; Scardemalia et al., 1996).

8.3.2 Developing new ways to share learning

Providing opportunities for children to share their new understandings in dialogic forums or spontaneous conversation provided a valuable means of “assessing progress while aiding learning” (Turkanis et al., 2001, p. 229). Some target children in the present study relished opportunities to talk about their new learning and to respond to points raised by their audience. For example, when Sakura engaged with her audience about the flexible skeletal structure of water snakes, not only could she share her new learning, but new understandings developed for children in the audience, and Rick was afforded an opportunity to observe her transformation of participation (learning). While the children’s preferred approach to sharing was to read their work to an audience, when a community of learners had developed, more supportive, reciprocal and spontaneous interactions were observed (see section 5.3.2 and 6.4.2 for examples of this discourse of co-construction). Observations of children in these sharing sessions, revealed their new understandings, their social and emotional competence, as well as what they could contribute to the group; these sessions became “a showcase of their collectivity” (Mayall, 2000, p. 134).

The value of observations as evidence of learning, is argued by sociocultural researchers as an effective means of assessment (Fleer & Richardson, 2004a). In early childhood education, research is showing how a rich picture of learning can be made available by observing children’s transformation of participation through the three lenses (Fleer, 2002b; Fleer & Robbins, 2004). Rather than just a focus on individual competencies and understandings (personal lens), sociocultural theory broadens the focus of assessment to include the mediational processes such as dialogue, and supportive gesturing, (interpersonal lens) as well as the taken-for-granted cultural values and practices (institutional lens). Gipps (2002) also argued for observational, dialogic and communal methods of assessment to capture what a child is capable of doing with others. Wells (2001a) made a similar point in his promotion of dialogic inquiry to develop and to demonstrate deep understandings; a process argued to “take place between people doing things together” (p. 186). Sociocultural theory highlights the difficulty of using individually focused assessments when learning occurs in reciprocal and responsive relationships in

which “the product and the process are dynamic and embedded” (Fleer & Richardson, 2004a, p. 6).

8.3.3 Learning a new way of relating to others

The target children in this study appropriated a new way of relating to each other when they had the opportunity to participate in the reciprocal dimensions of a community of learners. This transformation was observed when a child began to interact with his or her peers in ways that reflected the teacher’s responsive interaction without their actual presence. This finding was first recognised by Rick when he noticed children becoming *‘little me’s’*. Child-initiated joint participation (see Table 5.3, p. 108) only occurred in classrooms that had begun to function as a community of learners. As joint participation became an accepted cultural practice, children also began to: *‘actually listen to each other...be polite’* (19.12.03RickINT:32), contribute ideas, seek out the expertise of others, suggest innovations, share their feelings, lead without controlling, spontaneously manage inappropriate behaviour, initiate shared interactions without it being cued by the teacher or make decisions without needing adult approval. These children were beginning to see their joint participation as a way to learn, and as a way to be with each other: they were “exploring new ways of being that lie beyond [their] current state” (Wenger, 1998, p. 263).

As noted, not all target children had the opportunity to engage in a community of learners. These children often engaged in child-initiated transmission (see Table 5.2, p. 105) by continuing to use the same one-sided interactions of their teacher such as: controlling others or telling them what to do, needing to be boss, helping by taking over, clarifying trivial procedural details with the teacher, or concealing their underlife activity from the teacher. For these children, shared activity was actively resisted because to engage with the ideas, actions and feelings of another was a sign of their dependence on that person; a sign of their immaturity and of an illegal means to learn. These observations, however, do not suggest that the children were naturally non-collaborative rather they bring to attention the power of the classroom culture, and its unwritten ways of doing things, to determine the nature of interactions therein. Consistent with these findings are Rogoff’s (2003) analyses of cultural communities which showed that children appropriate different skills depending on what is expected

and the opportunities they have “to observe and participate in the activities and cultural values regarding development of particular skills” (p. 170).

The target children’s appropriation of their culturally organised classroom participation is also consistent with research reported by Matusov et al (2002). Their study found that children from collaborative classrooms initiated guidance and used inclusive gestures in learning interactions beyond their classroom, compared with children attending a traditional school who initiated the one-sided interactions of their classrooms. They concluded that children were learning “more than curriculum content in their involvement in the teaching and learning practices of their school” (p. 129). Nuthall (1999) supports their results when he argued that “students do not just acquire the curriculum content they are exposed to in classrooms they acquire their total experience in classrooms” (p. 247). Given the consistency of these findings with those of the present study, it is argued that for children to participate in New Zealand’s knowledge society, which requires citizens who can take initiative, collaborate, build relationships, create knowledge and engage in democratic processes (Rowarth & Cornforth, 2001), then they need to participate in these same practices in classrooms developed as a learning community. Knowledge-building communities prepare children and teachers for informed and productive participation in a knowledge society (Edwards, 2001).

This section concludes by reflecting upon the children’s enjoyment of learning in a community of learners. Not only did children like their teacher and peers knowing, respecting and caring about them as unique individuals, they regarded this as essential to learning together. Daniels and Perry (2003) also revealed children’s desire for teachers to care and to “know me as a unique person and learner” (p. 103) and to allow them to “make [their] own choices” (p. 105). In Room One, where a community of learners was sustained, some children began to question why joint participation was not a normal part of their school learning: *‘and the question I ask is why don’t teachers join in with us?’ (05.05.03CO20/1)*. Sharing decisions and responsibility with their teacher became a source of intense satisfaction because, for these children, it was a sign they were trusted and had valuable ideas to contribute. However, for children whose classroom culture was one-sided, sharing activity with their teacher was a sign of dependence, immaturity and hard work. The culture of the

classroom appeared to set up distinctly different perceptions of a community of learners.

The culture of the classroom also affected the children's motivation to be in it. Children in Room One, whose classroom had begun to function as a community of learners, *wanted* to be there and were observed hurrying back to it. Children in Room's Two and Three, whose classrooms remained predominantly one-sided, *had* to be there and were observed hurrying away from it and returning slowly or via a circuitous route; an observation noted elsewhere (Dockett & Perry, 2003). These observations can be explained by the "attraction of connection" (Turkanis & Bartlett, 2001, p. 70) and the deep satisfaction children derived from participating in a community of learners. Room One became a place that satisfied children's "yearn[ing] to have a voice in their own schooling" (Johnston & Nicholls, 1995, p. 94), and where they could "bring what they know and who they are into the learning relationship" (Bishop & Glynn, 1999, p. 165).

8.4 THE IMPACT OF TEACHERS' PERSPECTIVES

While the data showed that the development of a community of learners was enabled when the teachers developed sociocultural perspectives, the data also identified the retention of one-sided perspectives as a critical constraining factor. This section focuses attention on this constraint by discussing the struggle teachers had in understanding a community of learners, and the necessity of moving across paradigms to do so. This section concludes by presenting the clarified principles of a community of learners.

8.4.1 The struggle to understand a community of learners

As noted in Chapter Seven, all the teachers in this study found it difficult to understand the nature of shared activity in a community of learners. Initial interpretations of sharing included: presenting something, allowing choice from a range of options or taking full responsibility one moment and then relinquishing it all the next. Consequently, the teachers' first attempts to develop joint participation became a pendulum swing on the one-sided continuum, from adult-run to children-run, children as proxy-teachers and contrived joint participation (see Table 5.2, p.

107). Their focus on being independent where children ‘*don’t come to you*’ (26.03.03TiareINT:20) or ‘*don’t need me*’ (18.12.03AmyINT:20) was so dominant that the notion of making “varying contributions to each others’ [sic] learning, with all active and involved” (Rogoff, 1998, p.715) was difficult to conceive. The teachers found it hard to understand that they should not totally ‘*let the reins go*’ (24.02.04TiareINT:17); that they still had a pivotal role to play as contributors in shared activity.

This struggle to understand a community of learners was also reported by Rogoff et al (1996). These authors showed that North American parents, who took on the roles as co-operators, could not recognise or identify with the shared nature of interactions inherent in the OC community of learners. Like the teachers in this study, the co-operators made the assumption that collaborative practices were opposite to familiar adult-run models, and made the same “turn from adult-run structure to children-run ‘lack’ of structure” (p. 402). Neither the co-operators, nor the teachers in this study, could see beyond the “control versus freedom dichotomy” (Rogoff et al., 2001, p. 11). Breaking free from this one-sided dichotomy to recognise and participate in reciprocal connections challenged their taken-for-granted perspectives about learning and teaching. Brown and Campione (1996) also found that fostering a community of learners, which embraced new theoretical perspectives, was difficult for teachers.

The teachers in this study also struggled to understand the notion of sharing meaning with children, or developing intersubjectivity, which is the basis of co-construction. This difficulty was also reported by Jordan (2003) in her research with early childhood teachers. Two teachers in the present study, Amy and Tiare, misinterpreted co-construction as an either/or concept, where sometimes they did the telling, and at other times, the children did the telling. Their typical adult-directed dyadic pattern of taking a speaking turn between each child’s turn, did not allow children’s responses to be built upon in which meaning could be shared. Realising that this misunderstanding was constraining joint participation, I sought to elaborate upon the distinctions that set co-constructive processes apart from one-sided interactions on our fourth RaP day. Using the one-sided example from the data of Mike’s controlling the talk as he helped another child, and then taking the boy’s crayon and finishing his work while the boy looked away (see section 6.3.2), I attempted to clarify their lack of connection. I pointed out Mike’s controlled take-over, his one-way discourse and

rhetorical questions and their disconnected physical positioning, and how these had precluded developing intersubjectivity. However, I failed in my attempt to support Tiare's understanding. She responded defensively, justifying Mike's actions: *'Art is so hard to verbalise exactly what we want children to do'* (14.11.03TiareRaP4:23). Tiare's defensive response and her desire for the children to know what she wants them to do was evidence of her commitment to one-sided perspectives, and her unease at letting these go.

In contrast, Kelly and Rick came to understand and to engage in the reciprocity of shared activity with the children. Kelly expected to learn with the children in these co-constructive interactions, but Rick was uncomfortable in admitting a learner status. Rick readily acknowledged his co-learner status in what he called 'messy talk time' with me, and with the other teachers. He also admitted learning about teaching processes with the children but when it came to learning content with them he needed to *'feel that I know stuff!'* (19.12.03RickINT:5), a point he made with some irritation. Rick was in no doubt that the conversations he had with the children about content had been for their learning, not his. While Rick was developing sociocultural perspectives, and engaging in reciprocal exchanges, he could not see that his participation constituted his learning too; a perception argued to constrain ongoing development. It has been argued that contradictions like Rick's are about the need in teachers to tell or to know (Hedegaard & Chaiklin, 2005). Wells (2001a) argued that the act of participating in a conversation constitutes some learning for each contributor because "the understandings we achieve builds on the contributions of others and invites their further response" (p. 186); even sharing our understanding serves to clarify it for us. Rogoff et al (2001) endorsed his view by maintaining that when teachers share meaning with children they "not only foster children's learning but also learn from their involvement with the children" (p. 3). This finding not only focuses on the importance of helping teachers to understand and to participate in co-constructive processes with children, but to assist them to feel comfortable as co-learners in these knowledge-building dialogues.

8.4.2 Moving across paradigms

The teachers' struggle to understand a community of learners was an indication of their attempts to move across paradigms from their deeply ingrained one-sided perspectives to a sociocultural view of learning. Whenever attempts to make this

paradigm shift overwhelmed, the teachers reverted to “draw[ing] upon the arsenal of traditional practices” (Matusov, 2001, p. 393). Trying to understand the philosophy underpinning a community of learners involved rethinking fundamental and taken-for-granted understandings about teaching and learning, such as the nature of knowledge and the roles teachers and children play in learning. Rogoff (2003) argued that these cultural ways of doing things based on subtle and unquestioned assumptions are the most difficult to examine and “require open eyes, ears, and minds to notice and understand” (p. 368). Furthermore, the need to make a paradigm shift, and the struggle to do so, is evidence of the distinction between one-sided instructional models and a community of learners (Rogoff et al., 1996).

Making this paradigm shift was even more difficult because the structure of a community of learners is not visible and not easily articulated. The “‘common thread’ of mutual engagement in shared endeavours” (Rogoff et al., 1996, p. 404) was difficult for the teachers, and for me, to see. The use of repetitive participant structures was one approach used by the teachers to visualise joint participation. However, the big breakthrough in making this paradigm shift occurred for Rick when he realised, through dialogue with me, that his first attempts to share decisions and responsibility only focused on doing activities; he was assuming rather than making explicit the learning orientation. Section 5.3.3 reveals Rick’s transformative moment when he shifted from thinking about teaching as planning and organising activities, to teaching as negotiating decisions with children about learning. Rick shared his paradigm shift on our second RaP day, which seeded new ideas for developing a community of learners, as well as more discussion about its distinctive mismatch with current perspectives and practices.

Kelly’s and Rick’s success in developing a community of learners was partly attributable to their development of sociocultural perspectives from which they came to understand that knowledge was something created and recreated between people; or as Rick would often say ‘it was in the talk’. Their new understandings enabled them to visualise a way of learning together (personal lens), which saw them learn with children in a range of reciprocal exchanges (interpersonal lens), which in turn shaped, and was shaped by, a developing culture of collaboration (institutional lens). Part of Tiare’s and Amy’s difficulty in developing a community of learners was their

persistent one-sided perspectives which precluded understanding of sociocultural principles (personal lens), and which restricted joint participation (interpersonal lens) so retaining mainly one-sided cultural values (institutional lens).

8.4.3 Revised principles of a community of learners

Brown and Campione (1996, 1998) argued that to ensure a systematic approach to developing a community of learners, teachers needed to understand the underlying principles. By understanding these theoretical principles, the all-too-easy superficial or piecemeal approach is avoided. The four principles of a community of learners, exemplified in written excerpts at the beginning of this research, were deemed by the teachers to have *'really helped trigger our ideas and a lot of talk'* (17.12.03KellyINT:43). However, data generated in the process of working with these principles over the course of this research, enabled their clarification by the teachers and me together. Table 8.2 clarifies each of the four initial principles, and adds a fifth one in response to the efficacy of making explicit the learning orientation. These principles are identified according to their dimension of reciprocity.

Table 8.2 Initial and clarified principles of a community of learners

Dimension of reciprocity	Principles	Clarification of principles
Cognitive	1. We are all learners in the classroom.	<ul style="list-style-type: none"> • We are all learners and teachers in the classroom. • We <i>share our expertise</i> in <i>dialogue</i> to build on previous ideas and experiences <i>beyond the classroom</i>. • We engage in <i>intellectually demanding</i> inquiry and <i>reflection</i> about content that interests us.
Social	2. We share decisions about what and how we learn.	<ul style="list-style-type: none"> • We share decisions about what we learn sometimes without a pre-determined endpoint. • We share decisions about how we learn. • We share our learning with an audience to engage in dialogue about it and for <i>purposeful assessment</i>.
Social	3. We vary responsibility for learning.	<ul style="list-style-type: none"> • We share responsibility for learning where sometimes the teacher takes a lead role and sometimes children initiate the lead. • We have a responsibility to <i>support</i> other's learning in <i>guided participation</i>. • We share responsibility for managing our own and each other's behaviour.

Emotional	4. We have caring conversations.	<ul style="list-style-type: none"> • We have honest dialogue to share our feelings and emotions. • We listen to each other with <i>respect</i>. • We respect our <i>diversity</i> as a valuable resource for learning.
Cognitive Social Emotional Spiritual Physical	5. We work together for the purpose of learning. (New)	<ul style="list-style-type: none"> • We learn in <i>repetitive participant structures</i> • We share our out-of-school lives • We talk about our feelings and emotions. • We feel deeply connected as one • We learn in a variety of physical configurations

The italicised phrases in Table 8.2 are those that were also found in Brown and Campione's (1994, 1996, 1998) Fostering Communities of Learners (FCL) instructional programme. Some principles from the present study extend those from FCL. These include: explicitly positioning the teachers as learners, teachers and children guiding joint participation, sharing decisions about developing new participant structures, and sharing out-of-school experiences. The emotional, spiritual and physical dimensions of learning together were not explicit in FCL principles, there being a greater emphasis on the social and cognitive dimensions such as the social dynamic for sharing expertise and discovering deep conceptual knowledge.

Table 8.2 also reflects the central principle of the OC community of learners, used at the start of this research (see Table 4.3, p. 87). The overlap between the OC principle and those clarified in Table 8.2 include: building on children's interests, sharing expertise in collaborative activity, sharing planning decisions, positioning teachers as learners with children, engaging in purposeful learning, and assessing learning while continuing to guide it. As was the case for the FCL programme, the principles guiding the OC focused strongly on the cognitive and social dimensions of joint participation. The emotional and physical dimensions, while not expressed as principles, were discussed as important aspects of the OC community (Rogoff et al., 2001). No reference was made to a spiritual dimension in the OC community of learners.

8.5 THE IMPACT OF CHILDREN'S PERSPECTIVES

As was the case for the teachers in this study, the target children's persistent one-sided perspectives and their appropriation of one-sided practices constrained the development of a community of learners. This section discusses the tensions children faced while trying to let go of their entrenched one-sided perspectives, as well as their

struggle to understand, and to participate in, shared activity; a process likened to *'pulling teeth'*.

8.5.1 Children's tensions of perspective

The target children's entrenched one-sided perspectives created a range of tensions, three of which are discussed here to show how they impeded their ability to participate in a community of learners. The first tension arose when children viewed their teacher as the 'know-it-all', the question-askers and the instruction-givers. When the children were encouraged to ask their own questions to focus a collaborative inquiry, they all struggled to do so. Their initial response to this encouragement to participate more to their learning was to use a range of innovative strategies to avoid intellectual effort, such as: asking questions to which they already knew the answer, copying trivial questions from food packaging or copying information from a book or simply doing a craft activity. To ask their own questions based on genuine interests simply contravened their one-sided perspectives of how learning occurred in the classroom. The children struggled to shift from perceiving themselves as passive recipients of knowledge, to becoming active creators of it; a struggle well documented in the literature (Engle & Conant, 2002; Hume, 2001).

A second tension of perspective arose when the teachers encouraged children to share their ideas and expertise with others. As noted in the previous chapter, the children initially considered the idea of sharing their ideas as a breach of their individual ownership of them, and thus an indication of cheating. This dilemma became apparent in the early analysis of data when children barricaded their work with arms or books, or accused others of *'taking'* or *'stealing'* their ideas. Many children in this study were unable to accept that sharing ideas to develop a joint understanding could be a legitimate way to learn; a perspective that placed a critical constraint on developing a community of learners. This phenomenon of perceiving collaboration as a form of cheating in primary classrooms is not well documented in the literature. Most references in the literature are made in relation to learning in tertiary institutions where there are unclear boundaries between the forbidden acts of plagiarism and collusion, and collaboration (e.g. Barrett & Cox, 2005). This finding reveals that one of the challenges of developing a sociocultural approach in primary classrooms is assisting teachers and children to perceive learning as a shared activity, and to

develop “a commitment to find a common ground on which to build shared understanding” (Palincsar, 1998, p. 355).

The third tension of perspective arose when children believed that collaboration required everyone *‘to agree with everyone else’* (15.10.03EraCO60/1). This assumption that learning together comprised of contributing only similar ideas in what Stein (2001) referred to as a culture of niceness, resulted in children choosing not to add their idea if it differed to those being offered. Most target children did not understand that joint participation in the classroom could include dissenting views, that to do so was not an unfriendly act, rather a rich source of new ideas and vital to their learning (Alton-Lee, 2003; Matusov, 2001). Most disagreements in this study focussed on procedural issues where the children sought the mediating role of their teacher. Fewer disagreements focused on issues of content - a finding also noted by Rojas-Drummod, Perez, Velez, Gomez and Mendoza (2003) in their study of exploratory and disputational talk as a tool with which to promote reasoning in Mexican children. These findings reveal the importance of guiding children to voice intellectual disagreements and to understand its promotion of learning.

Rogoff (1994) argued that these tensions of perspective, constraining participation in a community of learners, are attributable to the children’s previous participation in traditional classrooms. She argued that the cultural expectations and social structures of these adult-run classrooms enable children to appropriate only one-way forms of communication and understandings where learning is about passively receiving knowledge. Engle and Conant (2002) concurred with Rogoff’s argument by identifying a lack of significant precursors to joint participation in primary classrooms. Children need to experience dialogue and other forms of joint participation so that these experiences can be appropriated and brought into their future learning relationships.

8.5.2 Children’s struggle to understand a community of learners

When the culture of the classroom and interpersonal activity therein, remained predominantly one-sided, children not only retained their one-sided perspectives but they struggled to understand a community of learners. Wenger’s (1998) notion of reification, in which an abstraction is turned into a living form, can explain the

children's struggle. The usual separation of children's and teachers' activity (an abstract idea) had taken on a concrete existence in the form of many well-established one-sided classroom rituals. As the children appropriated these one-sided interactional patterns, the one-sided ideas behind them were also reified in the children's perspectives, in their discourse and in their participation. The children's early experiences of joint participation were first resisted because they contravened the traditional practices that had long been reified.

A window into Amy's classroom revealed one-sided practices that continued to focus on doing solo activities and finishing work, despite her efforts to change the physical learning environment. The children's perception that teaching should be about telling and giving instructions, and that learning should be a solo activity in pursuit of a finished product, was reinforced by ongoing cultural traditions, in part born of Amy's inability to let go her own one-sided perspectives and understand for herself the nature of shared activity. The children in her room talked about learning as *'exchanging knowledge'* and *'working together'* which implied understanding of a community of learners, but further probing revealed that their understandings were framed by one-sided perspectives. For instance, Amy contributed an idea or a child did, rather than transforming an existing idea into a new one through reciprocal exchanges; children worked in a group rather than with a group, or they chatted about out-of-school events rather than debating the content of learning. These children could not grasp the idea that learning with their teacher was a feasible activity *'because she's in charge'* (09.12.03MereINT:37).

In contrast, a window into Rick's classroom revealed new collaborative rituals and guided participation, due in part, to his shift in perspectives and his understanding of shared activity. These transformations of participation observed through all three lenses, shaped the children's perceptions that teaching and learning could be a shared activity in "pursuit of newness" (Paavola et al., 2004, p. 562). The children spoke of *'combining skills'*, *'sharing their mind'* and *'finding new solutions'*. Further probing of these terms showed they were developing perspectives consistent with a community of learners which framed new, albeit fragile, understandings of learning together and of the co-construction this implied. For instance, while they talked about *'telling'* others who did not know, they also came to understand that sharing ideas was not cheating, that listening to each other was important, and that everyone could

learn by “building knowledge through doing things with others” (Watkins, 2005, p. 17). These children spoke confidently about the prospect of learning with Rick *‘he is one of us...we are all learners and teachers in our classroom’* (08.12.03IkaniSakuraINT:39/45).

Just as teachers found it difficult to discern and articulate the meaning of shared activity in a community of learners, so too did the children. It was not until teachers made the paradigm shift in their own perspectives, and then guided children to participate in a community of learners, that some children came to understand the nature of shared activity, began to talk about its meaning as something *‘you can be part of’* (12.11.03SarahCONV), and then actually became part of a learning community. This finding indicates the value of helping children to see the big picture of a community of learners, and of talking with them about the ideas that reify it as a means to learn in the classroom.

8.6 TEACHERS NEED COMMUNITY TO DEVELOP COMMUNITY

If learning is embedded in participation in social and cultural activity of community practices (Rogoff, 1998), it follows that teachers’ learning is also embedded in participation in the practices of their professional community. This section identifies “the awesome power of the teacher” (Smith, 1996, p.62), and “the power of collaborating” (Fullan & Hargreaves, 1992, p. 60) in developing a community of learners. This section discusses the cognitive, social and emotional reciprocity of this action research as effective professional development for teachers seeking to develop a community of learners, and concludes with the elements of effective professional development as observed through Rogoff’s three lenses.

8.6.1 Developing reciprocal connections in research

The reciprocal exchanges, discussed in section 8.2 as constituting a community of learners, were also evident in the research relationships which developed between the teachers and me. The cognitive dimension of our relationship developed in dialogue to problematise their practice, to reflect on sociocultural theory and practice, and to work towards achieving professional goals that mattered to them. Because the teachers and I belonged to different knowledge communities, it was important to

“negotiate the boundaries between the[m]” (Bruffee, 1995, p. 124). We began this process of negotiating meaning in conversations that responded to the principles of a community of learners, my fieldnotes and my feedback written to the teachers. Our RaP days provided space for dialogue to share expertise, to develop intersubjectivity and to co-construct new ideas about developing a community of learners.

At the beginning of this research, the teachers claimed that they did not have expertise to bring to the research. Such one-sided perspectives led them to perceive me as the expert and to expect *me* to tell *them* how to implement the ideas of sociocultural theory in their classroom, as if puppets on my research strings. The teachers generally felt unsure about the evolutionary and responsive nature of their participation. Being set up by the teachers to *tell* and to *direct*, it was vitally necessary, but difficult, for me to withdraw from the role of director in which they had cast me. However, if the teachers were to understand notions of co-construction and shared activity, central to a community of learners, this action research needed to immerse them in just these experiences (Prawat, 1996; Wells, 1999; Westheimer & Kahne, 1993). The following extract highlights the tension I felt while trying to resist the temptation of telling teachers so as to create spaces to co-construct new understandings about a community of learners with them:

Ally: Did you ever feel I was telling you how to develop a community of learners?

Tiare: No! No!

Ally: It was always an issue for me. I didn't want to tell because that's going back to that old model of teaching. I'd think we've got to work this out together. Sometimes I wanted to tell you something and then I thought no, I won't say that. Sometimes I planted seeds to talk about.

Kelly: But it is nice to have those [seeds] I must say. Sometimes you need something – another point of view, another way of seeing things.

Tiare: I saw it as a safety net...to take that next step.

Amy: Yeah.

Kelly: And it brought all our ideas together...

Tiare: because we were part of this research net. (14.11.03RaP4:38)

My focus on both participation and knowledge-creation metaphors for learning and research was so strong initially, that I resisted any form of telling. However, I soon realised the limitations of choosing only one metaphor (Sfard, 1998), and did respond

to times when teachers signalled their need for me to tell. I did so, as a way to seed conversation about a community of learners, for instance when I told them about the four principles, showed them a diagram, or gave them readings from the literature. As identified, joint participation could co-exist with one-sided interaction in the classroom, and it was no different in this research process. To have only led the teachers to my incomplete understandings of a community of learners in one-sided interaction would have severely restricted their learning, and mine. As members of a *'research net'*, our learning about the meaning and development of a community of learners was embedded in our joint participation which included some times for telling.

The social dimension of our research relationship developed beyond the school site as we took on new and complementary roles in the RaP days. The social organisation of these RaP days gave "voice to the teacher's purpose" (Fullan & Hargreaves, 1992, p. 66) enabling a collective commitment to developing a community of learners, as well as an individual response to each teacher's goals. The asymmetry of our shared roles was exemplified when sometimes I initiated meetings, set the RaP day agenda or redirected conversation back to a community of learners. At other times the teachers took more decision-making responsibility when they contributed to RaP day agendas and dialogue, initiated a presentation to the Board of Trustees or suggested the use of electronic mail in the research. Just as in a community of learners in the classroom, no-one in the research carried all the responsibility and no one was passive (Rogoff et al., 1996).

In addition to sharing roles and decision-making responsibilities, we also shared aspects of our lives beyond this research context which enabled us to get to know each other as individuals rather than just as teachers or researchers. We shared our out-of-school lives in social events, in *'messy talk time'*, during interviews held in our homes, and over shared meals, *'the same five of us...as people, as teachers, as friends'* (18.12.03AmyINT:7). Just as had been the case in the classroom, getting to know one another enabled us to understand each other, to voice our vulnerabilities and to empathise with personal circumstances such as illness, bereavements and bad days. These insights into the person the teachers were, and their social worlds, supported our research relationships from which rich data were generated. The

importance of getting to know each other is advocated by Palmer (1998) when he proposed doing “something alien to academic culture: we need to talk to each other about our inner lives” (p. 12).

The emotional dimension of our research relationship developed through our willingness to work together in a genuinely committed, trusting and respectful manner, argued by Donaldson and Sanderson (1996) as constituting the heart of collaboration. The four off-site days were vital for developing what Bryk and Schneider (2003) termed relational trust; we came to rely on each other to be supportive, rather than being judgemental about the changes happening in each teacher’s classroom. In such an emotionally supportive environment we were able to reveal ourselves as individuals with diverse perspectives. Likened to a ‘*safety net*’, or ‘*soul food*’, RaP days became anticipated times to share our feelings as much as our ideas about teaching; a time of ‘*being honest and open with each other and building relationships*’ (14.11.03TiareRaP4:37). The emotional responsivity of our participation in RaP days intensified as the research continued: it was expressed in the joy of succeeding, the tears of frustration, the fear of letting go, the discomfort of tensions of perspective, or the simple pleasure of being together.

Maintaining trusting, respectful and honest relationships was as important to our collaboration in this research, as it was to the children’s learning together in the classroom. Regardless of the learning setting, Hargreaves et al (2001) argued that transforming participation requires emotional work. Evidence from this study made clear the immense emotional demands placed on the teachers to create, and to sustain, classroom reforms; demands that needed to be supported in our collaborative research. These findings identify the need for reform efforts to foster emotional connections between teachers and researchers as they collaborate in research “anchored in problems of practice” (Darling-Hammond & McLaughlin, 1995, p. 599).

8.6.2 Collaborative action research as effective professional development

Palmer (1998) argued that the development of any profession depends on honest dialogue and shared practices that encourage risk-taking. At the beginning of this research teachers talked of discontinuity and privatisation: ‘*we say to the kids we*

want them to learn with each other, but we don't do it...we don't even know how we each teach' (08.04.03TiareRaP1:2). However, by the end of this research, data showed risk-taking, sharing and honest talking had begun to “crack the walls of privatism” (Fullan & Hargreaves, 1992, p. 12). The teachers’ recognition that their own learning had been embedded in their cognitive, social and emotional connections, led them to appreciate the efficacy of a community of learners for children’s learning in the classroom. Wells’ (2002) initiation of professional development as a community of inquiry was based on these same reasons; if collaborative inquiry is motivating for students, it “can be equally energising and productive for teachers” (p. 36).

The results from this study showed variance in the teachers’ ability to ‘*walk the talk*’ of sociocultural approach to learning. Stable changes occurred in Rick’s and Kelly’s classroom participation, whereas less stable changes were observed in Tiare’s classroom, with little change at all evident in Amy’s. One year was not enough time for Tiare to cultivate the seeds of change she had sown to develop a community of learners. Nor was one year long enough for Amy to begin to develop the perspectives required for her to understand joint participation (personal lens), to then guide participation in a community of learners (interpersonal lens) so shaping a collaborative culture (institutional lens). This suggests that coming to understand and develop the distinctly different paradigm of a community of learners requires longer than one year. Research reported by Matusov and Rogoff (1997) showed that it took at least two years of legitimate peripheral participation (Lave & Wenger, 1991) in a community of learners to develop sociocultural perspectives and practices. No evidence linking the teachers’ ability to develop a community of learners, to their years of teaching, was found. Rick had been teaching for three years, Kelly and Amy for two and Tiare for nine years. What mattered were the teachers’ perspectives and practices of teaching and learning and their willingness to reflect critically on these with others.

While the degrees of transformation varied, important learning had occurred for all the teachers through their participation in this collaborative action research. Effective learning, for the teachers and for me, was embedded in what developed as our professional learning community. This finding also confirms the mutually supportive

relationship between teacher learning communities or networks *beyond* the classroom and teachers' capacity to develop a community of learners *within* it (Hargreaves, 2002; Jordan, 2003; Lieberman, 2000; Little, 2003; McLaughlin, 2001; Sergiovanni, 2005; Shulman & Sherin, 2004; Wells, 2001b; Wineburg & Grossman, 1998).

This study has shown that developing a community of learners is not about introducing new pedagogical tricks or changing the furniture when the cultural context remains unchanged. Nor is developing a community of learners about following a script or set practices; there being no "pure exemplars ...[because] variations continually spark ideas" (Rogoff et al., 1996, p. 398). Instead, developing a community of learners is about creating a new landscape for teaching and learning on which new seeds of a sociocultural variety, can be sown and cultivated. My regular presence and *'follow up back in the work place'* (14.11.03RickRaP4:45) with the teachers and the children was vital to the success of their transformational processes. Their professional development had become "a matter of ... inventing what to do with others.... [rather than others] determining what to do to them" (Thiessen, 1992, p. 85). These teachers preferred to learn in a collaborative context, "not separated in time and space from the work of teaching" (Hargreaves et al., 2001, p. 170). Learning to develop a community of learners in this way had been within the teachers' "ecological zone of community comfort" (Matusov, 1999, p. 174).

Research has shown that professional learning communities, such as the one developed in the present study, can increase teachers' sense of efficacy. Qualitative studies of teachers' sense of efficacy show that it is enhanced by a range of factors such as social support and collaboration and that it has powerful effects on the quality of teaching and learning (Tschannen-Moran & Woolfolk Hoy, 2002). Findings from the present study suggest that the teachers' participation in collaborative research enhanced their sense of efficacy in bringing about the actions required to develop a community of learners. Their sense of efficacy was cued by four key sources: mastery experiences, social persuasion, vicarious persuasion and affective states (Bandura, 1997). The teachers in this study experienced some degree of mastery in their goals to develop a community of learners. The dialogic and supportive processes of this research also provided the teachers with social persuasion. The teachers experienced

vicarious success through hearing how each other had overcome constraints to develop joint participation. The trust, respect and caring that characterised our learning community developed positive emotional responses to the changes being attempted. These efficacy-enhancing sources of information influenced a range of the teachers' personal and interpersonal activity including: making choices, expending effort, persisting in the face of obstacles, and responding to their feelings (Bandura, 1997). To varying degrees the teachers: sought new and more challenging professional goals, risked speaking up and sharing their expertise, sustained the effort required to develop a community of learners, persisted in the face of the multiple constraints, and felt excitement in their own and each other's achievements.

This section concludes by bringing together the different aspects of our learning community that constituted effective professional development. Figure 8.2, identifies these features by foregrounding activity using an institutional lens while temporarily backgrounding activity observed through the personal and interpersonal lenses. In so doing, the sociocultural context of effective professional development for teachers seeking to develop their classroom as a community of learners is illustrated.

Backgrounding professional development using a personal lens

Teachers and researchers ...

- 📌 set individual goals, mindful of collective goal
- 📌 develop understanding of a community of learners
- 📌 develop understanding of sociocultural perspectives of learning
- 📌 develop understanding of each other
- 📌 develop skills to be responsive to others
- 📌 develop confidence to express views and take risks
- 📌 disclose fears, uncertainties and tensions

Backgrounding professional development using an interpersonal lens

Teachers and researchers ...

- 📌 share expertise
- 📌 guide new forms of participation
- 📌 use dialogue to build on each other's ideas
- 📌 co-construct new understandings
- 📌 share experiences beyond the classroom
- 📌 share emotional responses to change
- 📌 share responsibility for own and others' learning
- 📌 support each other to take risks and to let go of traditional practices
- 📌 share commitment to each other's goals

Foregrounding professional development using an institutional lens

Teachers and researchers ...

- 📌 learn together in the context of teachers' practice
- 📌 value teachers', researchers' and children's perspectives
- 📌 reflect on sociocultural theory and practice together
- 📌 question traditional practices
- 📌 value collaboration as a means to learn
- 📌 regard learning as an emerging dialogic inquiry
- 📌 uphold a culture of care and respect
- 📌 value flexibility and emergent processes

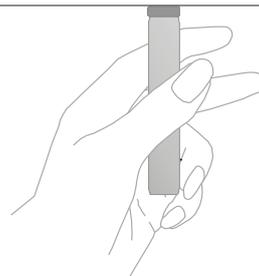


Figure 8.2 Observations of effective professional development using three lenses.

8.7 CHILDREN NEED GUIDANCE TO LEARN TOGETHER

The target children needed guidance from their teacher and their peers to participate in a community of learners. When this guidance was provided (interpersonal lens), and when the culture of the classroom began to sanction collaborative activity (institutional lens) some children began to resolve their tensions of perspectives and to understand the nature of learning together (personal lens). Three important aspects of this guided participation are discussed: the need for teachers to develop intersubjectivity with children, the need for teachers to discuss children's tensions of perspectives, and the importance of a classroom culture that authorises shared activity.

8.7.1 Developing intersubjectivity

The teachers' ability to develop intersubjectivity with children across cognitive, social and emotional dimensions was critical for the children's ability to participate in a community of learners. An example of the importance of intersubjectivity is seen when Rick supported Sakura to advance from asking questions she already knew the answers to: 'what are big cats and where do they live?', to co-construct questions that challenged her to engage with new ideas: '*why are big cats endangered?*' (08.10.03worksampleDOC). The successive turn-taking of this discourse of co-construction ended with 'I think **we** might have hit on it [a question]'. Rick's approach reflected full, two-way intersubjectivity (Jordan, 2003) because both he and Sakura were able to respond to each other's contributions as equal partners in an ongoing exchange of ideas known as two-way pedagogies (Darling-Hammond, 1996). The interaction skills Rick used to maintain intersubjectivity with Sakura included: having a deep respect for her, knowing her interests and existing knowledge, listening to and building on her ideas, clarifying her responses, allowing her to initiate ideas, being 'with' her in close physical proximity and believing in her ability to collaborate. Rick's participation in this co-construction had changed from being "primarily telling to primarily guiding...a crucial role that calls for sophisticated decision making about when and how to intervene" (Brophy, 2002, p. xi).

While slower to develop, Kelly also managed to guide small groups of children to ask questions of genuine interest. Like Rick, she engaged in a discourse of co-

construction with the children: listening to their ideas, building on them, encouraging initiative and believing that with her support, children could frame their own inquiry. Tiare's approach to support children to ask their own questions did not develop the same area of shared meaning. She asked the children to tell her what their research questions were: *'I need to know what **you** want to answer...then **I'll** point **you** in the right direction'* (07.10.03TiareCO55/3). The dialogue, and the flow of responsive interactions it called forth, was missing. Tiare knew the groups' broad interests, but she did not engage with their ideas. Amy's one-sided interactions created even less intersubjectivity with the children. Her reinforcement of solo and separate roles, evident in her statement to the children: *'it's great to see **you** can do this **without me**'* (12.11.03AmyCO73/2), removed opportunities to share meaning, and suggests why children in her class continued to focus on doing craft-like activities instead of pursuing a genuine intellectual inquiry.

8.7.2 Resolving tensions of perspective

The target children's capacity to develop intersubjectivity with their peers and their teacher in a community of learners required them to resolve their tensions of perspectives arising from their one-sided views of learning; resolution that again required teacher guidance. As identified in section 8.5.1, one of these tensions included the perception that sharing expertise was a dishonest activity. Having raised this issue with the teachers as a critical constraint to developing a community of learners, the teachers used different approaches to help the children to understand that sharing ideas was not only permissible, but imperative, to learning together. Rick regularly reminded the children to 'share their minds' or to 'work with the team', using drawings to illustrate this type of collective interaction. The importance of sharing became the focus of a class conversation, the responsivity in which enabled new understandings about the importance of sharing knowledge (see section 5.5.2). Through Rick's guidance the target children began to share their expertise respectfully, and to recognise it as a rich resource for learning. A culture of dialogue and humility undetected in the other three classrooms developed where they spoke out: *'I disagree'* or *'I can help you, I'm good at that'* or *'I don't know, what do you think?'*; words and actions that revealed skills of interpersonal reasoning (Noddings, 2005).

Like Rick, Tiare reminded the children that they *'should be sharing ideas'* (22.07.03TiareCO31/3), but she did not engage in dialogue with them to help clarify the distinction between sharing and copying ideas. Target children in Tiare's room continued to interpret sharing as synonymous with copying. Instead of dialogue to build on each other's ideas and to maintain a flow of meaning, ideas were stolen, outrage was expressed by the victim and the theft was denied by the perpetrator. Even when the victim declared, *'I don't care if you copy me'* (15.10.03CO61/3), ideas were still taken in an undercover act, rather than openly built upon in mutual exploration to develop new understandings. These findings show that a community of learners does not develop when teachers tell children to share their ideas or when their classroom culture authorises only one-way instructional models. Without guided participation in cognitive, social and emotional exchanges, the children in this study retained their perspectives that learning was an individual activity, that sharing was taking another's idea, and that to work with the teacher was a sign of immaturity.

Authorising joint participation

While children's participation in a community of learners required guidance to develop intersubjectivity with their teachers and peers (interpersonal lens), as well as guidance to resolve tensions arising from holding one-sided perspectives (personal lens), children also required guidance from a classroom culture that authorised joint participation (institutional lens). The culture of Rick's and Kelly's classroom endorsed the reciprocity of sharing expertise, experiences, decisions, ideas, feelings and emotions; to share in these classrooms had become culturally authorised activity. The children had appropriated cultural tools, such as using dialogue, supporting and respecting others which provided them with the mediational means to learn together (Wertsch, 1994). The culture in Room One also sanctioned the use of the funds of knowledge (Moll & Greenberg, 1990) children had developed in their community lives, and these became a legitimate and valued resource for learning in the classroom. In short, culture counted (Bishop & Glynn, 1999) and created a wider pool of expertise to share. Hedegaard and Chaiklin (2005) also argued the importance of drawing "explicitly from the local societal conditions in which children live" (p. 9) so that what is learned in school might transform their everyday concepts and their participation in their local community.

Despite some shared activity, the culture of Tiare's classroom did not authorise collaboration, which limited the children's access to the cultural tools necessary for joint participation. Children in Amy's classroom had even less access to these cultural tools. These findings again direct attention to the importance of making explicit the underpinning sociocultural principles of a community of learners, and reifying them in a wide range of collaborative practices, so that they can take on a real existence in primary classrooms.

8.8 CHAPTER SUMMARY

This chapter has theorised a community of learners as comprising cognitive, social, emotional, spiritual and physical dimensions of reciprocal connection. The development of a community of learners required the teachers and the children to forge new learning partnerships across these five dimensions. The transformations of participation identified in this study were heard in the teachers' and children's dialogic interactions and intellectual inquiries (cognitive), seen in their socially supportive activity (social), felt in their honest and sensitive expression of feelings (emotional), sensed in their selflessness and interconnectedness (spiritual), and noted in their closer and freer physical configurations (physical). This chapter conceptualised spiritual and physical connections as evolving from and further strengthening cognitive, social and emotional connections (see Figure 8.1, p. 221). When the teachers and children engaged in these connections, new learning and teaching identities were forged, new understandings were eagerly shared and an intensely satisfying way of learning in the classroom was found.

This chapter has also discussed the impact of teachers' and children's perspectives of learning and teaching on their ability to understand, and to participate in, a community of learners. The factor most constraining the development of a community of learners was discussed as being the persistence of teachers' and children's one-sided perspectives and the reification of these traditional ideas in taken-for-granted classroom practices. Their struggle to participate in a community of learners was born of the tensions created when their one-sided perspectives were challenged by sociocultural principles, and the necessity to move across paradigms to understand the reciprocal and co-constructive nature of learning. Arising from the

analysis of the transformations of participation, principles of a community of learners were clarified (see Table 8.2, p. 231).

The guided participation of teachers and children in the cultural practices of a community of learners was discussed as the most pervasive enabling factor in its development. For instance, the teachers' guided participation in the reciprocal connections of this research enabled three of the four teachers to resolve some of their tensions of perspective, to begin to understand shared activity, and to develop skills required to participate as a learner and as a teacher in a learning community. Collaborative action research was thus argued to constitute effective professional development for teachers (see Figure 8.2, p. 243). The children's guided participation in the cognitive, social and emotional connections of a community of learners enabled some children to resolve their tensions of perspective, to develop intersubjectivity in their learning interactions, and to guide others to learn together. In the way, the ongoing development of a community of learners was observed as a shared responsibility between the teachers and the children.

This discussion of the development of a community of learners has revealed its mutually constituting processes. For instance, when teachers and children developed sociocultural perspectives (personal lens) these shaped, and were shaped by, interaction across the five reciprocal dimensions (interpersonal lens), and the development of a collaborative classroom culture which authorised joint participation and made available new cultural tools for learning together (institutional lens). When the classroom culture sanctioned one-sided instructional models (institutional lens), one-way communication patterns and teacher-dominant practices (interpersonal lens) also predominated, as did the teachers' and children's one-sided perspectives (personal lens).

The following chapter presents the final conclusions of this study from which implications are considered for stakeholders responsible for the development of a sociocultural approach in New Zealand's primary classrooms. New research initiatives are also identified to extend understanding of the themes emergent in this study.

CHAPTER NINE

CONCLUSIONS AND IMPLICATIONS

Rick explains how Sir Edmund Hillary placed such value on the steps he and Sherpa Tensing had taken together that he would not tell the world who stepped up to the summit first. What mattered was their shared understandings and the rope connecting them as they climbed **together** to reach the top. (28.05.03CO28/1MEMO)

9.1 INTRODUCTION

Climbing together to reach the summit is an appropriate metaphor to describe the development of a community of learners in this study. Every step the teachers took went “against the current of dominant discourses” (Watkins, 2005, p. 59), making it a hazardous and at times harrowing journey. Instead of compass, pick, boots and map these teachers required: determination to find new ways of teaching, clarity to develop new perspectives of practice, vision to see new possibilities, ability to share their expertise, and courage to cope with the tensions of walking an unfamiliar educational terrain. Like Hillary and Tensing, the teachers and children needed a safety rope to keep them together on their journey and that came in the form of this research. Developing a community of learners was a mutual learning adventure for the teachers, for the children and for me. It is argued that the contributions of this study will support those seeking to take their first steps in developing a community of learners.

The conclusions of this study reveal the wide range of transformations of participation made by teachers and children. These transformations, observed through the three lenses, indicate the mutually constituting nature of the development of a community of learners; new forms of participation observed through one lens shaped, and were shaped by, changes observed through the other two lenses. Secondly, consideration is given to the theoretical contributions made by this study and the implications of these for stakeholders responsible for the development of a community of learners in primary classrooms. Thirdly, the limitations of this study are identified and suggestions made for further research.

Finally, the methodology and my own transformation of participation as I worked with the teachers and the children are reflected on.

9.2 CONCLUSIONS

How does the participation of Year 3 and 4 teachers and children change as a community of learners develops in their classroom?

Observations of participation through an *institutional lens*, revealed the emergence of a collaborative culture which authorised shared activity as another way to learn in the classroom. This classroom culture also provided a range of new cultural practices for learning together such as sharing circles, reciprocal teaching and collaborative research. These cultural rituals gave much needed meaning and structure to a community of learners, and enabled the teachers and children to appropriate new cultural tools for learning together such as: listening to each other, building on ideas in dialogue, using a learning language, sharing expertise and expressing feelings. The culturally organised practices of a community of learners, which enacted many sociocultural principles (see Table 8.2, p.), were observed as co-existing alongside one-sided interactional patterns.

Observations of participation through an *interpersonal lens*, revealed new reciprocal relationships among teachers and children in which new cognitive, social, emotional, spiritual and physical connections were formed. *Cognitive* connections evolved as the children and teachers responded to each other's thinking and, using a "dialogue of knowledge building" (Wells, 2001, p. 15), shared meaning. *Social* connections evolved as the children and teachers shared decisions and responsibilities for learning in "power-sharing relationships" (Bishop & Glynn, 1999, p. 165), and brought their out-of-school experiences to the classroom. *Emotional* connections evolved as the children and teachers shared their feelings and emotions, so forming "caring relations" (Noddings, 2005, p. 53). In developing these three cognitive, social and emotional forms of intersubjectivity, a *spiritual* dimension emerged through which the children and teachers developed a sense of oneness as they contributed to "something greater than the self" (Csikszentmihalyi, 2002, p. 74). *Physical* connections also emerged in response to the cognitive, social and emotional reciprocities when the children and teachers learned together in a

range of more informal arrangements (Rogoff et al., 2001). These five dimensions of connection, and the reciprocity and responsivity they imply, provide coherence and meaning to a community of learners.

Holding a *personal lens* on the children's and teachers' participation revealed their new identities as learners and as teachers, their new capacities to engage in shared activity, as well as their struggles to make these transformations. Teachers who successfully developed a community of learners also came to understand the mutuality of shared activity. Understanding their practice as a mutual relationship upheld the importance of listening to children's perspectives and interests, sharing power with them, and guiding them to participate in, and to understand, shared activity as a means to learning. Given the opportunity to participate in these different forms of joint participation, most target children came to understand the reciprocal interactions of community of learners, through which they could contribute to a knowledge-creating inquiry (Paavola et al., 2004) with others, including the teacher. As children developed these new identities as knowledge-builders, new capacities also developed for learning together. These children also learned a new way of relating to each other in the classroom.

In what ways do Year 3 and 4 teachers' and children's perspectives of learning and teaching shape the development of a community of learners?

The teachers' and children's perspectives of teaching and learning shaped, and were shaped by, the development of a community of learners in both enabling and constraining ways. When the teachers or children retained their one-sided perspectives of learning as being a solo enterprise directed by the teacher, the development of a community of learners was constrained. The "resilience of the dominant image of classrooms" (Watkins 2005, p. 8) and the persistence of one-sided perspectives, made it difficult for teachers and children to let go of traditional practices, and to understand the distinctiveness of a community of learners. As noted by Rogoff et al (1996) the struggle to develop a community of learners was born of the necessity for teachers and children to move across paradigms so to understand and engage in the reciprocal and co-constructive nature of learning together. When

the teachers and children did develop perspectives consistent with sociocultural views of learning, they were successful in their joint participation.

Evident in the above conclusions is the mutually constituting nature of development in which the teachers' or the children's participation, observed through one lens, was shown to shape, and be shaped by, activity observed using the other two lenses. Developing a community of learners in a primary classroom required more than ability to engage in the five reciprocal connections (interpersonal lens), it also required the development of cultural rituals and values to authorise these reciprocal exchanges (institutional lens), as well as the ability of teachers and children to: understand the meaning of reciprocity in shared activity, to appropriate cultural tools for learning together, and to move beyond their individual views of learning and teaching to develop sociocultural perspectives (personal lens). In the process of learning together, both in the classroom and in this research, the teachers' and the children's transformations of participation were observed through these three lenses as mutually constituting processes.

What factors constrain or enable Year 3 / 4 teachers and children to develop and to participate in a community of learners?

A wide range of activity observed through the three lenses, was shown to constrain or enable the development of a community of learners. These constraints and supports were shown to be consistent with research reported elsewhere (e.g. Brophy, 2002; Hargreaves et al., 2001; Watkins, 2005; Wells, 2001a). The institutional constraints included: inflexible school organisational practices, dominant exposure to a one-sided culture, and the difficult-to-discern structure of a community of learners. Interpersonal constraints included: the children's, parents' and some other teachers' one-sided perspectives, the uncertain nature of managing joint participation, the persistence of one-way discourse patterns, and the struggle and effort required to change. Personal constraints included: the persistence of the research teachers' and target children's one-sided perspectives, the misinterpretation of shared activity, the lack of relevant skills for collaboration, and the tensions created when taken-for-granted perspectives and practices were challenged by a sociocultural approach to learning.

Factors identified as enabling the development of a community of learners were also evident through the three analytic lenses. Institutional supports included: flexible organisation systems, the school and classroom culture that placed value on caring relationships and collaboration and the dialogic rituals that emerged both in the classroom and in this research. Interpersonal supports included: the professional learning relationships, the guidance by the teacher, peers and me in cognitive, social and emotional dimensions of shared activity, and shared knowledge of each other. Personal supports for teachers included: their confidence to articulate their own theories of practice, their willingness to learn about, and to develop sociocultural perspectives, their courage to take risks and their honesty to reveal issues which constrained reform. Personal supports for children included: their development of sociocultural perspectives, their comprehension of the reciprocity of a community of learners, their interpersonal expertise and enjoyment derived from learning together.

9.3 CONTRIBUTIONS TO KNOWLEDGE

Seeking to understand how sociocultural views of learning might be practised in primary classroom settings has clarified and extended the knowledge base as reviewed in Chapter Two. Findings from this research contribute to three fields of knowledge: sociocultural theory, sociocultural practice, and professional development. Specific details of these contributions in each of these three domains are shown to contribute to the ongoing debate surrounding sociocultural theory and practice.

Contributions to sociocultural theory

- This study has clarified the sociocultural principles underpinning a community of learners and further developed these in a New Zealand context (see Table 8.2, p. 231). This contribution builds on the work of Rogoff et al (2001) and Brown and Campione (1998).
- The use of Rogoff's institutional, interpersonal and personal lenses has confirmed them as a useful analytic tool to observe the complexity of teachers' and children's transformations of participation. This study has also revealed the effectiveness of these lenses as a tool to present the findings and

to discuss their mutually constituting nature. These contributions build on research reported by Matusov et al (2002) and Rogoff (1998, 2003); and in early childhood centres Fler (2002b) and Jordan (2003).

- This study has also suggested that the reciprocal exchanges of a community of learners may serve as a source of spiritual development for children. This contribution extends research by Eade (2005) and hooks (2003).

Contributions to sociocultural practice

- This study has identified the nature of interactions in joint participation instructional models (see Table 5.2, p. 107) and differentiated these from one-sided models (Table 5.3, p. 110).
- This study has conceptualised the nature of teachers' and children's participation in a community of learners as comprising reciprocal processes of cognitive, social, emotional, connections with spiritual and physical connections evolving from and further strengthening these. A conceptual model illustrating these connections has been designed to advance teachers' understandings of a community of learners (see Figure 8.1, p. 221). This contribution builds on the work of Rogoff et al (2001), Sergiovanni (2005), Tangaere (1997) and Wells (2001a).

This study has confirmed the value of a community of learners for primary school children's learning. When learning shifts from an individual focus to embrace personal, interpersonal and institutional foci, new learning identities and relationships are forged, and new understandings are co-constructed. This contribution builds on research reported by Alton-Lee (2003), Rogoff (2003), and Fler and Richardson (2004a).

Contributions to professional development

- Using personal, interpersonal and institutional lenses, this study has identified the enabling and constraining factors in the development of a community of learners in primary settings, as well as identified the sociocultural elements of effective professional development so that teachers can be supported to overcome the factors that constrain development (see Figure 8.2, p. 243).

- The study has confirmed the importance of professional development initiatives being structured to listen to teachers' and children's perspectives of learning and teaching so as to resolve tensions of practice and to enable reforms of a sociocultural nature. This contribution is consistent with that reported by Carr (2000), Cochran-Smith and Lytle (1999a), and Dockett and Perry (2003).
- This study has also confirmed collaborative action research, which fosters social, emotional and cognitive connections between teachers and researchers in their own learning communities, as effective professional development. This contribution builds on the research of Brophy (2002), Hargreaves (2002) and Jordan (2003).

9.4 IMPLICATIONS FOR DEVELOPING A COMMUNITY OF LEARNERS

Implications for the development of a community of learners are derived from the above stated conclusions, and contributions to knowledge, in so far as they affect teachers, children, teacher educators, and educational researchers. Together, these stakeholders have a critical role to play in ensuring the development of sociocultural perspectives in New Zealand's primary education sector, and of ensuring that communities of learners become accepted practice in its classrooms.

9.4.1 Implications for primary teachers

In line with Fleer's (2002a) claim that sociocultural theory has given early childhood teachers new ways to think about their practice, the present research has shown that sociocultural theory can also provide primary teachers with new perspectives from which to reconsider their practice. The key implication for primary teachers is that they should take inspiration from, but not be bound by, these sociocultural theories. Teachers need to engage in dialogic inquiry (Wells, 2001b) with each other, and with researchers, so as to challenge their taken-for-granted perspectives and practices, and to make the paradigm shift required to understand the cognitive, social, emotional, spiritual and physical connections of a community of learners. Opportunities also need to be found for teachers to consider how these connections are made in naturally occurring collaboration beyond the classroom, such as playing in a team sport, and to consider how they might provide

opportunities for children to engage in the same type of shared activity in the classroom (Sagor, 2002). In so doing, teachers can redefine their roles and rethink the ways in which they engage with children to encourage learning. In understanding these sociocultural ideas and perceiving teaching as a collaborative practice, or as an improvisational performance (Sawyer, 2004), teachers' professionalism is enhanced, and they are better positioned to justify a community of learners as a pedagogy for the new knowledge age (Edwards, 2001).

The importance of teachers perceiving themselves as learners who learn in both one-sided and joint participation instructional models is also made clear in this study. While Watkins (2005) argued that teachers need to "publicly present themselves as learners" (p. 165), the conclusions from this study suggest that it is also important to present themselves as learners *with* children and other adults. Space also needs to be created for dialogue (Jennings et al., 1999) in which teachers talk to their colleagues about their mutual roles as teachers and as learners, as well as to parents and to children. In such public dialogue, the collaborative processes of teaching and the co-constructed nature of learning are made transparent, which serves to reify practices consistent with a community of learners (Wenger, 1998) and seed new variations. Furthermore, such dialogue will assist teachers to feel comfortable to be seen as co-learners in the classroom.

Arising from these implications is the need for teachers to be sensitive to children's cultural experiences, to acknowledge their competence and perspectives and to authorise them to contribute these in the classroom. These implications have been reported elsewhere (e.g. Alton-Lee, 2003; Bishop & Glynn, 1999; Cook-Sather, 2002; Nuthall, 1999). Teachers need to be aware of, and to be able to play, their critical role in guiding children to participate in the reciprocal connections of a community of learners. Teachers also need to be aware of the impact of the physical environment to support shared interactions, and to design spaces which promote reciprocal relationships. Perhaps more importantly, teachers need to be aware of the power of the classroom culture, and the cultural tools therein to shape the nature of relationships, and take deliberate steps to develop mutual trust, respect and support. It is in this reciprocity that hierarchies are disrupted, and new cultural tools appropriated with which children and teachers can participate in a community of

learners. When these conditions for connectedness are created, teachers may recognise the spirituality that exists therein “where it waits to be brought forth” (Palmer, 1999, p. 8).

This research also highlighted the importance of the small steps teachers must take to develop their classrooms as a community of learners. Hiebert, Gallimore and Stigler (2002) made this point when they argued the “value [of] small improvements, small changes in practices as a means to larger ends” (p. 13). In the present study, the struggle teachers experienced in developing their classrooms as “place[s] of profound interdependency” (Dahlberg & Moss, 2006, p. 10), makes it clear that the teachers need to reflect on the steps they take to ensure that they are consistent with the reciprocity of a community of learners. Furthermore, teachers need to anticipate children’s active resistance to letting go of their familiar one-sided perspectives of learning and teaching and their reluctance to change the way in which they participate in the classroom. Teachers also need to seek children’s responses to changes being made; an implication in line with Ruddock and Flutter’s (2000) argument that children’s experiences and expertise about classroom learning should inform change.

9.4.2 Implications for children

The first implication for children, arising from this study, is to consider their naturally occurring collaboration in settings beyond the classroom. Observations of the children’s collaboration on the sports field, on the adventure playground, in the library, or even in the classroom before the 9.00 o’clock bell provided evidence of their capacity to understand each other’s thinking so well that talk was not even required to confirm their mutuality. Children *do* have the capacity and *are* ready to develop intersubjectivity (Crook, 2002) which lies at the heart of collaborative activity (Fleer et al., 2006). Children need to recognise that their capacity to collaborate in these activities beyond the classroom, is the same craft of interdependence (Brufee, 1995) required to learn together in a community of learners. The use of metaphor is proposed to assist children’s understanding of the fluidity and mutuality of a community of learners (e.g. Sergiovanni, 2005). For instance, in the fast moving game of soccer (learning together), not everything is decided beforehand. Numerous decisions are made on the spot (shared decisions),

positions and moves are communicated in many subtle ways (intersubjectivity), and leadership is exercised by the players (shared responsibility), on the field (classroom) as the game (learning) proceeds.

Children also need to understand that collaboration consists of “contested roles and disagreements, as well as moments of smoothly coordinated ongoing activity” (Rogoff, 1998, p. 725). A positive disposition toward conflict, and skill to manage it, are crucial to participation in a community of learners. Furthermore, children need to differentiate between sharing ideas in knowledge building dialogues (Wells, 2000) as a means to learning, and taking or copying ideas, as a means to cheat. The key implication arising here is to create a metacognitive environment (Brown & Campione, 1996) in which children can: consider their perspectives of learning and teaching, ponder what it might mean to become knowledge workers (Bereiter & Scardemalia, 1998), and reflect upon the problems and possibilities of the collaborative strategies as they start to use them.

This study has revealed the importance of children learning how to participate in a community of learners by: appropriating understandings of learning together (personal lens), being guided in joint participation (interpersonal lens), and engaging with experts in the cultural practices of a community of learners (institutional lens). While, some children in this study had the opportunity to observe, listen in and participate in a community of learners, these children also created *new* ways to learn together in response to their teachers’ invitation to share decisions about learning. This indicates that the conservative notion of apprenticeship as participation “to become a member of an existing community and working with existing practices” (Edwards, 2005, p. 51) had evolved to include *changing* aspects of their collaborative practice. This knowledge creation, achieved by these children, was acknowledged by the teachers as an essential part of their learning to develop a community of learners. The implication here is to enable children to share the design of their learning community and go beyond the prevailing practices. In this way, the ongoing development of a community of learners, described as a “work in progress” (Turkanis, Bartlett & Rogoff, 2001, p. 225), becomes a shared responsibility.

This research has also confirmed and elaborated the importance of children broadening their perspectives of learning and teaching to recognise collaboration as an effective way to learn in the classroom. If children experience the mastery of learning together, hear the verbal persuasion of others as they engage in the many manifestations of joint participation, experience vicariously the success of their peers mutual efforts, and feel the positive emotions that come from doing so, then children will develop the self beliefs that they can learn with others and act with human kindness in the classroom (Paley, 1999). The implication here is for children to understand that:

learning relationships can be reciprocal, be initiated by them, and include the teacher as a learner (Wells, 2002);

learning is about a mutual exchange of ideas and contributing to a group (Edwards, 2005; Watkins, 2005);

decision-making, responsibilities and cultural experiences can be shared (Bishop & Glynn, 1999);

feelings and emotions need to be expressed (Nodding, 2005); and,

the learning process is about wholeness, interconnectedness which nurtures the spirit (Schon, 2005).

9.4.3 Implications for pre-service teacher educators

Nuthall (2001) argued that New Zealand's pre-service teacher education system reflects an apprenticeship model in which traditional practices and beliefs of experienced teachers are taken as an ideal for student teachers to imitate. A critical implication for the development of a community of learners in primary classrooms is that student teachers to be afforded opportunities to engage with contemporary expressions of sociocultural theory and practice in primary classrooms. This will require pre-service educators, themselves, to engage with the theory and research of sociocultural scholars, to design a responsive and participative pedagogy for student teachers, and arrange for the teaching practicum to include experience of classrooms that function as a learning community.

Reform of this nature interrupts the business-as-usual of teacher education (Cochran-Smith & Lytle, 1999a) because it requires teacher educators to guide classroom discourse by building on students' contributions, and to work with them.

It also requires teacher educators: to connect with the past experiences and personal histories that student teachers bring to their university class (Gitlin et al., 1992), to negotiate their current curriculum, and how their learning might be demonstrated. Matusov's (2001) attempt to share activity in his pre-service courses revealed the difficulties of changing university practices which "bear remarkable similarity with the earliest known classrooms of 5,000 years ago" (Watkins, 2005, p. 8). The constraints Matusov encountered were similar to those found in this study, leaving him to conclude, as this research has done, that teachers need to be aware of the dominance of one-sided rituals and traditions, and of the students' resistance to these being changed.

9.4.4 Implications for in-service teacher educators

Given the rarity of learning communities in primary schools, and the struggle to understand, develop and sustain them as another instructional model, the role played by in-service teacher educators is vital to their development. Yet, much of what happens in the name of in-service education falls short of conditions necessary for teachers to learn to share meaning with children and to become knowledge builders with them (Ingvarson & Marett, 1997; Lieberman, 2000). Findings from the present study revealed the power of participation in a community to assist teachers to develop the theoretical understandings, conceptual tools and confidence to develop a community of learners (Prawat, 1996; Wells, 2001b). For in-service education to be organised in such communities of practice (Wenger, 1998), or teacher learning communities (Lieberman, 2000), or professional learning communities (Hargreaves, 2002), the educators need to engage with sociocultural discourses, and themselves, work together through responsive and reciprocal relationships. The cultural tools developed in these professional communities will carry forward to the classroom where they can be appropriated and improved (Wells & Claxton, 2002).

Developing in-service education as participation in professional learning communities requires reconceptualising the traditional roles of the educators and the teachers. The roles of outside experts and passive teachers would need to transform to allow shared roles to develop with time and space to talk together, to share

expertise, to reflect on perspectives and practices, to engage with the principles of sociocultural theory, and to resolve the inevitable tensions of perspective. Such transformation in the in-service education enables the co-construction of new understandings that are context specific. Because teachers in this study continued to need support after one year, it is suggested that these learning partnerships remain *beyond* the initial stages of the development of a community of learners. By situating in-service education in schools so making them places of learning for teachers *and* for children, the myth that traditional teaching practices create learning, might be realised (Hargreaves, 2002; Nuthall, 2001).

9.4.5 Implications for educational researchers

Given the rich data generated in this collaborative action research, educational researchers need to place more of their work within school-university partnerships, an argument also made by Moll (2002). While these dialogic “mechanisms for knowledge construction” (Zellermayer & Tabak, 2006, p. 48) are more complex than traditional research, they can “produce more practical, contextualised theory and more theoretically grounded, broadly informed practice” (Darling-Hammond & McLaughlin, 1995, p. 599). Furthermore, the relationships of mutuality within these partnerships work to overcome the culture of disconnection which Palmer (1998) argued to be common in the development of knowledge about learning and teaching. The assumption that the knowledge teachers need is produced by researchers, and transmitted to them in a top-down manner, is also challenged. It is this same challenge to traditional top-down approaches that has underpinned the Ministry of Education’s *Best Evidence Synthesis Programme*. These collaborative knowledge building partnerships aim to bring together evidence about educational approaches that optimise learning for diverse learners, and to inform policy, practice and further research (Alton-Lee, 2005).

The development of new learning partnerships between universities and schools will require participants to develop a new appreciation of each other’s roles and expertise. For instance, the researchers need to let go of their perceptions of teachers as consumers of their research, and to see them as co-researchers, generators of knowledge, and as agents of change (Beck & Kosnik, 2001; Cochran-Smith & Lytle, 1999b; Rudduck & Flutter, 2000). In addition, the teachers need to see

researchers in a new light as co-learners, collaborators and as critical friends. Adopting a sociocultural methodology in these professional learning communities also requires its members to understand the mutually constituting nature of learning, and to observe and analyse classroom participation in its entirety by using Rogoff's (2003) three lenses. These collaborative initiatives will require new systems to manage the ethical dilemmas of conducting university research in partnership with schools, and to address the thorny issue of intellectual ownership of the co-constructed knowledge generated therein.

9.5 FURTHER RESEARCH

Some of the limitations inherent in the present study need to inform further research. Three limitations are indicated below.

The use of one team in one school in one region limited the transferability or usefulness of findings to teachers in diverse classroom settings in New Zealand.

The one year duration of the research did not accommodate generation of data about the ongoing development of a community of learners.

The research design did not encompass parents or other community groups which are frequently part of a community of learners approach.

This research is the first of its kind in New Zealand to simultaneously investigate and support the development of a community of learners in a low decile Year 3 / 4 primary classroom setting. It is vital, therefore, to grow this evidence base in more diverse primary school populations so as to extend understanding of the transformations of participation, and of the long term consequences of learning and teaching in learning communities. Further research needs to incorporate understandings of the institutional, interpersonal, and personal supports found in this study to enable teachers and children to develop a community of learners. Given the struggle to understand the reciprocity of a community of learners, it will also be important for further research to investigate ways to assist teachers and children to understand the nature of joint participation. The conceptual model (see Figure 8.1, p. 221), and the clarified principles of a community of learners (see Table 8.2, p. 231), could be trialled to assist in the development of this understanding. In addition, an illustrated analogy that likens the reciprocal exchanges of a community of learners to playing and working together in everyday activity needs to be developed and

tested to further assist teachers and children to understand the nature of joint participation in the classroom (e.g. Sagor, 2002; Sergiovanni, 2005). Further research also needs to investigate ways of overcoming the other constraints found in this study to impede the development of a community of learners.

The collaborative methodologies, discussed in section 9.4.5, need to be adopted in this further research activity to widen the discourse community of teachers and researchers who share an interest in developing sociocultural practices in primary classrooms. Such professional learning communities need to integrate the elements shown to constitute effective professional development (see Figure 8.2, p. 243) so that new ideas might seed and migrate to other primary classroom settings. In this way, future research will continue to blur the boundaries between the researchers' and the teachers' worlds, and to develop professional partnerships that support and sustain a community of learners.

In addition to the above suggestions, further research into developing a community of learners could:

focus on Māori, Pasifika and other cultural minority children living in New Zealand, who encounter problems learning academic knowledge in school, yet whose indigenous ways of teaching and learning already align with a community of learners (Alton-Lee et al., 2000);

involve parents to enrich the learning potential in a community of learners and to overcome the constraining effect of their one-sided perspectives (Konzal, 2001; Rogoff et al., 2001);

re-examine the reciprocal relationships of a community of learners to better understand these as sources of spiritual development in “a long-overdue conversation that we can no longer postpone” (Kessler, 2000, p. xiii);

use narrative methodologies to enable teachers and children to tell their stories of transformation in a community of learners (Clandinin & Connelly, 2000).

9.6 REFLECTIONS ON MY USE OF THE METHODOLOGY

While collaborative action research was an effective methodology to assist and observe the development of a community of learners, it placed intense cognitive, social and emotional demands on the participants. As the outsider, these demands

expanded as I walked the tightrope between the two different worlds of university and school life. The following diary entry records my reaction to these co-existing demands:

Each time I drive from the university to school it feels like driving across a bridge that connects two sides of a wide chasm. I feel quite shattered today trying to be in both worlds... I had not anticipated this aspect of collaborative research, or its intense intellectual, social, emotional and physical demands. (03.04.03DIARY)

Paradoxically, participation in the four RaP days, held off-site created the same hospitable space (Myers, 1997) and the same reciprocal connections that characterise a community of learners. Those days were long anticipated and energising, enabling us to come away from the frenetic pace of school and university life to share our ideas in a safe place. What had once been our private practices became shared understandings as classroom activity, inner thoughts and personal anxieties were opened out. I came to think of these days as the hub of this research, because our participation in them kept us together.

While I contributed to the development of this collaborative methodology, participation in the methodology also shaped my development as a researcher. I developed the capacity to be a partner in research, and to generate rich data about classroom interaction through my collaborative engagement with the teachers and children. As these skills developed, the research process itself began to change such as when the teachers initiated conversations with the children that they knew would generate interesting data for the research. I became more confident to *share* expertise with the teachers, rather than only to *tell*. I learned to listen, to recognise the moments to talk, and the moments to be silent, to sow a seed, or to respond or encourage others to respond. In so doing, I learned to be a part of a conversation, one contributor in a mutual exchange of ideas about defining and developing sociocultural practices. In addition to these aspects of my learning to use CAR methodology, the following transformations in my participation were observed:

feeling comfortable in the classroom as a researcher rather than the teacher;
trusting the negotiated and unpredictable journey with teachers and children as a means to generate rich data and new understandings;

recognising the importance of trusting each other and jointly constructing protocols to inform the way teachers and researchers work together;
realising that listening to and picking up on each other's ideas in long and serious conversations (Hollingsworth, 1997) enriched the data and potential understandings, as well as being the glue that kept us together;
developing competence to use sociocultural tools to analyse data rather than seeing the analysis process as a mysterious metamorphosis (Merriam, 1998);
letting go the need for certainty and for controlling the research; learning to live in the moment, in all its "doubt, uncertainty and feelings of crisis" (Dahlberg & Moss, 2006, p. 18);
learning to be self-aware in the research, noticing my response to emergent events, as well as those of the teachers and the children, and using these responses to inform ongoing action;
recognising the importance of this reflexive critique to make transparent my part in the co-construction of knowledge; and,
developing an identity as a researcher, understanding that the research process can be an intimate activity rather than a solo enterprise to fear.

As I talked with Kelly in our final interview, it occurred to me just how similar my learning to participate in this methodology had been to her learning to develop a community of learners. The following extract shows my transformational moment:

Ally: Do you know what's just hit me? It's the parallel between what I did in this research and what you did in developing a community of learners. I had to learn to listen to you, I couldn't plan my research, it was messy and I didn't know where it was going. Initially, that was scary. But that's where the richness was. But you had to do the same - learn to listen to children, things in your classroom got messy, but look at the learning. Just as I believed in and respected your expertise, you are now seeing and believing in what children can bring to the classroom. If I had not valued your...

Kelly: ...expertise, you'd shut off

Ally: You just said it, you'd shut off, that connection wouldn't happen ...the value of this research has been those connections, and it's our process for researching that's going to stay with me in my next venture. (17.12.03INT:53)

9.7 FINAL WORDS

This study has shown that it *is* possible to develop a community of learners in a primary classroom when teachers and children are willing to question their taken-

for-granted perspectives and practices, and when they have the time, space and support to engage with and understand sociocultural ideas. The very different journeys taken by four teachers as they sought to develop their classrooms as learning communities have been reported. The teachers' transformations have been observed in context, the impact of their perspectives have been theorised, and the factors that helped and hindered their journeys have been documented. The children's experiences were also important to this study. The different nature of children's transformations, the impact of their perspectives, and the factors that helped and hindered their participation have also been theorised. While a community of learners was shown to manifest itself in different ways in each of the classrooms, they were shaped by the same foundational principles identified in Table 8.2 (p. 231). The transformations of the teachers' and the children's participation, identified in this study, combine to make a strong case for pursuing the development of a community of learners as a key feature of New Zealand primary classrooms.

This study has focused on connections observed through the personal, interpersonal and institutional lenses. Connections were observed as teachers co-constructed their own understandings of sociocultural ideas, and in so doing, began to align their personal and professional values (personal lens). Five reciprocal connections were shown to constitute teachers' and children's joint participation in a community of learners (interpersonal lens). Connections were also forged in our university - school research partnership (institutional lens). Furthermore, connections were made across time, bringing action on the basis of past experiences into the present to prepare for similar future activity.

It seems fitting that a study aimed at developing a community of learners, in which a dialogue of knowledge building became a key aspect, should conclude with the children's voices. The following extract, taken from my final conversation with the children, records their contributions to a shared reflection on their participation in this research, and in so doing became part of a research community:

Caleb: It was like being special. We improved on our talking skills.

Mike: It did help me and then it didn't, because when I got back to class I didn't know what to do. But when we go with you, you get to learn things that you didn't know and we got to sit on comfy chairs...

Caleb: I liked it just how we talked, because sometimes in class you just get really knackered and it's like ... the batteries in your head are going flat and you're just really tired but then all of a sudden Ally walks into the room, it's like wahoo! ...

Ally: Do you remember when I was talking with you...

Era (wistfully): Oh yeah.

Ally: And we were having a great chat and Sarah and Alice came in.

Sakura: Yeah it was about the water snakes.

Ally: And then Sarah started to ask you questions and then Era said "Ikani, you haven't talked, it's time you did." (laughing) You had become a researcher like me and the conversation just carried on.

Era: I remember that time...

Ikani: It was like a community!

Caleb: Because we are community ... a big comm - unity ...

Sakura: When you first started talking to me, I started getting all shy but it got better and I was glad when you came.

Ally: Why were you glad Sakura?

Sakura: Not to get out of work, it's just um someone to talk about my learning and what I think about it.

Sarah: Yeah I liked to share my ideas.

Ally: Do you miss anything about this research?

Era: I miss everything really and if I had three wishes one of them would be to do it all over again... we got to actually talk to someone honestly about it. And you gave us a choice about whether we wanted to record it or not...

Sarah: I miss talking to you...you listened to us... (23.02.04INT:2/10)

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