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# Enhancing teacher learning in inclusion

A thesis presented in partial fulfilment of the requirements for the degree of  
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## **Abstract**

*Enhancing teacher learning in inclusion* is an action research study which researched how two New Zealand classroom teachers were facilitated to enhance their pedagogy and become more inclusive. An examination of the international literature suggested that contextual professional development, classroom action research, and a collaborative relationship with a critical friend would facilitate inclusive pedagogy. However, there were no published studies of New Zealand primary teachers engaged in classroom-centred action research on inclusion involving an educational psychologist. A two phase action research design was used, firstly negotiated and modelled by an outside researcher, second order action research, and secondly by empowering the teachers to become action researchers, first order action research.

Some inclusive practices were evident but two major barriers to inclusive practice in New Zealand classrooms were highlighted. These were an independent and autonomous teacher practice and limited use of individual student assessment data to inform teaching for individual learning. Active reflective thinking through reflection journals and teacher action research of teacher chosen classroom learning challenges occurred in two cycles of second order action research. Results established increased teacher focus on individual student learning, collaboration between themselves and the researcher, knowledge and skills of action research and its effectiveness in solving learning challenges within the teaching programme, use of student assessment data to inform subsequent teaching and learning, and critical awareness of the effect of their beliefs, knowledge and actions on student learning. Whilst literature suggests that schoolwide re-culturing is necessary, this research has demonstrated that two teachers engaging in practitioner action research, supported by a small community of practice, reflective thinking and critical dialogue, can improve their pedagogical and inclusive practice.

## **Acknowledgements**

I would like to dedicate this thesis to my four sons: Nicholas, Christopher, Benjamin, and Thomas, and to Lynne, my very patient wife who will no longer have to ask the question, “Are you going to school tonight?”

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## **List of abbreviations used to identify extracts**

<b>Abbreviation</b>	<b>Description</b>
ARR	Action research review
CI	Child interview
CO	Classroom observations
J	Janine
PI	Parent interview
RJ	Reflection journal
T	Tina
TI	Teacher interview

## Glossary

<i>Abbreviation or Term</i>	<i>Description</i>
6 Year Nett	A series of assessments given to children in New Zealand on, or around, their sixth birthday. It was developed by Dr Marie Clay (1979 – second edition) and assesses such skills as word knowledge, letter knowledge, and common features of books and writing knowledge (e.g. front of book, full stops, etc). The lowest scoring children are given remedial assistance based on interventions suggested by Dr Clay in her book, “The early detection of reading difficulties: A diagnostic survey with recovery procedures.”
Decile ranking	A school's decile indicates the extent to which the school draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students. A school's decile does not indicate the overall socio-economic mix of the school. Census information is used to calculate the decile. There are five factors that make up the socio-economic indicator: household income, occupation, household crowding, educational qualifications, and income support. (Information from the website of the Ministry of Education, New Zealand)
Disabled children	This is the term used by the Ministry of Education in New Zealand as outlined in their 2007 -2012 Statement of Intent. This term replaces several others used in the past including children with special education needs and children with special needs.
NUMP	Numeracy Development Project. The focus of the Numeracy Development Project is improving student performance in mathematics through improving the professional capability of teachers. The focus is on the number strand of the New Zealand Mathematics Curriculum. As a part of the project teachers have been provided with an assessment kit that they can use to assess the number learning of their students.
ORRS	Ongoing and Reviewable Resourcing Schemes. Approximately 1% of school-aged children in New Zealand qualify for these extra resources. The schemes provide extra teaching support to the child, and if needed, monies with which to employ para-professional assistance to assist the teacher to better meet the needs of the student. The student also qualifies for specialist support, for example, physiotherapy, speech-language therapy, occupational therapy, psychology and specialist curriculum support.
School Entry Assessment Kit [SEA]	An assessment kit compiled by the New Zealand Ministry of Education (2001) to assess the skills of five-year old children at school entry. Included in the assessment are book knowledge, mathematics, alphabet knowledge and oral language through retelling.

## **Introduction to the research study**

*“...our aim must be to find effective ways of supporting teachers in developing their capacity for reaching out to all of their learners.” (Ainscow, 2007, p.149)*

### ***1.1 Introduction***

The provision of education for all children, including disabled children, has been debated for several decades and has resulted in both legislative and pedagogical change ("Education Act", 1989; Ministry of Education, 1999; Office for Disability Issues, 2001). The focus of the debate has also altered from a concern with integration and settings, to facilitating inclusion and enhancing pedagogy. Schools, and especially teachers, are now expected to meet the diverse learning needs of all their children. Teachers achieve this through having a range of skills and knowledge (Ainscow, 2007).

The acquisition and maintenance of such skills and knowledge is an ongoing challenge for teachers. Florian (2007) suggests that primarily, teachers need problem solving strategies because there is no single teaching strategy that meets all needs. Professional development has been the traditional method by which teachers have enskilled themselves (Beatty, 2000; Wearmouth, Edwards & Richmond, 2000). As a result of recent research into teacher professional development there is now a primary focus on teachers as active learners shaping their own pedagogical growth (Clarke & Hollingsworth, 2002; Ruthven, 2005). Teachers as researchers of their own practice, is advanced in the literature as a method of shaping inclusive practice, effecting enhanced student outcomes and overcoming the research into practice dilemma. It is also considered to challenge the ‘theory of practice’ that influences teachers’ pedagogy.

Inclusive pedagogy and professional development set the scene for the present research study; *Enhancing teacher learning in inclusion*. Working with two teachers in a primary school to investigate how they were facilitated to become

researchers of their own practice, develop inclusive pedagogy and enhance their students' learning was the main purpose of this research.

Within this introductory chapter the research aims are outlined. The current provisions of education for disabled children have arisen as a result of changing views, advocacy, policy and legislation. The need for pedagogical modification to match the expectations of parents and stakeholders is outlined noting that a change strategy advocated is encouraging teachers as research practitioners. Finally, several relevant pedagogical issues are outlined to give a rationale for the research.

### ***1.2 Impetus for the research study***

Disabled children present additional challenges to teachers and contribute to the complexity of the classroom environment. Teachers often seek assistance from outsiders to help them meet these students' needs. As a leader of a team of visiting educational specialists, I encourage my team members to assist teachers to meet their teaching challenges from within their classroom programmes. I do this because I have a belief that children have a right to be present, to participate and contribute, and to receive quality instruction in the same environment as their peers. While there are many teachers who welcome the support and guidance my team offers in their environment, there are other teachers who consider that disabled children should be educated in separate environments. There are many reasons given for this view, but the most pervasive reason given is that mainstream teachers are not trained and do not have the skills or resources to teach disabled children (Avramidis, Baylis & Burden, 2000a; Bevan-Brown, 2000; Croll, 2001; Prochnow, Kearney & Carroll-Lind, 2000; Rose, 2001). Therefore, the impetus for this research study was for me to research how teachers could be assisted to meet learning needs within a mainstream environment and become more inclusive in their pedagogy.

### ***1.3 Research Aim***

The central focus of the research is a practitioner-based action research study on factors promoting teacher change in inclusive practice. Teacher change literature

indicates that involving the teacher in research in their own classrooms is an effective change strategy.

### ***1.4 Background***

Whether in the community in general, or education in particular, including everyone and providing for diverse needs has been a developing practice. Such a development has caused a major examination of the policies and practices of organisations, and of people charged with providing services (Ballard, 1996; Nakken & Pijl, 2002; Office for Disability Issues, 2001; Sebba & Ainscow, 1996).

Within education, debate has historically centred on provision and settings for disabled children but that focus has changed over time (Kavale & Forness, 2000; Mitchell, 2001). Initially, the focus was on whether learners with severe disabilities should be educated within the state system. In New Zealand, the 1964 Education Act gave these learners the right to an education but suggested a separate class or school. These separate classes and schools proliferated in the 1960s and 1970s, but increasingly parents were demanding that their disabled children should be educated in mainstream schools. By 1989 the New Zealand policy had changed and the education act passed at that time gave all learners, regardless of ability, the right to attend their local school ("Education Act," 1989).

As children won the legal right to attend their local community school, the management of schools changed from direct control by the Department of Education through Education Boards, to self-managing schools with a Board of Trustees in the role of Directors and employers and with the principal as the chief executive officer. The newly established Ministry of Education became a policy developing body. Major implications for disabled children followed as each school sought to interpret the provisions of the 1989 Education Act with respect to their responsibilities for catering for the needs of their children with learning and behavioural challenges (Bevan–Brown, 2000; Ministry of Education, 1999; Wylie, 2000). Adding to the confusion and complexity of the situation, a provision for separate special schools remained within Section 9 of the 1989 Education Act. This provision continues today.

In 1999, Special Education 2000 was introduced to schools by the New Zealand Government. This policy attempted to give greater direction and assistance to schools by dividing special education funding into three strands. For those children with severe needs, the Ongoing and Reviewable Resourcing Schemes (ORRS)<sup>1</sup>, the Severe Behaviour Initiative and the Communication Service were introduced. Children qualifying for these services received specialist assistance and access to specialist teaching and to para-professional assistance. For those children with 'moderate' needs, school based resource teachers were established to cater for learning, behaviour, vision, hearing and literary needs. Finally, schools were given extra funding with the Special Education Grant (SEG) to assist them to meet 'mild' needs ("Education Act", 1989; Ministry of Education, 1998, 1999). Following a review of these provisions (Wylie, 2000), some changes were made to the contestable nature of the delivery of the services.

Two streams of debate around inclusion in education continue. One stream revolves around the relative merits of mainstream and separate provision as studies seek to demonstrate that one or other is better (Holahan, 2000; Peetsma, 2001; Rea, McLaughlin & Walther-Thomas, 2002; Zigmond, 2003). Pedagogical processes needed to give effect to inclusion are the focus of the second stream (Booth, 1996; Burstein, Sears, Wilcoxon, Cabello & Spagna, 2004; Dharan, 2006). For a history of this debate see Kavale & Forness, 2001. This research study follows the second stream.

Whereas inclusion was once seen as referring only to disabled children, current definitions now refer to the diverse needs of all children. A discussion on definition is found in the Literature Review (Chapter 2, Section 2.2).

Studies researching reasons why schools struggle to implement inclusion have identified a number of factors, but the most pervasive is the attitude and ability of the teacher (Bartak & Fry, 2004; Bergren, 1997; Bevan-Brown, 2000; Flecknoe, 2005; Pivik, McComas & Laflamme, 2002). With the focus on the classroom

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<sup>1</sup> See glossary

teacher and their pedagogy, professional development is viewed as a key factor in giving teachers the skills and knowledge needed to meet diverse needs (Dharan, 2006; Dickens-Smith, 1995; Naidoo & Naiker, 2006; R. Robinson & Carrington, 2002; Wearmouth et al., 2000).

As with inclusion, the focus of teacher professional development has changed. A strategic shift for teachers engaging in professional development has been for them to move from being passive recipients of information to being active shapers of their own pedagogical growth (Clarke & Hollingsworth, 2002). This change has been driven by a number of factors including: the failure of professional development to initiate and sustain teacher change, teacher reluctance to adopt educational research into the classroom programme, and teachers often perceiving professional development topics as not being relevant to their practice. Research has also demonstrated that while traditional professional development such as workshops, conferences and in-service courses might raise awareness of issues, teacher change in practice did not necessarily follow (Boyle, Lamprianou & Boyle, 2005; Thiessen, 1992).

Several models for sustainable teacher change are offered in the literature (Boyle et al., 2005; Poskitt, 2005; Roettger, 2006). However, if the priority requirements of professional development are to enhance student outcomes through improved teacher ability, then teachers as researchers of their own practice is advocated (Burbank & Kauchak, 2003; Huberman, 1992; Ruthven, 2005). Critical elements identified in the literature pertaining to practitioner research include the presence of a critical friend, critical reflection on practice, a focus on students, an examination of teacher assumptions and sustainability of change. It is also believed that having tools to solve pedagogical challenges is better than ready made solutions (Florian, 2007).

Meeting diverse needs through practitioner research is viewed as inclusive because the focus moves to the individual student and to specific solutions through the use of problem solving strategies (Ainscow, 2007; Burstein et al., 2004; R. Robinson & Carrington, 2002). The role of the teacher is considered critical and it is timely, therefore, to explore how the teacher might be facilitated

to become a practitioner researcher, solve classroom learning challenges and enhance their inclusive pedagogy.

### ***1.5 Rationale for the study***

The debate around the relative merits of mainstream and segregated education provision continues in New Zealand. Anecdotal parent reports suggest they are more likely to choose segregated options for their disabled children. Multiple reasons are given for these choices with teacher skill and knowledge, enhanced resource pool, and pastoral context being those being most frequently given. These concerns were highlighted in a 2000 report to the government (Wylie, 2000). Despite changes implemented since, the number of children entering special schools has been steadily increasing whilst the number of special schools remains constant<sup>2</sup>. Therefore, there is a need to enquire into how all children could have their learning needs met in their local community school.

Within the literature there is a fundamental difference between classroom teachers and researchers regarding factors that encourage a focus on meeting individual needs. Researchers consider the role of the teacher as pivotal, with teacher attitude, perceptions of competence, assumptions underlying practice, and skills and knowledge being critical factors (Barnett & Monda-Amaya, 1998; Carrington & Robinson, 2004; Rouse, 2006). Classroom teachers have listed class size, lack of specialist assistance, paucity of resources including teacher aides, and time for planning as major barriers to meeting individual needs (Prochnow et al., 2000). Class teachers are looking outside their practice whilst researchers are concentrating on pedagogy and factors influencing pedagogical practice. Exploring the ecological context of the classroom from both perspectives would have salient outcomes for student learning and teacher practice.

An inclusive framework assumes that the underlying beliefs and values of teachers influence how they view the learning and behavioural difficulties of their students (T. Booth, personal communication, August 18, 2003). Those that believe the difficulties lie within the child and need to be 'fixed' are subscribing

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<sup>2</sup> Ministry of Education School Roll Summary Report, March 2006

to the ‘Personal Tragedy’ model which “*has its origins in the medical model in which disability is a pathology to be remediated through a focus on the individual*” (Alton-Lee, Rietveld, Klenner, Dalton, Diggins & Town, 2000, p.182). ‘Impairment’ becomes the focus rather than ‘need’. Alton-Lee et al. offer a social-constructionist model in which teachers manage the context and the environment and provide appropriate educational experiences (see also Ainscow, 2007). Not only does the social constructivist model change the focus from pathology to learning, but it also shifts the focal point towards difference and diversity. With research suggesting that up to 60% of the difference in student outcomes can be attributable to teachers (Alton-Lee, 2003), researching current New Zealand teachers’ views on how to facilitate an educational perspective would be crucial in a study on inclusion.

Practitioner research is a concept that encompasses some fundamental understandings including the role of researcher viz a viz the role of teacher, the importance of systematic data collection and analysis, the implementation of a research design and the evaluation of, and reflection on, results obtained (Gersten & Brengelman, 1996; McIntyre, 2005; V. Robinson, 2003; Roettger, 2006). Overlaying all of these fundamentals is the need for a teacher to successfully integrate classroom research into the daily programme, minimising the disruption but maximising the benefits. Researching the skills, knowledge, resources and support needed in the New Zealand context is timely if practitioner research is to be advocated as a valid and reliable method of meeting diverse needs.

Central to practitioner research is the choice of research method because both the needs of the research design and the practitioner have to be satisfied. Internationally in the literature, action research is advanced as a participatory and naturalistic research method to use (Ballard, 1996; D. Fisher, Sax & Grove, 2000; Meyer, Park, Grenot-Scheyer, Schwartz & Harry, 1998; Salisbury, Wilson, Swartz, Palombaro & Wassel, 1997; Swann, 2001). It is also viewed as a research design that assists with developing inclusive practice (Ainscow, 2003). Although action research is advocated as assisting to facilitate teacher change towards inclusive practice in the New Zealand classroom, a study is needed to examine the realities of implementation in regular classroom settings.

In collaboration with teachers and in the context of the New Zealand classroom, this research study seeks to explore how teachers are facilitated to meet the diverse needs of their students. Classroom contextual factors, collaborative partnerships, stakeholder opinion, children's voice, and teacher skills and knowledge are researched through a social constructive and qualitative lens. A first order - second order action research study is proposed to allow for the research roles of both the practitioners and the researcher. The focus on teachers is important as they are the catalyst for both improved student learning outcomes and enhanced pedagogy. The expected outcomes of the study are to advance inclusive pedagogy and to contribute to practitioner knowledge.

### ***1.6 Overview of the thesis***

The thesis is constructed around eight chapters. The introduction has considered the impetus for the research, the background in which it is set, and rationale for its direction. Chapter 2 reviews the literature through a focus on inclusion, including its historical antecedents, modern context and a definition. Literature relating to the development of teachers into practitioner researchers through professional development is also reviewed. The research method employed in the research is detailed in two complementary chapters. Chapter 3 details the considerations given to the choice of action research as the research method. Theoretical perspectives, the need for an ecological framework and the context of the classroom are discussed. Action research is then discussed in terms of its history, its variants, and the critical elements of the model chosen for this study - the Deakin model (Kemmis & McTaggart, 1992). Ethical issues in qualitative research are considered prior to a discussion around ensuring the trustworthiness of qualitative data. How action research was implemented in practice is outlined in Chapter 4.

The results of the study, some emerging themes, and some preliminary comment are detailed in two further chapters. Chapter 5 concentrates on the results from the ecological assessment of the classroom, whereas the results from the rest of the study are considered in Chapter 6. The division into two chapters delineates the teachers as emergent participants in the study and as researchers of their own

practice. Discussion of the themes and findings of the research occurs in Chapter 7, with particular emphasis on how the teachers were assisted to meet learning needs in a mainstream environment and became more inclusive in their pedagogy. Chapter 8 concludes the thesis. Conclusions are drawn and implications for inclusive teacher practice are advanced, together with a discussion on limitations of the study and avenues for further research.

Chapter 2

## **Literature Review**

### ***2.1 Introduction***

Over the last four to five decades there has been considerable debate in education literature around the question of how, and where, disabled children should be educated (Nakken & Pijl, 2002; Sebba & Ainscow, 1996). During this time period, however, the focus of the debate has been slowly changing (Mitchell, 2001). In New Zealand, the 1964 Education Act gave all children the right to an education but with separate classes and schools being available alongside mainstream schools. Increasingly, however, New Zealand parents were advocating that their disabled children should be educated in mainstream schools. The parents were able to give examples from overseas and locally where mainstreaming was successful. For instance, many rural schools in New Zealand successfully educated disabled children because there were no alternative placements. The United Nations Declaration on the Rights of the Child (United Nations, 1959), and the United States Education for all Handicapped Children Act ("Education for all handicapped children", 1975), had influenced public opinion that a separated education was becoming unacceptable.

By 1989 the New Zealand policy had changed and the Education Act passed at that time gave all learners, regardless of ability, the right to attend their local school. *"Except as provided in this Part of this Act, people who have special educational needs (whether because of disability or otherwise) have the same rights to enrol and receive education at state schools as people who do not."* ("Education Act", 1989, Section 8). However, in Section 9 of that Education Act, the government left the option of a separate provision (i.e. special schools) in place for parents who wanted it, and where Ministry of Education officers agreed to it. That Section 9 provision currently remains in place.

There is still some debate over the merits of including all children in their local school (Dickens-Smith, 1995; Farrell, 2000). The debate ranges over a number

of topics including the right of parental choice to have separate provision, the strong belief of some teachers that they do not have the skills or resources, that comparison studies do not always demonstrate that inclusion is better and that some learners e.g., deaf pupils, need to have separate provision because they are a community of interest, just as do ethnic and religious groups such as Maori, Exclusive Brethren and Seventh Day Adventists. Whilst the debate over the merits of inclusion will continue to be held, the focus of this research moves to the practical plane. The focus of this research is that teachers, parents and schools could be assisted in their efforts by being informed about ways to include all children in the classroom. Research, particularly participatory classroom research, can inform policy, practice and pedagogy in a participative and contributory manner.

Consequently, this review of the literature examines what previous researchers and writers have stated as the most appropriate and sustainable methods to ensure that all learners, including those with special education needs, have their learning needs met in their classrooms. In relation to this, the professional development of teachers is examined with a focus on teachers as researchers of their own practice. The review also highlights where gaps in the literature are apparent, especially with reference to practice in New Zealand, and identifies areas in need of research investigation.

## ***2.2 Inclusion***

Defining educational inclusion is important in the context of this research because a major focus is on enhancing teaching practice so that it becomes more inclusive in its implementation. To decide whether the research has achieved its aim, it is necessary to have a measure against which to determine how, and in what ways, the teaching practice has been enhanced. Before moving to a definition, however, it is important to briefly consider how the notions of special education and inclusion are conceptualised in the literature.

### ***2.2.1 Special education, general education and inclusion***

For many proponents of inclusion the notion of special education as distinct from general education is considered redundant because it is argued that the focus of

the teacher should be on teaching all learners in a classroom. The argument is advanced that special education was a historical solution to an educational dilemma because the assumption held by previous educators was that the learner's disability was the problem and that there had to be separate provision in order to cater for it (Barnett & Monda-Amaya, 1998). By contrast, proponents of inclusion advance a concept that learning difficulties should be the catalyst for a review of teaching practices in the classroom and school to see how all learners' needs could be better met. Some researchers, including Ballard (1995), also consider that this review of teaching practice should be continual within a school because the practice of inclusion, like the practice of improving the outcomes for learning, does not have an end point. Sebba and Ainscow sum up the debate by stating, "*Inclusion, therefore, is conceptualised not as how to assimilate individual pupils with identified special educational needs into existing forms of schooling but, instead, as how schools can be restructured in order to respond positively to all pupils as individuals.*" (Sebba & Ainscow, 1996, p.8) Pedagogy in an inclusive classroom, therefore, is not conceptualised as meaning the same for all learners, as assimilation might propose. Rather, it is conceptualised as meaning that each learner will access the teaching that they require in order to grow and develop - a matter of equity rather than equality (Vaidya & Zaslavsky, 2000).

A consensus on what constitutes effective inclusion practice in education is elusive in the literature (McLaughlin & Tilstone, 2000). For some writers the concept and process of inclusion is as straightforward as including learners with special educational needs in mainstream schools (Austin, 2001; Barnett & Monda-Amaya, 1998; Farrell, 2000). For others, educational inclusion is complex because not only does it pertain to areas of life other than education, but also it can involve such concepts as disablement, reductionism, and assimilation (Ballard, 1996; Sebba & Ainscow, 1996; Slee, 1996, 2001b; Udvari-Solner & Thousand, 1995). While recognising conceptually that inclusion has a wider brief than just education, for the purposes of this research a definition that focuses on educational factors is required because the research will be conducted in an educational setting.

### ***2.2.2 The Index for Inclusion***

Before embarking on a discussion around definitions of inclusion, it is timely to consider the Index for Inclusion (Booth & Ainscow, 2002) because of its, and the authors', influence in matters of educational inclusion.

The index was developed over a period of three years by a team of teachers, parents, governors (school trustees in New Zealand), researchers and representatives of disability organisations to, “support schools in a process of inclusive school development” (Centre for Studies on Inclusive Education [CSIE], 2002a, p.1). The Index for Inclusion is a self-review tool for schools. An initial version of the index was piloted in six schools in 1997-1998, further evaluated in 17 schools in 1998-1999, and then distributed to all schools in England through the United Kingdom's Department for Education and Employment (DfEE). Revised versions of the index have been produced in 2002 and 2005. By March 2008, the index had been translated into 27 languages and used in schools in a number of countries including Australia (Carrington & Robinson, 2004), Hong Kong (Heung, 2006), Indonesia (Fearnley-Sander, Moss & Harbon, 2004), New Zealand (Bourke, Holden & Dharan, 2007) and South Africa (Engelbrecht, Oswald & Forlin, 2006).

Four key concepts and three dimensions provide a framework for the index. Inclusion and what it involves is the first key concept. The authors (Booth & Ainscow, 2002) consider that there are a number of ideas which frame inclusion: it applies to all staff and students, it involves change, it is an unending process, and it is an ideal to aspire to. Reducing exclusionary pressures in schools is a second key concept. What is taught, how it is taught, who it is taught to, and which children have access to learning are all pressures in a school that can cause children to be excluded. Having the resources to increase participation and learning is the third key concept where professional development for staff, material resources to assist teaching and learning (e.g., assistive technology), and an examination of assumptions that guide teaching are amongst the resources to be examined and acquired. Support for diversity is the fourth key concept. The index encourages schools to view children's differences as a resource on which to

increase participation and learning rather than a barrier to be overcome. Planning for all students, recognising their differing skills, levels of development and learning styles is encouraged. All four key concepts lead to a social model of education in which difference is viewed as positive and inclusive, as compared to a medical model in which difference is viewed as a disability and potentially exclusive.

The index materials “*guide the exploration of the school along three interconnected dimensions: ‘creating inclusive cultures’, ‘producing inclusive policies’ and ‘evolving inclusive practices’.*” (CSIE, 2002a, p.2) All aspects of school life are covered by the dimensions and they have been chosen to assist schools to think about their culture and how they could be more inclusive in their teaching and learning. Within each dimension are a series of statements which cue those using the index towards aspects of the school ethos (e.g., students help each other, the school seeks to admit all students from its locality, and teaching is planned with the learning of all students in mind).

A five phase cyclical process is suggested for using the index. Phase one is concerned with beginning the process and, in this phase, it is suggested that all participants become aware of the index through a variety of means including reading the materials, forming groups, inviting a critical friend from outside the school, and sending invitations to all school stakeholders to take part. Phase two is concerned with finding out about the school through using the index as a questionnaire, a focus group discussion, or a series of working groups looking at different aspects. The dimensions, statements and questions become crucial in this second phase. Phase three is about deciding priorities for school development once all the evidence gathered during phase two has been analysed. Phase four forms a school development plan whereas phase five reviews the plan and begins the cycle again. Included in the 2002 version are amended versions of questionnaires for primary children, secondary students and parents.

Crucial to the use of the Index for Inclusion (Booth & Ainscow, 2002) is the commitment and belief in the process by the principal and senior staff members of the school. The index does not provide a single definition of inclusion but offers

a range of definitions based upon key understandings, as is discussed in the following section.

### ***2.2.3 Defining inclusion: What is important?***

Definitions of educational inclusion concentrate on the rights of learners (Ballard, 1995), the duties of schools towards all pupils (Mitchell, 2001), and posit that a radical restructure of our schools is necessary because currently schools are not structured to deal with inclusion (Booth, 1996). Some definitions of inclusion exclude. Austin (2001) considers inclusion to be about all children being instructed in a mainstream setting except where there is substantial evidence that it would not be “*in the student’s best interests*” (Austin, 2001, p.245).

As the understandings around inclusion develop, there is a concomitant change in what writers consider a good definition of inclusion should include. A growing trend in the literature is one that views inclusion as a process rather than a construct (Berres, 1996; Booth, 1996; Clark, Dyson, Millward and Skidmore, 1995). For these writers, there is no end point to inclusion as they believe that schools should go on a journey, constantly seeking to improve their responsiveness to learners’ needs (Evans, Lunt, Wedell and Dyson 1999). Three further elements that are considered crucial to the concept of inclusion were proffered at the beginning of this decade: participation, a sense of belonging, and the opportunity to make a contribution. All learners in a school must have the opportunity to participate in all of the curriculum, cultural, sports and social opportunities offered, and in so doing feel that they belong to the school (Voltz, Brazil and Ford, 2001). The learners must also believe that their contributions are listened to and valued.

Merging all of the above concepts into one definition of educational inclusion is formidable especially if we accept that inclusion does not have an end point. The Index for Inclusion (Booth & Ainscow, 2002) has overcome this difficulty by offering nine definitions, each pertaining to a different aspect of inclusion. Aspects of inclusion covered include: increasing participation and reducing exclusion, restructuring cultures, policies and practices, inclusion involves all children, inclusion is concerned with staff as well as students, responding to

diversity, a right to an education in their own community, diversity is a resource to support learning, fostering relationships between school and community, and inclusion in education is but one aspect of inclusion in society.

The development of the Index for Inclusion was an acknowledgement that inclusion is now widely viewed in the literature as applying to all children (Ainscow, 2007; Slee, 2007). Providing for diversity within a classroom and a school is now considered to be inclusive practice where the focus shifts from the pathology of the individual to learning and teaching (Slee, 2007). Slee views educational practices including pedagogy, curriculum, assessment and classroom organisation as some of the areas that need to be developed in order to have inclusive practice. Tony Booth would agree with Slee on this point, as it is his view that where the teacher believes the problem of learning difficulties lie, determines how they meet individual needs (T. Booth, personal communication, August 18, 2003). Inclusion was viewed, and is still by some, as a task concerned with moving students into the mainstream but now it becomes a task of restructuring the mainstream to cater for all (Slee, 2007).

When crafting a modern definition of inclusion, Ainscow (2007) considers that four elements are necessary: inclusion is viewed as a process which implies that there are continual cycles of examination, reflection, planning, and action to refine and enhance the process, inclusion is concerned with the identification and removal of barriers preventing children from growing and developing, inclusion involves the presence, participation and achievement of all learners, and inclusion involves a particular emphasis on those groups of learners who may be at risk of marginalization, exclusion or underachievement. However, with this last element Ainscow may have left the door open to a return to earlier definitions of inclusion that specifically related to children with special education needs. Or, as is more likely, he is reminding education practitioners that it is those on the margins that are most at risk of being overlooked through assimilation, which is a practice that can occur in an environment that is believed to be inclusive.

A crucial element which is assumed by literature, but not often explicitly stated, is that inclusive pedagogy involves issues of equity. That is, that each child has

access to resources based on need. However, this is a difficult concept to implement where a teacher is faced with complex and competing demands placed on their skills and knowledge. Further, it is often not recognised by teachers whose ideas relating to inclusion suggest that all children should be treated equally – a concept of sameness. It is for this reason that Florian suggests that whilst inclusion be the practice in our schools, the resources of special education be preserved so that those at the margins receive an equitable distribution of resources (Florian, 2005).

Because this research project is concerned with classrooms, teachers and students, a definition of inclusion that specifically relates to them is appropriate. A consensus view from literature is that the varied and complex interactions that happen in the classroom lie at the heart of any inclusive process in our education system today (Alton-Lee et al., 2000; Farrell, 2000; Forlin, 2001; Haug, 2003; Sebba & Ainscow, 1996; Slee, 2007). Therefore, a definition that acknowledges that view is appropriate.

### ***A Definition***

The following definition of inclusion portrays the position taken within the current study.

*Inclusion in the classroom is a process whereby the teacher, through continual cycles of examination, reflection, planning and action, adjusts the learning environment to support the learning of all children so that they are able to participate, contribute and achieve to their maximum extent. The process of adjusting the learning environment includes the identification and removal of barriers which impede the development and growth of students, and has an equitable allocation of resources as a core requirement. Inclusive practice is a collaborative process in which the voices of the students, parents and colleagues are heard and their contributions welcomed. It is also a process whereby the teacher collaborates with others to share experience and insights of people, research and opinion.*

#### ***2.2.4 Some critical factors in fostering inclusion in the classroom***

The above definition acknowledges the guidelines of Ainscow (2007) and the participation highlighted by Booth (2002), whilst restricting its scope to the classroom setting. It is, therefore, important to explore what the literature sees as important factors to give effect to inclusion in school and classroom contexts. This exploration will be followed by a listing of key principles and characteristics of an inclusive pedagogy for a primary classroom, as described in the literature and highlighted in this literature review. Leadership by the principal, teamwork amongst staff and professional input from outside the school setting have all been identified as contributing to successful inclusion (Mamlin, 1999). Other crucial factors include the importance of assumptions held by teachers (T. Booth, personal communication, August 18, 2003), the ongoing professional development of the practitioner (Carrington & Robinson, 2004) and teachers having skills, knowledge and attitudes that enhance inclusion (Rouse, 2006). Each of these factors is now examined.

In any enquiry into classroom, and school practice, the role of the professional leaders and specifically the principal is crucial (Barnett & Monda-Amaya, 1998). Having a philosophy that embraces inclusive practice is important for the principal, but being able to communicate that vision is considered to be even more important. With the following skills principals are able to assist their staff develop an inclusive pedagogy: being able to guide the staff through a process of self-reflection and participation (Barnett & Monda-Amaya, 1998; Booth & Ainscow, 2002), modelling how to look below the surface to philosophy and paradigms (Knoblock, 1996), and fostering collaboration within the school amongst staff and outside the school with parents and community (Wylie, 2000). While the role of the principal is important, it was outside the scope of this study to research, but where the role interacts with the teacher it will be reported.

Paradigm assumptions on the part of management and staff hold the key to how inclusive a school community is in practice. It is only the examination of these deeper, more entrenched understandings that will enable teachers to become more inclusive in their practice (Ballard, 1995; Hanson, Wolfberg, Zercher, Morgan,

Gutierrez, Barnwell et al., 1998; Mitchell, 2001; Slee, 2001a). However, what do New Zealand classroom teachers and school principals currently examine when considering how to provide for their learners with special education needs? From one source it appears that the answer to this is the lack of para-professional support, the lack of money for resources, the high numbers of learners in a class and the lack of outside support (Prochnow et al., 2000). Mitchell (2001) also suggests that for many teachers, the assumptions underlying their practice are leading them to believe that the problem of inclusion lies with the individual learner rather than with ecological considerations such as teaching methods, curriculum changes and classroom practice. Placing the problem with the individual rather than with the system is reinforced for schools by the current practice in New Zealand of identifying learners with special education needs, for example, the Ongoing and Reviewable Resourcing Schemes. Under such a system, schools look for individual entitlements rather than to individual needs (Wylie, 2002).

Teachers' practice is underpinned by their assumptions. In considering how practice might become more inclusive it is necessary to examine these assumptions. The literature helps us to do this by pointing to structured questioning and guided reflection, and suggests that with these it is possible to open the teacher's mind to assumptions that encourage inclusive practice (Burbank & Kauchak, 2003; Carrington & Robinson, 2004; Schon, 1995). Some of the assumptions that are recommended as being inclusive are: all children are capable of learning, diversity is positive and challenging, participation in activities and belonging to the group are important self-concepts for all children, classroom practices that support diversity are the constant challenge, family perspectives are critical, self-reflection and collaboration are important teacher traits, and disability is just another dimension along which learners can vary (CSIE, 2002b; Knoblock, 1996).

As this thesis will demonstrate, changing pedagogy is difficult especially where assumptions and practices are long standing. However, if we do not encourage teachers to question their assumptions we agree that some learners should be excluded from participation in the classroom and belonging to their peer group.

This research study suggests that teachers are encouraged to question their beliefs and assumptions when they actively participate in reflective thinking as a part of classroom research that they themselves carry out.

The role of the classroom teacher is pivotal in ensuring successful inclusion (Farrell, 2000). Research has shown that regardless of the views and positions of principals, administrators and parents, if classroom teachers do not have a belief in inclusion then it will not be implemented in a meaningful manner (Barnett & Monda-Amaya, 1998).

Teacher attitude and perceptions of student competence affect both teacher and classroom practice in all areas of teaching but more especially for disabled children (Avramidis, Bayliss and Burden, 2000b; Snyder, 1999; Treder, Morse and Ferron, 2000). Researchers who have surveyed teachers, administrators and parents, consistently list both of these factors. The remedies or suggestions for improvement in attitude and competence generally revolve around two themes – pre-service and in-service education. The next section of the literature review (Section 2.3) examines teacher and student change that is facilitated by teacher professional development.

According to Rouse (2006), there are a number of factors relating to teachers that when present result in inclusive classroom practices. At the heart of these factors is a positive attitude to disabled children and the ability and capacity to enhance their social relationships. A willingness to deal with differences effectively is also considered essential not only on an individual level but also from a curriculum perspective. Not only must teachers have the confidence to deal with diversity but they must also possess a repertoire of skills, expertise, knowledge and pedagogical approaches to ensure that diverse needs are met. A belief that all children can learn is essential and willingness to work together with specialists and their colleagues is considered important. How then does the teacher develop these skills, knowledge and attitudes? In Section 2.3 of the literature review we examine how the teacher develops professionally and what are considered to be the critical elements of professional development opportunities. However, before embarking on this examination we need to consider key principles and

characteristics of an inclusive pedagogy for a primary classroom. In so doing we link back to this thesis's definition of inclusion and the subsequent discussion around critical factors in fostering inclusion. We also link forward to a consideration of teacher professional development, considered a major critical factor, and how it cultivates an inclusive pedagogy.

### ***2.2.5 Key principles and characteristics of an inclusive pedagogy for a primary classroom***

Primary school classrooms are complex, exciting and busy learning and teaching environments in which the interactions of the adults, children, resources and environment determine the nature of the pedagogy and the level of its inclusiveness. Further, a classroom is but part of a larger school environment which, in turn, is reflective of the wider community from which it draws its students. Therefore, when considering what are the key principles and characteristics of an inclusive pedagogy within a classroom not only must one take cognisance of internal classroom influences but also what external effects are operating (Booth & Ainscow, 2002).

#### ***Key principles***

From the literature the following key principles of an inclusive pedagogy have been identified. An inclusive pedagogy:

- is concerned with all students and not just those seen as having special education needs (Alton-Lee, 2003; Bevan-Brown, 2006; Booth & Ainscow, 2002; Rouse, 2006; The Alliance for Inclusive Education, 2008)
- is based on a socio-educational model for learning and teaching (Booth & Ainscow, 2002)
- accepts that learning involves the whole student affirming their personal, social and cultural mores and values (Alton-Lee, 2003; Bevan-Brown, 2006; Booth & Ainscow, 2002; The Alliance for Inclusive Education, 2008)
- is concerned with identifying barriers to learning and participation and using strength based approaches to overcome identified barriers (Alton-Lee, 2003; Booth & Ainscow, 2002; Guskey, 2003a; The Alliance for Inclusive Education, 2008)

- involves cooperation, collaboration and the development of communities of learning and learners (Florian, 2006; Guskey, 2003c; Stuart, Connor, Cady and Zweifel, 2006; The Alliance for Inclusive Education, 2008)
- views diversity as a positive attribute which can be used to support and guide learning and teaching (Alton-Lee, 2003; Booth & Ainscow, 2002)

Practising within an inclusive pedagogical framework with these key principles giving guidance and support has major implications for students, teachers, parents and the wider community. Long held beliefs, opinions, assumptions, and prejudices regarding teaching and learning have to be probed and interrogated and, where found to be incompatible with an inclusive pedagogy, be amended and modified. Literature has suggested that these amendments and modifications are difficult to achieve and that a re-culturing of the school might be necessary (R. Robinson & Carrington, 2002). This present study, however, investigates whether it is possible to enhance teacher practice in inclusion without a total re-culture of the school. Therefore, to have a base from which to compare how far this study was successful in its objectives, it is necessary to outline and describe the characteristics of inclusive classroom pedagogy.

### ***Characteristics of an inclusive classroom pedagogy***

Seven characteristics of inclusive classroom pedagogy have been crafted from a review of literature:

- all students are engaged in the learning process and teachers provide active and successful learning experiences (Alton-Lee, 2003; Bevan-Brown, 2006; Carrington & Robinson, 2006; Stuart et al., 2006)
- a range of outcomes for students are valued (Rouse, 2006)
- cooperative and collaborative relationships are developed and enhanced (Alton-Lee, 2003; Bevan-Brown, 2006; Booth & Ainscow, 2002; Downing & Peckham-Hardin, 2007; Florian, 2006; Guskey, 2003a, 2003c; Rouse, 2006; Stuart et al., 2006)
- assessment is individual, ecological and identifies strengths and interests as well as needs (Alton-Lee, 2003; Bevan-Brown, 2006; Downing & Peckham-Hardin, 2007; Guskey, 2003a)

- resource use is equitable, flexible and uses available and natural supports (Alton-Lee, 2003; Bevan-Brown, 2006; Downing & Peckham-Hardin, 2007; Guskey, 2003a)
- espoused theories and theories in use are in concert (Carrington & Robinson, 2006)
- teachers engage in relevant, regular and contextual professional development (Downing & Peckham-Hardin, 2007; Rouse, 2006).

Each characteristic is now examined briefly.

***All students are engaged in the learning process.***

Affirming a student's culture, having high expectations of all students, focussing on all aspects of a student's achievement and demonstrating learning in multiple ways are all offered as factors demonstrating that all students are engaged in learning. Further, this characteristic overarches all of the others. It is the most difficult and demanding task that classroom teachers perform but, where it happens, it is the most rewarding. Bevan-Brown (2006) considers that through rewarding learning, providing successful learning experiences and developing positive relationships with students, Maori students are more likely to feel included, achieve and sustain their educational experience. Within the New Zealand classroom context, this is important. Such behaviours could readily be generalised to all students and result in similar outcomes.

***A range of outcomes are valued.***

Whilst teachers, students, parents and the community often consider academic success as the most important outcome for schools to achieve, Rouse (2006) posits that there are other outcomes that are just as valued in an inclusive pedagogy. Making and sustaining friendships, becoming collaborative and cooperative, developing ability to problem solve, learning to set one's own goals and achieve them, and appreciating the diverse abilities of one's peers are examples of other outcomes that can be valued in education.

***Cooperative and collaborative relationships are developed and enhanced.***

A matrix of relationships is present in every primary classroom, and in an inclusive pedagogy, should also extend beyond the classroom. Guskey (2003a)

believes that there should be whole school ownership for the teaching and learning that occurs in classrooms resulting in multiple communities of learning which Alton-Lee (2003) considers should be inclusive, cohesive and flexible. Within the classroom, there are collaborative relationships between students, between the teacher and the students, and between the teacher and any other adult in the room (e.g., teacher aides). Beyond the classroom, there are communities of learning between teachers, between teachers and the principal and between teachers and the community of parents. The community of parents is considered as a major resource for schools to use and value (Booth & Ainscow, 2002) and involving parents in the school community assists with the learning of students from minority groups (Bevan-Brown, 2006). Finally, according to Bevan-Brown (2006), the cooperative and collaborative relationships that develop and flourish within a classroom should facilitate an environment where risks are taken with learning and teaching, and where mistakes happen and are valued for their learning opportunities.

***Assessment is ecological and identifies students' strengths and interests as well as needs.***

Ecological or functional assessments consider all the factors that are likely to promote or impede the learning of students, and such assessments particularly require the teacher to consider their teaching practice and its effects on learning. Assessment must be relevant to the tasks that the student is undertaking or about to undertake and should be an integral part of the instructional process (Guskey, 2003a). Not only must assessment identify barriers to learning and development, but it must also result in next step teaching (Downing & Peckham-Hardin, 2007). An important component of assessment is student self-assessment (Alton-Lee, 2003). Assessment is but one facet of the teaching cycle which also includes analysis, planning, instructing, evaluating, reviewing and reflecting. However, because it is often the catalyst to the other steps in the teaching cycle, assessment must be carried out ecologically so that teaching is relevant to the learning of the individual student.

***Resource use is equitable, flexible and uses available and natural supports.***

Equitable resource use is an important characteristic of an inclusive classroom because it ensures that the resources go to those who need them most. This includes teacher time; a concept which is often viewed as contentious by teachers who consider that they should give of their abilities in an equal manner. Using natural resources in the student environment is advocated by some (Downing & Peckham-Hardin, 2007). Peers, parents, cooperative groups, teacher aides, and individuals from the community are all offered as being natural and available resources (Alton-Lee, 2003; Rouse, 2006).

***Espoused theories and theories in use are in concert.***

An inclusive pedagogy is one where teachers understand and operationalise their theories in concert. This means that what they say they are doing is what the observer views as happening. For example, if a teacher states that they conduct assessments in an ecological manner, then the observer will view this happening in the classroom either directly by observation or through an examination of the data that the teacher collects. Carrington and Robinson (2006) consider that this is one of the most important characteristics of an inclusive pedagogy because, where it occurs, it demonstrates that the teacher has thought deeply about their practice.

***Teachers engage in relevant, regular and contextual professional development.***

The following Section (2.3) considers the literature relating to teacher professional development and what is recommended as most relevant for teachers wishing to develop and enhance an inclusive pedagogy.

Inclusive classroom pedagogy has a number of key principles and characteristics and the more important of these have been outlined in the preceding paragraphs. Together with the definition of inclusion developed earlier in the thesis, a foundation now exists from which to understand the findings of this research study.

### ***2.3 Developing professionally: teacher learning, pedagogical change, and meeting student need***

Developing teachers' pedagogy has been a continuing practice within the profession. Over the last two decades the school improvement movement, particularly in England and the United States, has intensified the focus on what happens in our schools, how it happens and what the learning outcomes are for students (Boyle et al., 2005; Flecknoe, 2005; Ruthven, 2005). While the views on how to improve teaching and learning are diverse, and at times, contradictory, there is agreement that the role of the classroom teacher is critical, and that a primary focus of any improvement is to effect teacher change in order to improve student learning (Beatty, 2000; Flecknoe, 2005; Guskey, 2002; Wearmouth et al, 2000). Because inclusion seeks to meet diverse needs within a classroom the teacher, therefore, needs to continually evaluate and reflect on their practice so that they are better able to meet these needs (Ainscow, 2007; Burstein et al., 2004; R. Robinson & Carrington, 2002).

Therefore, a focus of this section of the literature review is to examine literature that considers the professional development of teachers. A related focus examines some effective methods for enhancing teacher pedagogy. For the purposes of this thesis, teacher professional development (improvement) and teacher change are considered to be synonymous because the research focus is on facilitating teacher pedagogy to become more inclusive (Roettger, 2006).

#### ***2.3.1 Purposes of Professional Development***

Within recent literature there is a consensus that the primary purpose of teacher professional development is to enhance the learning outcomes for students (Guskey, 2003a, 2003b; Joyce & Showers, 2002; Poskitt, 2005; V. Robinson, 2003; Thiessen, 1992; Timperley, Wilson, Barrar and Fung, 2007). Such a purpose has a number of consequences. Unlike the past when teacher professional development was evaluated in terms of teacher feedback or the numbers of teachers attending a course, the criteria for success is now described and evaluated in terms of how a teacher's participation in a programme leads to improvements in their students' performance (Guskey, 2003b). However, Boyle

et al. caution that just measuring student outcomes may be insufficient because the improvements in outcomes may be transitory and that changes in teacher practice also need to be measured. Boyle et al. (2005) also posits that change in teacher practice needs to be embedded before long term learning outcomes for students happen.

A secondary purpose for teacher professional development is for the teachers to enhance and improve their own skills and knowledge so that they are able to teach all learners. Not only do classes have learning diversity but there is no 'universal' teaching method available. Therefore, a teacher has to have a repertoire of available skills and knowledge so as to choose which instructional method will suit which student (Florian, 2007). Alongside knowledge and skill, teachers also need problem solving strategies to assist them to find alternate teaching methods. Florian considers that being able to problem solve in this manner makes a teacher's pedagogy more inclusive in character because it focuses on individual learning.

### ***2.3.2 Historical aspects of teacher professional development***

Debate around the historic emphases of professional development is evident within the literature. According to Clarke and Hollingsworth (2002) the emphasis was on the deficit between 'good' and current teacher practice. Most often this deficit was an assumption held by someone other than the teacher, and the result was that the teacher was expected to attend professional development to remedy the perceived deficit. An emphasis on skills development is what Poskitt (2005) suggests was happening in the 1980s and 1990s. It was considered, at that time, that with sufficient coaching and support teachers would adapt and change.

Early models of professional development were linear in assumption and suggested that professional development activities would lead, first to a change in teachers' knowledge and beliefs, which would in turn lead to a change in classroom practice which would ultimately lead to a change in student learning outcomes (Fullan, 1992 as cited in Clarke and Hollingsworth, 2002, p.950) In an earlier work in 1986, Guskey considered that the change in beliefs and attitudes did not occur until the teacher had observed a sustained change in student learning

outcomes. In further work, Guskey emphasised the importance of motivation as a factor in teacher change in his model and also noted that his model was not strictly linear but cyclical (Guskey, 2002).

Within the literature there is also debate around the value of short professional development opportunities e.g., workshops, one day courses (Boyle et al., 2005; Thiessen, 1992). Whilst some research is reported as suggesting that short courses may raise a teacher's awareness of an issue, they were considered to be of insufficient duration to lead to pedagogical change. However, Timperley and colleagues (2007) caution that extended time for professional development is not always more effective. Their best evidence synthesis suggests that extended time is necessary but not sufficient.

A key shift has resulted from some recent research into teacher professional development. This shift has been from programmes that seek to change teachers to activities that have teachers as active learners shaping their own pedagogical growth through reflective participation in professional development and practice (Clarke & Hollingsworth, 2002). In the next section of the literature review activities and models are considered that writers believe lead to effective professional development for teachers.

### ***2.3.3 What is effective professional development?***

Two intertwined themes are evident in the literature examined around this topic. On the one hand there is an acceptance that the role of the teacher as the initiator and controller of their professional development is crucial to sustained pedagogical change. On the other hand there is an acceptance that the outcome of any professional development of teachers is that students learn and develop in meaningful and developmentally appropriate ways.

In early research on teacher change, Michael Huberman (1992) recommends teacher experimentation (research) because he believes that the 'artisan model' that many teachers adopt in their classroom makes it hard for them to change their practice. He describes the artisan model as one of teachers working alone in unique conditions, with unique tools and working in a personally congenial mode

developed over a long period of isolation. His recommendations for overcoming the negative features of the artisan model include increasing the quantity and quality of peers with whom staff interact, decentralising the resources available for professional development to schools or groups of schools, facilitating quality leadership in the schools and encouraging teachers to experiment in the classroom by collecting data, over time, and analysing it (Huberman, 1992). Such a teacher research strategy would also allow for dissemination of results and findings as the classroom results would be shared with groups of interacting and collaborating peers. As will be seen in the following paragraphs, several other writers and researchers in the field have concurred with Huberman's model.

Clarke and Hollingsworth (2002), having considered the linear model of professional development, as outlined earlier in this section, found it to be insufficient to explain teacher change. Further they had, in an earlier paper, raised the idea that change had multiple perspectives and had listed them. The perspective that they chose as best fitting the current focus in professional development was "*change as growth or learning*" (p.948). From their research and thinking around teacher change, they have developed a model of teacher change which has four domains (personal, practice, consequence and external) and mediating influences of reflection and enaction. These mediating influences are the mechanisms whereby change in one domain leads to change in another domain.

The model developed by Clarke and Hollingsworth introduced the important notion of interconnected factors in teacher change, acknowledging that change does not come about in isolation or in a predetermined manner. Rather, teacher change is complex, contextual, personal and diverse. Placing the teacher at the heart of teacher change and allowing them to direct their own development is a method favoured by other researchers.

Because of their concerns that traditional research is not often adopted into practice by teachers, Burbank and Kanchak (2003) propose a teacher researcher approach. They believe that there are three essential characteristics of effective teacher professional development: teachers need to be critical consumers of

research, they should be participants in research discussions, and should also be developers of research-based approaches to classroom decision making (Burbank & Kauchak, 2003). In their papers these authors promote collaborative action research between pre-service teachers and teachers in the classroom.

However, in the results of their study it appears that the differing priorities of student teachers and classroom teachers led to difficulties in implementing such a collaborative approach. If one were to contemplate implementing such collaboration, one would need to examine the individual needs of each partner to ensure that they were focussed on the same outcomes even though they may approach them from differing paths.

One of the outcomes of the focus on school improvement in England has been development of the National Strategies and associated 'good' teaching. Kenneth Ruthven (2005) examined both of these and came to the conclusion that 'top down' approaches to teacher professional development are not successful in promoting long term change. Ruthven's belief is that 'bottom up' approaches encourage self-awareness in teachers through recognising and reviewing their assumptions about education and identifying their ideal and their actual practice. His recommendation is that universities and schools develop a partnership that has the teacher as a researcher of their own practice, believing that, "sustained university-school partnerships in which there is a mutual commitment and dialogic contribution to knowledge creation have the potential to make important contributions to the robust development and rigorous warranting of good practice." (Ruthven, 2005, p.424)

From their longitudinal study into teacher change, Boyle et al (2005) consider that there are a number of reform types of professional development beginning to be used, particularly in England. Study groups, coaching and mentoring, personal and electronic networks and immersion in enquiry are some of the methods that are mentioned. One of the key findings of their enquiry was that coaching and research inquiry were found to be the most effective. They also consider that collaborative action research is very important in helping teachers to become critical, reflective and analytical. Although their study notes that the majority of

teachers participating had reported that they had changed one or more aspects of their practice, there was no triangulation of these self-reports. This would be viewed as a weakness of this study.

Arising out of the results of several research studies in New Zealand, Poskitt (2005) has concluded that effective professional development contains several interrelated phases: a rationale and purpose to the professional development activity with which the teachers involved are able to relate and understand, the process and the content of the activity needs to be developed collaboratively, and data about the teacher participants and the affected students needs to be systematically gathered to demonstrate teacher change and the effectiveness of the programme on student learning. Poskitt also considers that the duration and timing of the professional development are critical factors because she believes that at least two years is needed for significant teacher change. Poskitt summarises her model by stating, *“Teacher change and student learning are most likely to occur when professional reading of educational theory is combined with the modelling of appropriate new behaviours, with opportunities to practice new behaviours, and with feedback and ongoing coaching and support from a community of learners.”* (Poskitt, 2005, p.149)

Professional development has also been a concern for both teachers and those charged with ensuring ongoing student learning. Guskey (2002) would suggest that sustainability is a cyclical activity, where a teacher needs to experience both a successful professional development opportunity and a consequent enhancement of student learning before they will change their attitudes and beliefs, which will in turn motivate them to undertake further professional development. This cyclical theme is concurred by Poskitt and Taylor (2007) who consider that unless there is constant adaptation, one habitual pedagogy will be replaced by another. From their ongoing research in New Zealand schools, Poskitt and Taylor have identified a number of factors which are needed to sustain a culture of professional development and change. One of the more important factors is that there needs to be a change in the culture of the school where its structures and processes support the acquisition of teacher attributes of new knowledge, skills, attitudes and dispositions which facilitate the change process. As in previous

work, and supported by others in the literature, these authors reiterate that having time to develop professionally is a critical factor (Poskitt & Taylor, 2007).

From this review of effective professional development a number of themes have arisen. Having the time to learn and practice new behaviours is a common theme with several writers suggesting that it may take as long as two years for change to happen. Coupled with this is the belief that change does not happen in a linear fashion but is cyclical in nature and continual. Collaborative partnerships were another theme that was explored. Whether the collaboration was amongst a community of practising teachers, university-school partnerships, and peer teachers or between teachers and school administrators, the theme was constant. What was not apparent in the literature was collaboration with students and their parents which would be an interesting area to research. Having the resources to undertake professional development is also viewed as important, and several writers emphasised that change will only occur in the longer term if succour and supportive cultures are developed by the school staff.

Changing the focus of professional development to the classroom with the teacher as a primary researcher is proffered by several writers (Burbank & Kauchak, 2003; Guskey, 2003c; Ruthven, 2005). They suggest that teacher directed research, in which the setting of outcomes and the gathering of data around teacher change and student change, effectively leads to better outcomes for students. Having the classroom as a focus and the teacher as a researcher will also help to ensure that the purpose and rationale for any professional development is understood. Other techniques for professional development such as peer coaching, mentoring, electronic networks and research methodologies such as action research are also encouraged in the literature, and often suggested as being combined with teacher and classroom research (Clarke & Hollingsworth, 2002; Fullan, 1990; Roettger, 2006; Thiessen, 1992). Finally, the reflection by teachers of their assumptions, attitudes and beliefs is promoted by several writers (Beatty, 2000; Meade, 2005; R. Robinson & Carrington, 2002; Schon, 1995).

Whilst the idea of teachers acting as researchers of their own practice might have face validity what are its critical elements, its strengths and limitations and how will it lead to the enhancement of student learning?

#### ***2.3.4 Teachers as researchers: critical elements and limitations explored***

Just as there have been various methods advanced to develop enduring teacher change so too are there variants in teacher research methodologies. Some of the alternatives offered in literature include in-service – teacher experimentation (Huberman, 1992), teacher-student collaboration (Thiessen, 1992), pre-service collaboration (Burbank & Kauchak, 2003), expert-practitioner co-learning agreements (Ruthven, 2005), action research within an interconnected model (Clarke & Hollingsworth, 2002), autonomy through pedagogical research (Castle, 2006), and knowledge creating schools and networks using action research (McIntyre, 2005). However, at the core of the variants is the teacher, in the classroom, researching their pedagogy.

A theme of interdependence between the needs of teachers and students and using students to assist in researching the classroom environment is presented by Thiessen (1992). In his model of Classroom-based Teacher Development (CBTD), he argues that teachers need to develop themselves because their practice is intrinsically connected with the classroom experiences that they share with their students. Thiessen suggests that the best form of professional development in the classroom is where the teachers and students engage in researching their environments together through a variety of activities including teaching teams, investigation clubs, and using video-tapes to view instruction and engaging in action research with the children. The rationale offered by Thiessen for his model is that it will ensure a continuity of change and improvement in a meaningful context. Teacher to teacher collaboration is seen by this writer as a useful adjunct to this teacher-student intervention model.

Having a critical friend who is able to provide advice, guidance and support is seen as crucial to teacher research efforts (Elliott, 1990; Ruthven, 2005; Salisbury et al., 1997). Elliott (1990) sees the critical friend as a facilitator, and at times director, of the teacher research but from within a ‘second order’ inquiry. This is

where there is another research study being conducted which ‘overarches’ the teacher directed study: considered to be a first order study. Most of the writing around critical friends suggests that the person acting in that role should be knowledgeable about research in general, and classroom research in particular but the idea of using peers as critical friends is also advanced by Roettger (2006) and Huberman (1992). Roettger believes that support for teachers is important and that peers can provide that support. Whilst Huberman would agree with that idea he suggests that the peers also need to be trying out similar ideas, but questions whether they would be able to ask critical questions?

Whilst teachers are examining their pedagogy, through research activities, their primary focus for the research must remain on the student (Castle, 2006; V. Robinson, 2003). According to Castle (2006), teachers are expected to always act in the best interests of students and they must reflect on whether those actions were appropriate in promoting learning and growth in their students. Robinson (2003) believes that teachers have an ethical and professional obligation to examine the consequences of their actions because all decisions in a classroom affect the students.

Teaching in the classroom does not generally happen in a philosophical vacuum and although many teachers might not be able to describe their pedagogical philosophy, their practice is generally based on underlying assumptions (V. Robinson, 2003). Teacher research, especially that relating to inclusive practice, must focus on an examination of these assumptions in order to determine how the assumptions might be directing their practice. For instance, where a teacher believes the problem with a child’s learning lies is important for how they might proceed in finding an instructional solution (T. Booth, personal communication, August 18, 2003).

An effective method of examining assumptions is to critically reflect on the data that results from classroom research (Carrington & Robinson, 2004; Elliott, 1990). Reflection, therefore, is an important focus in teacher research. Elliott considers that the reflection needs to focus equally on the processes that occurred in the classroom as on the results of any learning outcomes that are achieved by the

research. Carrington and Robinson (2004) used reflection in an action research framework to look back to what had happened and to plan forward to the next cycle of research. From a New Zealand perspective the early childhood centres of innovation also used reflection as a part of their research programme. As Meade comments, “*reflection is a given for them, for they could not have embedded an innovation without lots of internal questioning, dialogue and debate.*” (Meade, 2005, p.1) In an article on teacher change through reflection on data, Flecknoe (2005) considers that reflection is emancipatory in that it helps teachers remove barriers that had been hindering their pedagogical change. Generally these barriers are seen as being assumptions, prejudices and beliefs that teachers have, that guide their practice (Flecknoe, 2005).

Reflection, focus on the student, examination of underlying assumptions and the importance of a critical friend are all perceived as key focus elements of teacher research. However, the literature cautions that there are also some limitations in teacher research and some of these are now examined.

Sustainability of effort is a limitation of teacher research raised by several writers who have offered a variety of solutions. Several elements are considered essential to sustainability: skill development, an environment of support, time allowed for change to develop and embed, and a maintenance of focus unencumbered by competing demands (Elliott, 1990; Huberman, 1992; Poskitt & Taylor, 2007; V. Robinson, 2003; Roettger, 2006). If teachers are to become researchers of their own practice, then they must be taught the skills of research including aspects of reliability, validity and application as well as the mechanics of running a research project. By acquiring these skills teachers will achieve autonomy and be able to practise their skills according to their own determination (Castle, 2006). However, having environmental (i.e. surrounding the classroom) support is also viewed as important to improve sustainability. Whether this support comes from peers, administrators, or critical friends, amongst others, is not important but rather the support and guidance that the teacher receives are seen as crucial to sustainability (Huberman, 1992; Poskitt, 2005; V. Robinson, 2003). Maintaining focus free from distraction is also seen as important for sustainability. Classrooms are busy environments with competing demands some

of which are imposed from administrators and colleagues. Roettger advocates for a period of single focus so that all efforts can be directed to teacher change through the collection and analysis of classroom generated data (Roettger, 2006). Consequently, acquiring the skills needed to conduct research is a paramount activity in any school requiring teachers to act as researchers of their own practice. Perhaps the greatest challenge to the sustainability of teacher change is time. Poskitt and Taylor (2007) caution that changes to teacher practice take time, from two to five years, and that not only must time be given but also that the environment must be one that is supportive of the time taken to change.

One of the challenges of teacher research is that teachers may self-validate their existing pre-conceptions (Ruthven, 2005). Whilst critical reflection may assist with this difficulty the skill of reflecting critically on one's own teaching takes time to learn and develop. The use of peers, critical friends and collaborative research are offered as ways to overcome self-validation. It is also important to maintain educational discourse in schools so that assumptions, philosophies and practices are constantly being reviewed.

Dissemination and validation of teacher research results may also be viewed as limitations (McIntyre, 2005; Ruthven, 2005). Results from single classroom research inform the teacher concerned but how does the educational community and the public at large become informed? There does not appear to be a consensus view as to whether this is a limitation and, if so, how to overcome it. The view as to whether it is a limitation appears to depend on how the writer views the purpose of teacher research. If the purpose is to enable the teacher to examine their practice and better meet the needs of their students, then dissemination and validation outside of that setting are not viewed as limitations. Ruthven suggests that cumulative knowledge building proceeds over time as education discourse takes its course, first amongst peers and then into the wider education community. However, to facilitate this knowledge building Ruthven advocates expert/practitioner partnerships. These partnerships allow for the dissemination of information within the local community through formal and informal networks, and into the wider community through academic activities including research writing, lecturing and the academic being in several

partnerships across a wide geographic base. Further, both practitioner and academic networks have unique cultures that govern the dissemination and creation of knowledge within them (see Meade, 2005 below)

McIntyre (2005) proposes a radical solution to this perceived limitation by suggesting that a network of knowledge creating schools be set up, which would then generate research which was collaboratively planned and have public knowledge generation as a goal. A similar process of ‘rippling’ out results of research is currently occurring with early childhood centres in New Zealand. The Centres of Innovation project (Meade, 2005) invites early childhood centres to conduct research within their centre (collaboratively with an external facilitator), and then ripple it out to the wider early childhood arena.

This examination of the core elements of teacher research and its limitations has suggested that teacher research should not be taken in isolation, regardless of its purpose, but that there be a form of collaboration whether that is with peers and administration within the school or with knowledgeable experts from outside such as academic educational researchers. Such collaborations are seen as providing rigour to the research, overcoming self-validation of existing pre-conceptions, assisting with implementation and sustainability, and helping with dissemination and validation.

### ***2.3.5 Integrating academic research into classroom practice***

A challenge that has engaged educationalists and academics alike for a number of years has been the incorporation of the results of academic research into the daily practice of teachers, and vice versa (Florian, 2007; McIntyre, 2005; Salisbury et al., 1997). Traditionally academic researchers have published their studies in which new methods, techniques, theories and philosophies have been described. Often classrooms have been the settings for such studies, and occasionally such research has been adopted into practice through governments providing money and resources. In New Zealand, the reading research of Dr Marie Clay became the Reading Recovery Programme which still exists in our schools today (Clay, 1979). Other researchers including Drs Glynn and McNaughton developed programmes from their research and disseminated the research through

workshops, videos and books (Glynn, McNaughton, Robinson and Quinn, 1979). However, in spite of these examples much educational research has not been translated into practice for a variety of reasons. *“Traditional research often fails to influence classroom teachers due to its inaccessibility, its lack of relevancy, and the tendency for its findings to be perceived as either inconsistent or contradictory.”* (Burbank & Kauchak, 2003, p.499)

As a contrast to the views expressed by Burbank and Kauchak, McIntyre (2005) considers that the major reason for the low uptake of academic research is that there are vast differences in the roles of the researcher and the classroom teacher. The classroom teacher is required to deal with the complex classroom situation in a real time context whereas the researcher is involved in interpreting and explaining results, identifying patterns from the results and formulating abstract ideas from those patterns.

Developing research strategies to fully capture the complexities of the classroom is a solution favoured by Florian (2007). In every classroom there are children who experience learning difficulties and Florian’s solution would see the teacher generate new understandings about these difficulties through research. In gaining understanding about the various complexities of the classroom including interactions, abilities, and motivations the teacher would be better able to meet learners’ needs (Florian, 2007). Research by Jordan and Stanovich (1998, as cited in Florian, 2007, p. 18) suggests that teachers who respond to, and meet individual needs within a whole class teaching environment are better able to sustain inclusive practice.

Beginning with the encouragement of teachers to seek evidence for their practice this discussion has proffered a number of ideas for integrating research into practice. The majority of solutions offered suggest that placing the research into the context of a classroom and involving the teacher is central. Several barriers to resolving the research into practice challenge have been advanced with perhaps the differing roles of academic researchers and teachers being a crucial one. A further barrier is the perceptions of teachers as to the relevance of academic research to their situation.

Recently a major professional development project was undertaken by the Group Special Education of the New Zealand Ministry of Education. The aim of the project was encapsulated in its name: Enhancing Effective Practice in Special Education (EePiSE). A summary of its findings, by one of the project coordinators, is particularly applicable to this section of the literature review, *“teachers needed professional learning and development that was practical, that addressed their issues and took account of their learning context. They had to own the process of their learning and be able to draw on one another’s experiences and expertise. It was important that they were given time to share a plan together”* (Dharan, 2006, p. 3).

### ***2.3.6 Developing professionally: a summary***

Teacher professional development should have two outcomes; a change in teaching practice and improved growth and learning for the student. Research examined in this literature review suggests that there are important factors involved in assisting with change; teachers need to critically examine and reflect on both their current and any new practice, and data collection, analysis and reflection are essential to any change process.

A key shift in professional development has happened over recent years with teachers moving from being recipients of knowledge to active shapers of their own professional development, because traditional professional development activities of conferences, workshops, and seminars whilst raising awareness of issues have not been shown to generally result in sustained change. Research in England, the United States of America, and New Zealand has suggested that for sustained teacher change, the teacher needs to engage in professional development for a longer term. An efficient method of doing this is for the teacher to engage in cyclical research in their classroom, particularly around finding solutions to students’ learning difficulties.

Some of the essential factors of teacher research, such as the need for a critical friend and the importance of reflection, have been examined, as have some of the limitations advanced in the literature including dissemination and validation of

teacher research. Finally, some of the issues around the research into practice dilemma have been explored.

Inclusive pedagogy requires the teacher to have skills and knowledge to teach all children. Examination of the literature around professional development suggests that teachers can do this by becoming researchers of their own practice and through integrating academic research into their own practice (V. Robinson, 2003). Action research appears to be a research design favoured by researchers who advocate teacher research as a vehicle for professional development and pedagogical change. Collecting data, observing behaviour, analysing results and critical reflection of their processes and behaviour are the key characteristics of professional development which lead to developing an inclusive practice. Ainscow sums up the need for effective professional development, *“As far as children are concerned, teachers are the key policy-makers: once the classroom door is closed, it is their decisions that determine what the class experiences. This being the case, our aim must be to find effective ways of supporting teachers in developing their capacity for reaching out to all of their learners.”* (Ainscow, 2007, p.149) This section of the literature review has argued that an effective way to develop teacher capability to meet their learners’ needs is to develop their skills as researchers of their own practice.

## ***2.4 New Zealand research***

Context is important in classroom research not only to ground it in the environment that gives rise to its findings, but also because teachers are more likely to adopt into practice research that has come from similar conditions that they themselves are experiencing. Therefore, for this research it was important to discover if there were any New Zealand classroom studies that addressed the topic of inclusion.

Combining elements of research, teacher education and educational practice was a feature of a research study conducted by Alton-Lee and colleagues (Alton-Lee et al., 2000). The effort of a teacher to be more inclusive in her practice, following participation in professional development, was the setting for the research. A

toolkit of four techniques for developing inclusive practice based upon a social constructivist model of disability was the outcome.

The authors gathered their classroom data through use of video-cameras and microphones. They recorded the teacher adapting a social studies topic to meet the needs of all the children in the class following an incident involving a child with Spina Bifida. The interactions within the classroom were the prime source of data analysis with some input from teacher interviews. In an effort to engage the reader and to instruct, the authors used the interrupted narrative technique where before revealing what the teacher did in a particular situation the authors encouraged the reader to consider what they might do in a similar situation.

Four strategies were identified that the teacher used: social studies curriculum integration, 'personal tragedy' model critique, multiple positionings, and curriculum application in the school community. Of particular interest to this researcher was the concept of multiple positionings within an inclusive environment. This is where the teacher presented the children with different aspects of the abilities of a disabled child. For instance, in order to encourage the other classmates to view the child as a helper the teacher appointed and tutored him to be a peer tutor to younger classmates. A further technique used by the teacher was to present the target child as an authoritative informant about his own disability. Finally, the teacher presented him as 'one of us' by highlighting the tasks that he could perform just like the other children e.g., holding a skipping rope for a friend.

Whilst this research focussed on one teacher and her efforts to integrate theory into the classroom practice, it demonstrated that when a teacher accepts a positive model of disability she is able to use it as a base upon which to make other decisions. This research is an example where the results of one case study, based upon a single classroom, can be used to inform others.

Developing an understanding of, and building confidence in adapting the curriculum to provide authentic needs-based programmes that enhanced student learning was the goal of a professional development programme (Naidoo &

Naiker, 2006). The facilitation team within the school used action research as a research design for the project and literacy as the context. Specifically, the professional development programme followed the path of assessment of achievement, analysis of that assessment data, using the analysis to inform the planning and implementation of instruction and evaluation of the results. At each stage the participants were encouraged to improve their skills and knowledge so that they could develop effective strategies for individual learners, and that those strategies were able to accommodate diversity.

For each child who was experiencing difficulties in reading, outcomes were set following an initial assessment and analysis. The path described above was repeated in cycles until the outcomes were reached and then new outcomes were set. Crucial to the success of this programme in meeting student learning needs was the analysis of assessment data which was then used to inform planning and implementation, as well as being used by the teachers to report results to parents or school administration. It was strength based in that it focussed on the current abilities of each student and built on them. The programme was inclusive because it concentrated on meeting needs within a classroom context.

One criticism of this study is that although it had as a goal that the participants would use critical reflection to consider teacher assumptions, beliefs and expectations, there was no report on this aspect. Such reporting would have enhanced the study by demonstrating teacher change not only in techniques and strategies but also in those deeper, more subtle drivers of practice including assumptions and attitudes.

Essentially what the above studies demonstrate is that with facilitation, collaboration and a focus on the analysis of assessment data, learners in New Zealand can have their individual needs met. The study by Alton-Lee and colleagues (2000) also demonstrated that having a model of disability that focuses on what is possible rather than what is missing, anchors classroom practice and facilitates solutions.

## ***2.5 Drawing the threads together: A summary of the reviewed literature***

Educational inclusion is about the promotion of equitable outcomes for all learners rather than the integration of children with special educational needs into the mainstream classroom environment (Florian, 2005; Slee, 2007). Within the literature it is viewed as a continual process requiring classroom teachers to structure the environment to facilitate learning. Not only do teachers acquire skills and knowledge necessary but they also regularly examine their assumptions, beliefs and opinions on which their 'theory of practice' is based (V. Robinson, 2003).

Teacher tasks, as implied by an inclusive pedagogy, involve a number of elements: a requirement to understand the individual needs of students through an ongoing cycle of assessment, analysis, planning, teaching, evaluation and reflection; identifying and removing barriers preventing children growing and developing; and placing a special emphasis on those children who may be at risk (Ainscow, 2007).

Developing and enhancing an inclusive pedagogy involves change, with particular reference to the practice of the teacher but also to the supporting structures around the teacher including their peers, their senior colleagues and administrators, their resources and also the theories on which they base their practice.

Methods of ensuring that teachers have the skills and knowledge to develop and enhance an inclusive pedagogy have generally been subsumed under the ambit of teacher professional development. Within this literature review several models of professional development have been examined with factors leading to effective professional development identified.

Common themes around effective professional development leading to sustained teacher change have been acknowledged. A primary theme in the literature is that the focus of any professional development must be enhanced outcomes for learners with a concomitant change in teacher practice. Change takes time to

happen and there should be a cyclical process operating. A cyclical process is where a change in practice resulting in enhanced outcomes for children leads to a change in teacher attitude which, in turn, encourages further exploration of new practices (Guskey, 2002; Poskitt & Taylor, 2007). Other important themes including the collaboration of teachers with researchers, teachers with mentors, coaching, the use of research methodologies and electronic networks were also explored.

‘Teachers as researchers of their own practice’ was a major theme highlighted in this literature review. The integration of research into practice dilemma and the consideration that teachers need to monitor and evaluate their own practice are some of the reasons for the inclusion of this theme. Further, by placing the professional development within the context of their own classrooms, it is believed that teachers are more likely to consider changes in practice because of the relevance of their class and its students. Teachers need to be active shapers of their own development and research is considered a suitable contextual vehicle for doing so.

Whilst classroom research is recommended, it is problematic to operationalise within a complex and busy environment. The methodology chapters consider this difficulty and proffer a method of integrating teacher research into the daily teaching of the classroom.

## ***2.6 Identifying the areas where research might inform practice and literature***

Whilst there are bodies of literature associated with each of the sub-topics of the thesis, there is no literature connecting inclusion, action research, New Zealand professional development and change, which this thesis seeks to address. Given a professional relationship between a central agency advisor and a classroom teacher, how can they, together, enhance the classroom pedagogy to become more inclusive? The influence of classroom contextual factors, ‘outside’ advisors, practitioner research using action research, and the connections of each of these to

each other are gaps in the knowledge that need to be addressed. Therefore, the following research questions were constructed:

### ***2.6.1 Research Questions***

1. What contextual factors are present in a mainstream New Zealand classroom that impact on the teacher's ability to provide for the educational needs of all the learners for whom they are responsible?
2. What is the role of a critical friend / second order researcher in a classroom based research project, and could service delivery staff providing specialist advice and guidance to a school adopt such a role as part of their brief?
3. In a busy and active New Zealand classroom is the teacher able to conduct practitioner research that contributes to teacher professional development and change, student skill development and an enhanced inclusive pedagogy?
4. As a research design, and in a New Zealand context, does action research, with its cycle of planning, action, observation, evaluation and reflection, allow the teacher practitioner to focus internally and solve their classroom challenges and so contribute to their own and others' pedagogical knowledge and skill?

Chapter 3

## **Methodology in Theory**

### ***3.1 Introduction***

Fundamental to choosing a research method is that the researcher must have a problem that they wish to examine and some research questions that they hope to answer (Jacob, 1990). As indicated in the literature review, the problem identified for this research related to classroom pedagogy and how it could be enhanced to become more inclusive. Following a review of the literature, discussion with colleagues and reflection, four research questions (see 2.6.1) were formulated. Several major considerations influenced the choice of methodology for the research, and are examined in this chapter.

Beginning this chapter the theoretical perspectives of positivism and interpretivism are considered. From the constructive criticism of these two perspectives consideration is given to critical theory, its strengths and weaknesses and how it provides a basis for research in the classroom. Finally, consideration is given to some associated factors which, together with the philosophical and theoretical perspectives, led to a choice of research design.

### ***3.2 Theoretical Perspectives***

Generally, theoretical perspectives can be classified into three paradigms: those concerned with quantitative measures, those concerned with qualitative measures and those theoretical perspectives that have combined both elements.

#### ***3.2.1 Positivism***

Because positivism, as a theoretical perspective, is linked with the scientific method, and hence associated with a quantitative paradigm, a brief examination of the method is appropriate. Cohen and colleagues (2000) lists four assumptions of the scientific method, the first of which is determinism. This assumption suggests that all events have causes and their events are determined by other

circumstances. Science proceeds on the belief that these causal links can be unravelled and that there is regularity to these links. Therefore, once these regularities are known universal truths, knowledge can be formulated. The second assumption of the scientific method is empiricism, which holds that certain kinds of reliable knowledge can only originate in experience. This means that all knowledge is subject to verification by observation. Truth is arrived at, therefore, by gradual approximation resulting from these verifications. Parsimony is the third assumption, which says that phenomena should be explained in the most economical way possible. Finally, we have generality. Beginning with observations of the particular, generalisations are then made to the world at large.

Cohen and colleagues also suggest that for scientists the ultimate aim of science is theory – gathering *“together all the isolate bits of empirical data into a coherent conceptual framework of wider applicability.”* (Cohen, Manion and Morrison, 2000, p. 11) Basically it could be said that having theories is making sense of our world because theories are generally easier understood than all the ‘bits’ that help to formulate them.

It is suggested that the adoption of positive methodology in the social sciences was as a direct result of its success in the natural sciences (Crotty, 1998; Davidson & Tolich, 1999). The French philosopher, Auguste Comte, appears to be the first person to use the term positivism in relation to social science. It was his belief that social phenomena could be viewed in the light of physiological laws and theories, and investigated empirically. He also believed that it was possible to establish the new science of society on a positive basis, as opposed to a natural basis, and hence the origin of the term (Crotty, 1998). As Cohen and colleagues say, *“Comte’s position was to lead to a general doctrine of Positivism which held that all genuine knowledge is based on sense experience and can only be advanced by means of observation and experience.”* (Cohen et al., 2000, p.8).

Even from its beginnings there have been many objections to positivism but perhaps the most compelling objection has to do with the positivists’ view that statements had to be empirically verifiable before they became meaningful. This view meant that many non-observable (e.g. motivation, habit, belief) and

metaphysical (e.g. intelligence, soul) ideas were considered to be meaningless (J. Clark, 1997; Crotty, 1998; Davidson & Tolich, 1999). Other writers were also concerned about other aspects of positivism including: its almost total reliance on quantification and mathematics (Ions 1997 as quoted in Cohen et al., 2000), its total absorption with objectivity and its attempt to adjust reality to methods (Crotty, 1998), its failure to address such important matters as values, informed opinion, moral judgements, and most importantly, beliefs (Gallagher, 1998), and its treatment of human behaviour as being passive, essentially determined and controlled (Cohen et al., 2000). Therefore, positivism was seen to be limited in scope and not useful, on its own, for social research.

### ***3.2.2 Interpretivism***

Interpretivism was one of the approaches that arose out of a conviction that the view of the world offered by the positivists left out the most important ingredient – that of the individual who acts and behaves as a result of a myriad of influences, not all of which are observable or quantifiable e.g. assumptions, prior experience. The interpretivists see social science as a subjective undertaking, relating to the context the individual is experiencing. They also believe that the individual or group being studied can only be studied in a social situation and with their active participation. Not only do we need to observe how a person behaves but we also need to know from their perspective why they behave or why they believe they behave (J. Clark, 1997; Crotty, 1998). Interpretivists do not seek to ‘know’ but rather to understand and interpret (Davidson & Tolich, 1999). Interpretivism is concerned, therefore, with qualitative matters.

What does interpretivism offer the researcher in education? Basically the researcher has to distinguish between human behaviour and human action (J. Clark, 1997). Behaviour is observable and can have causal explanations ascribed to it by the observer, but human action is only meaningful to the person exhibiting it. Therefore, what the researcher has to do is to try to understand what makes the individual actions intelligible, both from the individual’s perspective and from the perspective of discovering the social constraints on the individual.

Because the interpretivist researcher has to use the participants' understandings in their research, one of the telling criticisms of interpretivism is that of relativism which is where there are multiple interpretations and no clear compatibilities (Rex, 1974; Giddens, 1976 as cited in Cohen, 2000). While it would be good to have a clear independent reference point with which to 'test' these interpretations, some authors suggest that this is not able to be done because all interpretations are equally valid. Generalisation is only possible where there is agreed interpretation, and without generalisation important information relating to groups and organisations, such as schools, is not available.

If it is accepted that the participant's interpretation is the only interpretation, and not all interpretivists agree with this, then what happens where the participants have a false or partial view? Does the researcher merely accept this and allow the participant's self-deception to continue? J. Clark (1997) suggests that to do so would be wrong and sees this as a weakness of this theoretical perspective. However, as Tickle (2001) discovered, it may not be always possible to ameliorate self-deception especially in situations where confidentiality prevents it.

While it is of use to describe, through the participant's interpretation, what is happening in a situation, there are other elements that the participants may not acknowledge or know. There are situations, for instance, where inequalities of power are present and which have a major bearing on the situation under research (Bernstein, 1974 as cited in Cohen, 2000). Failing to account for this would give a distorted picture of the situation. Cohen and colleagues (2000) suggest that just as positivism can be criticised for its emphasis on macro-sociology, so interpretivism can be criticised by micro-sociology as interpretivists place artificial boundaries around subjects' behaviour. Because qualitative research is 'flexible' in its interpretations, it has also attracted criticism for lacking rigour in its methods (Crotty, 1998).

In considering the historical development of theoretical perspectives used by social science, one has been examined which is primarily concerned with quantitative enquiries, and one that has qualitative enquiry as its primary aim. Both have been subject to criticism, some of which has been offered in the

preceding paragraphs. A theoretical perspective which attempted to take the best from both schools of thought, and add some improvements of its own, is now examined. It was not the only theoretical perspective which arose out of the criticism of positivism and interpretivism, but it is one on which the methodology I have chosen to describe for my proposed research had its roots.

### ***3.2.3 Critical Theory***

Historically, critical theory arose out of the work of academics teaching at the University of Frankfurt between the two world wars. The development of the theory must be seen against the background of the social oppression of the people in Europe, and the rise of totalitarianism in the guise of fascism and communism. Apart from their concerns at the inadequacies of both the positivist and interpretivists views, the theorists who espoused critical theories were also concerned with social justice. They wanted to bring about a just and free society, and so their theories were considered to be emancipatory and democratic (J. Clark, 1997).

Habermas, one of the Frankfurt academics, developed a thesis which said that there was a link between knowledge and human interests, and that different forms of knowledge arise out of three cognitive or knowledge-constructed interests: technical (arising out of empirical analytic sciences), practical (arising out of historical-hermeneutic sciences), and emancipatory (critically oriented sciences). In these versions of knowledge Habermas has woven the best elements of the previous two theories (positive and interpretative), with a new critical theory. He believed it would overcome the dependence of people on ideological domination and social injustice, and allow them to become self-actualised (Habermas, 1973). This concern with ideology lies at the core of the critical theory advanced by Habermas. He was convinced that by self-reflection people are able to see past their beliefs and values to recognise that their beliefs and values may be distorted by ideology, culture and systemic factors such as the type of government they have, the hierarchical systems under which they work, and other hidden factors such as conforming to accepted group norms. Critical theory, therefore, is not only designed to understand situations and phenomena but to change them by seeking *“to emancipate the disempowered, to redress inequality and to promote*

*individual freedoms within a democratic society.*" (Cohen et al., 2000, p.28). From these lofty ambitions, it is possible to see how critical theory might have a place in the classroom, and in pedagogical change, especially as it relates to self-reflection on the part of the practitioner. Reflecting on one's practice by examining the beliefs and values that sustain it, is recommended for modern classroom practitioners as they structure the learning for their students (Fox, 2003; Schon, 1995; Smyth, 1989).

One of the major difficulties with research conducted in educational settings, or around educational topics, is how to turn into practice what has been discovered in research. For instance, if a researcher discovers a new method of teaching reading to children experiencing difficulties, how do we get teachers to evaluate and adopt the new method? In their discourse on the historical antecedents to participatory action research, Kemmis and McTaggart (2000) argue that this is made much easier through critical theory, because, using the methodologies based on the theory, the researcher has already involved the participants in the research and from self-reflection they are in a position to adopt any conclusions reached (Kemmis & McTaggart, 2000).

Participation is a key ingredient of critical theory. Critical theorists believe that only by reflective participation can people understand their own social situation, their reality, and then construct for themselves a new reality through cooperative action (Crotty, 1998). Freire (as cited in Crotty) considered that participation was the key to emancipation because without participation oppressed people simply remain in their current ideological framework, and without participation they are unable to reflect, plan and act (c.f. action research).

Critical theory, then, has four elements which characterise it: cooperative action, reflection, emancipation, and participation, with all elements necessary. The methodologies based on this theoretical perspective are, therefore, concerned with encouraging individuals and groups to examine their ideas and cultures so that they are able to examine current ideology, and in the cause of social justice, initiate action (Crotty, 1998). From an educational perspective, participants are encouraged to examine their current practices and the assumptions which guide

them. Critical theory is active where interpretivism is passive and seeks to understand from the participant's viewpoint, whereas positivism seeks to understand from the researcher's point of view. The expectation of change is a key issue of critical theory – to move people from the situation in which they find themselves to a situation in which they are freer, have more control over their lives and have the skills to continue the process of change (Cohen et al., 2000).

This consideration of critical theory has attempted to outline the major concepts that are important to the methodology of this research, rather than to give a full overview of the philosophy. There are, however, some thoughtful criticisms of the theory which are now discussed. One of the major criticisms is of Habermas's three forms of knowledge. It is suggested that there are a multitude of ways of viewing the world, and to reduce it to three is to simplify something that is far more complex (Cohen et al., 2000). A further criticism, especially by those of a positivist persuasion, is that it is not the role of the researcher to become involved in political agendas but rather that the researcher should remain dispassionate, disinterested and objective. Critical theorists answer this by saying that to do so would be a *laissez-faire* position which would allow the status quo to remain (Carr & Kemmis, 1986). The final criticism that I would like to advance concerns the problem of how to resolve differences amongst participants who are unable to arrive at a 'rational' consensus. As well as deciding on what is rational there is the problem of what to do if a rational consensus is later said to be irrational. Habermas's answer appears to be related to hindsight, but that raises the problem of how long to wait until it is agreed that a consensus was rational? If we are attempting to add to knowledge through research, do we always look back and not forward? (J. Clark, 1997)

Critical theory's four elements of cooperative action, reflection, emancipation and participation together provide a strong foundation for research which seeks to enhance pedagogy through change. Further, methodologies based on this perspective "*aim to foster self-reflection, mutual learning, participation and empowerment, rather than the acceptance of discoveries.*" (Fossie, Harvey, McDermott and Davidson, 2002, p.720)

### ***3.3 Further considerations around the choice of methodology***

As well as theoretical perspectives, some other considerations guided my choice of methodology. Personal professional philosophy, the locus of the research and a concern with translating research into classroom practice, were some of the considerations that are now discussed.

#### ***3.3.1 Ecological Framework***

As a professional working for disabled children, their parents and their teachers over a period of twenty years, I have learned that to focus on the specific impairment is to look for ways and means to ‘fix’ or overcome it. To do so, is to consider that the problem lies within the impairment and the child who has it. Alton-Lee and colleagues (2000) refer to this model of disability as the personal tragedy model which “*has its origins in the medical model in which disability is a pathology to be remediated through a focus on the individual.*” (Alton-Lee et al., 2000, p. 182) Traditionally, the assessment focus around special education has also been on student performance on standardised or criterion referenced tests when determining whether a programme or activity has been successful.

In an ecological framework, however, the focus is equally on the interactions between the student and their environment, the nature of those interactions in promoting or limiting the progress of the student and the pedagogical assumptions of the teachers and other adults working in the learning environment (Wallace, Anderson, Bartholomay and Hupp, 2002). It is crucial, therefore, when researching factors relating to inclusion that an effort is made to determine where teachers believe the problems around educational difficulties, including disabilities, lie (T. Booth, personal communication, August 18, 2003). Ascertaining such teacher assumptions, philosophies and prejudices assists with identifying factors which both advance and hinder the practice of inclusion. Student behaviour, teacher behaviour, environmental events such as physical arrangement or instructional grouping, and instructional planning and execution are also some of the other pedagogical factors that need to be researched. Adopting an ecological framework is consistent with critical theory, in that it

allows for the consideration of the four elements which characterise critical theory.

### **3.3.2 Classroom Focus**

In an article discussing the sociologies of disability, Slee (1997) suggests that it is possible to “*argue for education’s reconstruction as the only avenue for inclusion.*” (Slee, 1997, p. 411) Whilst this idea is novel and contains some inviting challenges for research around inclusion, it is a study of immense proportions. However, from the outset this current research study was focused on the individual classroom and how the pedagogical decisions of the teacher might develop their practice of inclusion. Naturally, there are decisions made at a schoolwide and national level that influence teacher decisions, and where these are identified they will be reported on. Factors which influenced this decision to focus at the individual class level included: keeping the research manageable with only one researcher, the time frame for the research, the availability and willingness of teacher participants, and the focus of the study with its research questions. Most importantly, the classroom is the intersection at which teachers and advisors meet and, as previously mentioned, a personal driving force behind this research was a wish for advisors to be better able to meet the needs of teachers and their students. In an earlier article around school organisational development and change, Slee suggests that research around inclusion should start with an analysis of local level initiatives and approaches (Slee, 1995). The ‘local level’ classroom was the major focus of this research study and, therefore, set the research boundaries.

A further consideration around the type of methodology, related to the primary focus of the study which was, as described earlier in the thesis, to look at ways that would facilitate teachers to teach all the children in their class. A focus on practice in the classroom is considered by some authors as a method to enhance inclusive pedagogy (Mick, 2002; Sebba & Ainscow, 1996). Also, literature presented by academics and researchers working in the area of inclusion consider that this research’s focus could best be met by working alongside teachers in their classrooms (Ballard, 1995; Salisbury et al., 1997). Such an approach would allow the researcher to work in a collaborative and systematic manner with the

teacher and children. Working inside a classroom would also facilitate a more thorough examination of factors that impact on the ability of teachers to provide for the educational needs of their students, and to discover any changes in pedagogy that would improve that provision (Ainscow, 1995; Mamlin, 1999).

### ***3.3.3 Translating research into classroom practice – bridging theory into practice***

Considered also were the difficulties that arise around teacher translation of educational research and innovation into classroom pedagogy. These difficulties have been highlighted in the literature as the research into practice dilemma (Ainscow, 2003; Elliott, 1990; Meyer et al., 1998). Regardless of the worth of a new teaching method, curriculum modification or research finding, there often appear to be barriers among the teaching profession to their adoption. Several writers consider that researchers working alongside, and in collaboration with, teachers will assist in ameliorating the dilemma (Ballard, 1996; Elliott, 1990; Mamlin, 1999; Meyer et al., 1998).

To assist researchers to develop research which was going to bridge the gap between research and practice, Fisher and her colleagues developed a set of guidelines for the development of naturalist interventions (M. Fisher, Bernazzani and Meyer, 2001). Their guidelines offer a form of checklist for the researcher to ensure that findings from a proposed research are going to be better accepted and maintained by the participating teachers. The guidelines suggest that: the research should be doable in context without any large scale reorganisation of the environment, the available resources should not be dependent on external funding, the research must be sustainable over time, and the research must be constituency owned and operated, naturally inclusive and intuitively appealing. These guidelines are suggested as helping with the research into practice dilemma which is an important aspect of this current research.

### ***3.4 Choice of Methodology***

Following the choice of critical theory as the theoretical basis for the research and other factors including the need for an ecological framework, a decision was made to choose action research as the methodology. It is seen as one of the

participatory and naturalistic research methods available to researchers to use in a classroom or school (Ballard, 1996; D. Fisher et al., 2000; Meyer et al., 1998; Salisbury et al., 1997; Swann, 2001). Action research, therefore, became a method of choice for the research not only because it was appropriate for the focus of the research and was suggested as assisting with the translation of research into practice, but also because it fitted in with the overall theme of the research - inclusion. Inclusion is about participating, contributing and learning for the children and for the teachers. It is the ongoing modification of the curriculum, environment and pedagogy which allows it to happen (Ainscow, 2003). Because the research was focussed on the practice of inclusion it should also model the practice by being inclusive in its implementation, which action research allows it to do.

However, there are difficulties in launching directly into action research because using that method presupposes that the teacher participants and the researcher have a shared understanding of the nature of any classroom difficulties, the research questions and the direction in which the research needs to proceed. Therefore, methods of addressing these difficulties were sought. They had to be methods which would, through a process of examination and analysis, provide data on which to formulate research questions which would, in turn, lead into and frame the direction of the research (Salisbury et al., 1997). They also had to be methods that might give insights into the pedagogy of the participating teachers and the assumptions and philosophy which guided that pedagogy.

The solution that was chosen was to have action research operating at two differing, but intertwined, levels. As the researcher I would employ several cycles of action research. The first cycle would enable me to develop an understanding of the ecology of the classroom through the use of several data collection tools. During the last of my research cycles the teachers would also engage in their own action research projects which would, according to Elliott (1990), be considered first order action research whilst my action research would be considered second order.

### ***3.5 Action research***

In the following paragraphs an examination of action research as a methodology for conducting research in a school classroom is undertaken. The methodology has two key goals relating to education. The first goal is to study a system or a concern in educational situations through research. Concurrently, collaborating with participants in the research with the aim of changing something towards a desired aim, is the second goal (O'Brien, 1998). Solving real problems and empowering the participants to develop their own research skills, are associated goals.

Before beginning a discussion of the methodology, a consideration of its history is warranted because of the variants of the methodology that have developed.

#### ***3.5.1 Historical Beginnings***

Kurt Lewin is generally credited as being the researcher who coined the term action research (Carr & Kemmis, 1986; Masters, 1995). While at the University of Iowa, Lewin and his students undertook research in workplaces and demonstrated, that where the workers had participated in the research and asked relevant questions, they achieved increased productivity and higher morale. Lewin was interested in social relationships in the workplace because he was interested in improving the social situations of minority groups who, in the United States, were the largest working group on the factory floors. Adelman (1993) notes that Lewin's work was characterised by a discussion of problems by the group and then the group made a decision on how to proceed. He also introduced the spiral concept of research in which following analysis of the problem, fact finding and conceptualisation, the spiral continued with planning and execution of action followed by more analysis (Adelman, 1993). Lewin did not consider his processes to be the only method that could assist social planning and action, but he considered that action research could be a powerful method because of the participation of those affected.

However, it was noted, especially by those with a critical theory background, that the emancipatory aspect of research appeared to have been overlooked. Lewin

and his students, who continued his research interests, appeared to accept the ideology and social practices of management without question and while they may have improved productivity, had they improved the workers' lives? (Landsberger, 1958 as quoted in Adelman, 1993). Following the work of Lewin and his students, action research appeared to lose flavour as a methodology, because financial resources tended to be invested in large scale projects which concentrated on curriculum development in order to meet the perceived deficiencies in western education following the launch of the Sputnik by the USSR in 1957 (Carr & Kemmis, 1986). A revival was begun in the early 1970s with the work of Adelman (1993) and Elliott (1987).

Elliott's view of action research has its foundations in the work of Gadamer who developed a theory based on the notion of a moral science paradigm which is, in turn, based on the philosophy of *phronesis*, "*a form of reflection concerned with translating universal ethical value into concrete forms of action in a particular situation*" (Elliott, 1987, p.162). In other words, our actions are the outward manifestations of our values, our knowledge and our truths and that these become practical principles, against which we can examine new situations. If so required we can amend our practical principles, which in turn can affect our inward knowledge. Therefore, action research is intended to improve our understanding, actions and practices through a cyclical and spiral approach.

While Lewin may have taken a pragmatic stance and Elliott a moral one, Carr and Kemmis (1986) link their view firmly in critical theory. For them, action research not only considers the practical needs of the teachers, it also addresses the more politically difficult areas such as systems planning and policy development. These latter areas are where the power resides and are generally considered by practitioners and researchers alike to be more resistant to review and change (Kemmis & McTaggart, 2000).

This brief examination of the historical beginnings of action research leads us into a consideration of some of the variants of the methodology.

### **3.5.2 Variants of action research**

Three variants of action research are considered in the following paragraphs.

#### ***Technical / Scientific***

Originally espoused by Lewin (Masters, 1995), the technical – scientific variant is the one which first contained the cycle with its four stages and spirals. Lewin appeared to be primarily concerned with implementing change in the workplace so that the situation of the workers was improved. He achieved this by looking at the technical aspects of the working environment. Although he did believe in the participation of the workers, it was more for them to discuss his agenda than to formulate one of their own.

#### ***Practical***

The researcher, John Elliott, formulated a variant of action research during his work with the Ford Project (Elliott, 1990). He considered that the formation of a plan was the most important part of the cycle because in doing so teachers might even be able to solve their problems without the research. Elliott was particularly concerned with teachers as researchers using action research so that they were able to understand practice in education and solve immediate problems. He also believed that action research was a moral endeavour in that, in the evaluation of practice, the realisation of values would be apparent (Poskitt, 1994).

#### ***Critical – emancipatory***

This variant emphasises change through the use of dynamic interaction amongst the elements of the cycle and the participants of the project. A group of participants is considered essential so that dialectic and reflective critique is possible. Participants are encouraged to explore the social and political forces that constrict or shape their beliefs, values and understandings so that they can achieve individual and social change (Carr & Kemmis, 1986; Elliott, 1987). The Deakin model is considered to fit into this variant of action research (Kemmis & McTaggart, 1992)

Regardless of the action research variants they do share some commonalities: those who are experiencing a phenomenon are the most qualified to research it,

knowledge is generated to inform design, and action research is based on four principal values of democracy, equity, liberation and life enhancement (DePoy, Hartman and Haslett, 1999; Dick, 1997). Action research is considered to be democratic because the stakeholders are participants and because their views are considered to be equally valued with the principal researcher(s), the method is considered to have equity (Altrichter, 1999). Decreasing oppression, or in this research removing barriers to participation and learning, is considered to be liberating. Promoting a systematic enquiry to assist students to reach their potential is viewed as expressing the principle of life enhancement (Dick, 2002). The ability of action research to assist in joining theory and practice, and its ability to assist people to become free from habit and tradition, makes it a superior approach to use when investigating social situations (Peters & Robinson, 1984). Action research, as a research design for classroom research, is summarised by Salisbury and colleagues, "*Action research is an approach that recognises and supports the expertise and knowledge of practitioners as those most knowledgeable about local contexts and conditions. It further assumes that practitioners are ideally suited to design solutions for the challenges arising within school and classroom settings.*" (Salisbury et al., 1997, p. 22)

A number of educational studies have used different variants of action research (Evans et al., 1999; Meyer et al., 1998; Salisbury & McGregor, 2002). However, because the Deakin model was developed from work around classrooms and schools, and emphasised the practical needs of teacher in the areas of curriculum modification, professional development and class improvement plans, it was the model chosen to use for this research. The model is named after researchers at Deakin University in Australia and is described by Kemmis and McTaggart (1992). Although the Elliott model is also concerned with teacher practice, the Deakin model emphasises environmental and social issues which I considered essential to a study of inclusion. Therefore, this became the model used in this research study.

Poskitt (1994) summarises the differences in the variants, "*The essential difference amongst the three models is that Lewin's cycle is one of a general, yet technically systematic process. The Elliott model is primarily concerned with*

*daily practicalities of improving understanding and practice of teachers, while the Deakin model is less concerned with specifics, and more concerned with social issues of emancipation.” (p. 65)*

### **3.5.3 Action research – The Deakin Model**

Carr and Kemmis consider that there are two essential aims in action research: improvement and involvement. Action research is seen as aiming to help practitioners improve their practice, their understanding of their practice, and the environment in which their practice takes place. Central to improvement is involvement. *“Those involved in the practice being considered are to be involved in the action research process in all its stages of planning, acting, observing and reflecting. As an action research project develops, it is expected that a widening circle of those affected by the practice will become involved in the research process.”* (Carr & Kemmis, 1986, p. 165) The essential elements of action research, according to the Deakin Model are thematic concern, planning, acting, observing, reflecting, cycle and spiral. Each of these elements will now be examined.

#### ***Thematic Concern***

Kemmis says that before beginning the action research process there has to be some concern about a practice or knowledge. He refers to this initial concern as a thematic concern which should be the main area that the focus for improvement is concentrated upon (Kemmis & McTaggart, 1992). Adjusting the curriculum to the student’s special abilities in an inclusionary environment would be an example of a thematic concern. In his approach to action research, Elliott has two steps for this initial reflection: identification and clarification of the general idea and reconnaissance i.e., data gathering (Elliott, 1994).

#### ***Planning***

Collaboration is an important ingredient in the planning stage of the model not only to involve all concerned but also to ensure that there are shared understandings. Flexibility is another ingredient in this stage because all action research models encourage change following reflection, both within the action research and at the end of a cycle. Therefore, any plan developed must have

scope for unexpected changes. It is also suggested that the plan be forward looking, take account of all the risks and recognise any constraints, either in practice or from a social perspective. Finally, it is suggested that the plan developed should be empowering. The participants should be empowered to look beyond their present beliefs and practices and have the ability to embrace any changes resulting from this reflection (Altrichter, Posch and Somekh, 1993; Kemmis & McTaggart, 1992; Swann & Ecclestone, 1999). Elliott considers that an end product or practical effect should also be a part of any plan, otherwise there is no purpose to the research (Winter, 1989).

### ***Action***

Following on from the creation of the plan is its implementation which is considered by Kemmis to be a rather risky element because it cannot be fully planned for. During the action stage the participants are working in real time and have to be able to deal with any issues and constraints that arise. Flexibility is also the key word in this stage where the participants must be able to change their plan, and their thinking, in light of the circumstances that they encounter (Kemmis & McTaggart, 1992). Examples of this flexibility in implementation are described in the results. Other skills needed in this stage include negotiation, compromise, observation and evaluation. This is the stage in which the research tools are generally implemented. Therefore, there has to be close cooperation and participation by the practitioners and some prior teaching of the tools. Altrichter considered this stage a kind of field experiment incorporating the trying out of new techniques and strategies (Altrichter et al., 1993).

A first action stage will largely be based on the plan that was put together from the thematic concern and would, therefore, be rather tentative. Future action stages in the spiral are likely to be more directed as they will have been the product of observation, reflection and further planning. Altrichter and colleagues (1993) also suggest that the first action stage might not lead to any change because it is an initial cycle and one in which most things are tentative. Wadsworth sums up the tentative nature of action research rather well when she says, "*Action research, like the discovery cycle of any science, knows it is coming from somewhere and going to somewhere, even though it does not know in*

*advance where precisely it is going to end up or what the new state will look like. Participatory action research, unlike conventional science, does not consider this to be an embarrassment!”* (Wadsworth, 1998, p.6) Choosing the best data collection methods to use in the action stage is important because the data collected are going to be the basis upon which further action is planned (Winter, 1989).

### ***Observation***

Observation needs to be planned in terms of how the observations are going to take place, what is going to be observed and how the skills of observation are going to be taught and monitored. Observation techniques need to be flexible so that they are able to cope with the unexpected. *“Action researchers need to observe the action process, the effects of action (intended and unintended), the circumstances of and constraints on action, the way circumstances and constraints limit or channel the planned action and its effects, and other issues which arise.”* (Kemmis & McTaggart, 1992, p. 13) Observation is a necessary stage because with the observation and recording techniques lie the foundations for the critical stage of action research, that of reflection.

### ***Reflection***

Looking backwards to the past and forward to the future are both critical components of the reflective stage. Skills needed in this stage include: analysis; the ability to recognise the crucial elements, synthesis; developing systems and theories, interpretation; being able to explain from differing viewpoints, explanation; being able to tell others, and the ability to draw conclusions (Kemmis & McTaggart, 1992). Critical analysis is the term used by Altrichter et al. (1993) to describe this stage. Altrichter and colleagues suggest that not only should the researcher be looking for confirmations of their beliefs but also for any evidence which does not support them. They further suggest that the participants need to be totally honest in this critical analysis and challenge their own and the social group’s most closely held beliefs.

Winter believes that in order to critically analyse we need to reflexively critique, which is to examine one’s own beliefs so that one is aware of what is ‘guiding’

the criticism (Winter, 1989). He says that when an individual proffers an opinion they are doing so in the belief that others listening to what they say have a shared interpretation of the concepts, values and understandings. The individual chooses their language for expressing their opinion based on their belief that the listeners have the same language understandings. However, this might not be so. Therefore, what has to happen is that the participants have to examine what their shared understandings are before they can comment on the opinion.

Finally, Kemmis reminds us that reflection must be a group process amongst the participants of the research, so that through discourse there is a reconstruction of meaning of the situation and further planning is able to happen. Consequently, in this research the role of the 'critical friend' is essential.

### *Cycles and Spirals*

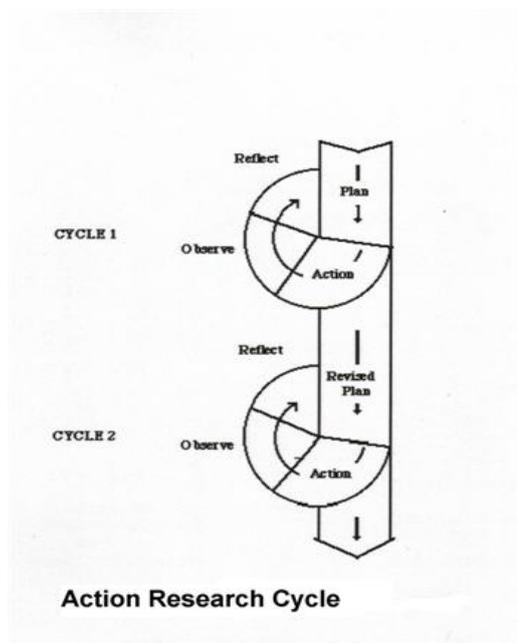
The cycle in the Deakin model of action research consists of the four stages of planning, acting, observing and reflecting and the stages are considered to be integrated and collaborative. The cycle is considered necessary because it assists the practitioner to change rather than just to evaluate and interpret, although these skills are a part of action research. The cycle also gives a structure to the process of change and ensures that when change occurs it is as a result of reflective thinking rather than a surface interpretation (Carr & Kemmis, 1986). Finally, the cycle is considered to be flexible and responsive, allowing for both changes in process during the cycle and changes in understanding, because it is not possible to anticipate everything during the planning stage (Poskitt, 1994).

The spiral concept in action research is historically based but has been refined by various researchers, notably Kemmis in his writings on Participatory action research (Kemmis & McTaggart, 2000). What the spiral purports to do is to assist the practitioners to refine their research and to give them the flexibility to research areas not known at the start of the project. For instance, at the conclusion of a first cycle there may be several matters that arise which the researcher considers worthy or essential for further exploration. In a traditional approach these matters would have been reported in the literature and either ignored or perhaps picked up by another researcher. Wadsworth considers that

this could be construed as an ethical matter and action research assists this because it allows for immediate follow up (Wadsworth, 1998).

The spiral approach also allows for more than one participant to conduct parallel investigations within the cycle and to bring them back for reflective critique by a group. This would generally happen in the second or subsequent cycle as the actions of the first cycle were reflected on. Finally, it is suggested by several authors that change often only comes after two or more cycles (Altrichter et al., 1993; Webb, 2000; Winter, 1989).

**Figure 1. Deakin model of action research**



This schematic view of the Deakin model of action research contains the four basic stages of the cycle, plus it demonstrates how the reflection of the previous cycle leads into the planning of the subsequent cycle. In comparison, a cycle schema detailed by Cardno (2006) has only three main stages but with several actions within each stage. From an identification of the issue the cycle begins with a reconnaissance stage in which investigation and analysis of the issue take place. The intervention stage is next in this schema with planning and action occurring. Finally, a stage of evaluation is reached in which reflection on the process and the outcomes takes place. As with the Deakin model, the reflection stage usually leads to a further cycle. Cardno used her cycle in a research study

in which the classroom was not the focus, and observation of the implementation of an intervention was not necessary (Cardno, 2006). However, with a classroom this stage is crucial, and so the Deakin model is preferred for the current study.

Regardless of the variant used, *“at the heart of action research is a methodology that encourages teachers to raise questions about theory and practice and encourages evaluation of teaching through systematic enquiry. The active involvement of the classroom teachers in action research can create knowledge that is both personally relevant and meaningful to teachers, qualities often missing from research generated by others.”* (Burbank & Kauchak, 2003, p. 500)

### ***3.6 Ethical issues in qualitative research carried out in classrooms***

Good principles for the conduct of research and trustworthiness in interpretation of the data are two important factors when considering ethical issues in qualitative research. (Fossie et al., 2002) These ethical factors are discussed in the following paragraphs.

#### ***3.6.1 Principles of human research***

Research centred around, and in, a classroom whether by an ‘insider’ teacher-researcher (a teacher conducting research in their own classroom) or an ‘outsider’ researcher (someone from outside the school) invades the participants’ (those being researched) space and time. It also involves risks to the participants with privacy, confidentiality, consent, access, trust, disclosure and reciprocity considered risk areas (Danby & Farrell, 2004; V. Robinson & Lai, 2006; Tickle, 2001). Consequently, ethical safeguards based upon principles of human research, respect for persons, beneficence and justice, circumscribe any classroom research (Roberts, Geppert, Coverdale, Louie and Edenharder, 2005). The ethical safeguards discussed in the following paragraphs are not rules but rather guides to good and safe practice, because at times the safeguards themselves may contradict one another in certain situations, and no rule can cover all situations that might occur during the completion of a research project. Further, some writers have suggested that the guidelines described below are in need of overhaul because they depend on notions of value free and value neutrality research and, as social

research is neither, an entirely new model of research ethics should be constructed in which “*human action and conceptions of the good are interactive.*” (Christians, 2000, p. 149)

With only guidelines to assist with ethical decision making in classroom research, the values of the researcher become important because they have an influence on how the guidelines are applied (Greenbank, 2003). Greenbank suggests that there are four values affecting ethical decision-making and they are moral, competency, personal and social values. In his article on the role of values in educational research, Greenbank considers how these values affect not only ethical decisions but also the methodology chosen. He considers several solutions to the dilemmas around values and ethical decision-making and proffers that the best solution is for the researcher to adopt a reflexive approach.

Reflexivity is a state in which the researcher is consciously aware of their values, beliefs, prejudices and practices, and seeks to examine them in the same critical manner as they would the rest of their data (Mason, 1996 as quoted in Guillemin, 2004). Therefore, the researcher is advised not to “*waste time trying to eliminate ‘investigator effects’: instead she should concentrate on understanding those effects.*” (Delamont, 2002, p.8)

Being aware of one’s beliefs and values is crucial when seeking informed consent from participants in educational research, because the participants should be briefed, comprehensively and accurately, before they give their consent (V. Robinson & Lai, 2006). “*Informed consent is at heart an interpersonal process between researcher and participant, where the prospective participant comes to an understanding of what the research project is about and what participation would involve and makes his or her own free decision about whether, and on what terms, to participate.*” (Guillemin & Gillam, 2004, p. 272) Further, gaining consent is not only a task performed at the beginning of research but renewed at appropriate junctures e.g., just before beginning an interview. Consent must be given without any form of obligation attending to it or power over it.

A child giving informed consent is a matter that has implications for this current research. According to Homan (2001), many researchers in education bypass the children and obtain the consent from their parents or their teachers/head-teachers, which he refers to as gatekeepers. Danby and Farrell (2004) consider that researchers who do this have adopted a developmental stance that sees children as undeveloped adults and not capable of making decisions about matters which provide some risk for them. Their belief is that “*children are competent interpreters of their everyday worlds*” and, therefore, capable of giving consent (Danby & Farrell, 2004, p. 35). Homan also believes that children are capable of giving consent but then outlines some five guidelines for ‘gatekeepers’ (Homan, 2001, p. 340). One has to ask that if Homan believes children are capable of giving consent why bother to have gatekeepers at all and guidelines for them. In this research, I took a view that in seeking the consent of the children, I should at the same time also seek the consent of their parents.

Informed consent was gained from all participants in this research. Oral and written information was provided to teachers, parents and children (See Appendices A & B). A written consent form was subsequently provided for signature (Appendices C, D & E). Ongoing consent was verbally sought at certain junctures. For instance, I sought ongoing consent of the two participating teachers, at the end of the first year because I had not finished the research. I also re-sought permission to interview from all participants prior to beginning the interview. Whilst it could be argued that the teachers felt an obligation to me because they knew I was not finished with the research, and that the children were in a power in-balance situation, I believe that each participant understood that they could withdraw at that point of asking.

Within this particular research there were opportunities for conflicts of interest to occur. My professional role was known to the two participating teachers, to many of the staff and to several parents. In order to maintain a separation of roles, I insisted that any matters related to the organisation that employed me and the school, be referred to another colleague who had agreed to perform this role during the duration of my research. Further, apart from assisting with suggestions during the teachers’ action research projects, I gave no professional

advice around educational matters relating to the progress of individual children. There were, however, occasions when general discussions around classroom activities took place.

Having gained informed consent the researcher is then required to ensure that no harm to the participants arises out of their research (V. Robinson & Lai, 2006; Snook, 1994). This is part of the second principle of human research: beneficence. In educational research harm is unlikely to be physical. Rather, factors related to psychological and emotional harm have to be addressed. Harm is also seen not only in the actual conduct of the research and the methods used e.g. participant observation, in-depth interviewing, but also in the write up where issues of confidentiality must prevent the participants from being individually or collectively identified, unless this has been previously negotiated (Guillemin & Gillam, 2004). It also means that any adverse information gathered or disclosure made during the interactions with the participants must be discussed with them and not used unless specific permission has been given. From time to time agreeing to keep disclosed information confidential may prevent an educational researcher from addressing a professional issue, assisting a participant to resolve a difficulty or to inform a wider audience about a specific finding (Tickle, 2001). Therefore, when weighing up ethical dilemmas within qualitative classroom research one has to be aware that conflicts arise and reflective thinking and consultation must both occur.

Justice is the third ethical principle. Subsumed under this principle are a number of guidelines relating to both the benefits and burdens of research (Christians, 2000; Guillemin & Gillam, 2004). Of particular interest to this research was the need to ensure that any benefits that arise from the results are equally applied to all children who could benefit, and not just to one group. One of the motivating factors of this research was a wish to research ideas that would assist professionals to, in turn, assist teachers to better meet the needs of all children for whom they were responsible.

The problem with ethical principles is not in understanding them but in their application (V. Robinson & Lai, 2006). The preceding paragraphs have

contained a discussion around ethical principles both in terms of their general application and their particular application to this research, dimensions that Guillemín and Gillam (2004) refer to as procedural ethics and ethics in practice. In the following paragraphs ethical matters are further examined in terms of ensuring the trustworthiness of qualitative data. This is so that the consumer of the research might have confidence as to its validity.

### ***3.7 Ensuring the trustworthiness of qualitative data***

Those researchers who favour the positivist research methods and its quantitative data often criticise qualitative studies as “*anecdotal, unscientific and entangled with the opinions of the investigator.*” (Nastasi & Schensul, 2005, p. 178) Nastasi and Schensul consider that what is more important is to find out what the research question is and what is the best method to use in gaining answers to that question. However, they acknowledge that it is important that what qualitative research presents as its findings is considered to be trustworthy i.e., having validity. They list 10 techniques for ensuring trustworthiness: prolonged engagement, persistent observation, triangulation, member checking, peer debriefing, negative case analysis, reflexive journal, thick description, audit trail, and referential adequacy. It is my intention in the following paragraphs to detail how this research met some of these techniques following the example of Siegel, a fellow researcher, who studied cooperative learning in the classroom (Siegel, 2005).

Whilst Nastasi and Schensul (2005) do not give a time-frame to what they consider is prolonged engagement, they do suggest that sufficient time is invested in the research to ensure a true understanding of its complexities. As will be detailed in the results’ chapters, this research was conducted over two school years with frequent visits to, discussions with, and observations of the participants.

Persistent observation is described by Nastasi and Schensul (2005) as being where observable happenings are followed up carefully so that the researcher is relatively certain that they have identified typical and atypical cases. In this research, this was partially accomplished by re-interviewing the teachers to

discover similarities and differences in their practice over a 12-month period. Actions noted during the observation periods became the cue for questions in informal discussions with the teachers during visits. Although the children in the study changed during the two years, the observations and interviews assisted in drawing out what was, and was not, typical practice in the classrooms. Similar questions were asked of both sets of children.

Triangulation was achieved in the research by using different methods of obtaining data, checking the responses of various participants with one another and matching my observations with the perceptions and assumptions of the various participants.

A research journal was kept particularly in the earlier stages of the data gathering. As well as noting down what happened and in what circumstances, I detailed some observations that could not be verified immediately. Informal discussions were held around the observations so as to make sure that what I had believed I had observed had actually happened.

Whilst a formal process of peer debriefing did not occur during the data collection and analysis, many informal discussions were held with colleagues around what had been seen, heard and interpreted. As well as assisting with my analysis of the data it was also helpful when colleagues confirmed that they, too, had observed similar happenings in other settings. Regular meetings were held with my research supervisors, who were able to advise and guide me around aspects of the research, particularly where the research did not follow the original plan and modifications had to be made. Twice I made formal presentations to professional colleagues around aspects of the research. Making these presentations assisted me to come to terms with the difficulties inherent in each topic and to adopt a stance on each.

Member checking was achieved in part by forwarding the transcripts of observations, interviews and questionnaires back to the participant teachers for their comment, reaction and correction. As will be shown in the results section this sharing of data with the teachers had the effect of modifying, in a small way,

their practice. Transcripts of interviews were also shared with the children who were interviewed so that they could ask that they be amended because of errors or because they wanted to add information.

Finally, all the transcripts and records gathered during the research have been kept so that they could be reviewed by a fellow researcher to determine that there was a sound basis for the analyses that I formed. In such a manner an audit is possible.

### ***3.8 Summary***

Following a consideration of positivism and interpretivism, an examination of critical theory ensued. The four interrelated elements of Critical Theory provide a strong theoretical base for a research project that focuses on how two teachers meet the diverse needs of students. Consideration of an ecological framework, a classroom focus and translation of research into practice, together with critical theory, led to a choice of action research as the research method.

Following an outline of the history of action research and its variants, a consideration of the Deakin model was undertaken because of its emphasis on change through emancipation and its concern with environmental and social issues. A detailed examination of the model then followed. Ethical issues in research in classrooms were then discussed. To ensure the trustworthiness of the qualitative data that this research would generate, steps to be taken were detailed.

Whilst this chapter detailed the considerations undertaken to choose a method and describe it, the next chapter considers the practicalities of implementation through the research design elements.

Chapter 4

## **Methodology in practice: Research design elements**

### ***4.1 Introduction***

The theory of the chosen research design, action research, was considered in Chapter 3 together with an outline of its essential features. Chapter 4 takes each of these elements and describes how they were used to conduct the research.

### ***4.2 Setting***

The research was conducted in two classrooms in a large, urban, decile 5 school on the east coast of the North Island of New Zealand.

The school self-selected into the research through the following process. Once the research proposal and the research had ethical approval through the university, an invitation (Appendix F) was sent to all schools in an urban area that were known to the researcher as having disabled children. Two schools that were willing to become involved replied to the invitation. The school that was chosen had an advantage over the other in that it had several teachers who had identified disabled children. It was considered that having two teachers and two classrooms involved would allow for a richer source of data to be gathered, and for comparisons between teachers and classes to be examined which would contribute to the data.

An initial visit to the school was made. A meeting was held with the principal and the Special Needs Coordinator (SENCO). An explanation was given as to the outline of the research and the level of interaction that the researcher would like with the teachers and classes. Copies of the Adult Information Sheet (Appendix A) and the Child Information Sheet (Appendix B) were left with the school personnel to discuss the request with their teachers.

A second meeting at the school was held a few weeks later at which were present the principal, SENCO and the two volunteer teachers. An outline of the research proposal was re-presented and teacher questions were answered. Subsequent to

this meeting I received a telephone call from the principal to say that one of the teachers had withdrawn but that another volunteer had been found. The reason given for the withdrawal of the teacher was the amount of time that I wanted to spend in the classrooms. A further meeting was held at the school with the new volunteer and she agreed to take part.

The principal of the school gave consent for the research to take place. The Board of Trustees was informed about the research study by the principal in his regular monthly report.

### ***4.3 Participants***

Both of the class teachers taking part in the research were women and New Zealand European. The older teacher, Tina (pseudonym), had been a teacher for a number of years but had only recently returned to full time teaching. Her class was, at its largest, 28 children and they were new entrant children. There were 13 boys and 15 girls in the class. Ethnically the class contained 20 New Zealand European children, five Maori children, two Samoan children and one Vietnamese child. The children had a variety of abilities with an identifiable group of five children who needed extra support to assist with their participation and learning.

The second teacher, Janine (pseudonym), was a young woman who had been teaching for two years. She had a degree in education and had some knowledge of action research from her pre-service education. She had a mixed ability class of 35 Year 5 and 6 children. Ethnically there were 17 Maori children, 15 New Zealand European children, one child from South Africa, one child from Canada and one child who was Korean. In the class there was also a pupil who was verified as having High Needs in the Ongoing and Reviewable Resourcing Schemes (ORRS)<sup>3</sup> who was assigned extra teacher and para-professional assistance. There was also a further group of five children who needed significant modification of the curriculum in order to ensure their participation and learning.

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<sup>3</sup> See Glossary

These two teachers began to walk to school together, discuss their classes and the research, help one another with ideas, and in the second year of the study the older class provided tutors for the younger class, in reading. They both acknowledged that being participants in the study was probably a catalyst to their friendship. The friendship also contributed to the smooth running of the research in that they kept one another abreast of developments in their own classes, were able to anticipate future directions and helped one another with tasks (e.g., reflection journals requested by me).

Several of the children in the senior class, each year, took part in interviews around their perceptions of what occurred in their classrooms. These children were chosen by the teachers as representing a mix of abilities and behaviours in each class. Some of them proved to be quite articulate whereas others found the process of answering questions about the interactions in the class to be difficult.

Parents of the children in the two classes (2004) and some of the other school staff (2004) took part in a questionnaire based upon the Index for Inclusion (Appendix G). As well, interviews were held with two parents of target children at the end of 2004.

#### ***4.3.1 Consent***

Both teachers gave their consent formally by completing the Adult Consent Form (Appendix C) following my initial discussions with them and their reading of the Adult Information Form (Appendix A).

After receiving consent from the two teachers to conduct the research in their classrooms I gave them: further Adult Information Sheets for the parents to read, Child Information Sheets (Appendix B), Parent Consent Forms (Appendix D), and Child Consent Forms (Appendix E). A copy of each of these forms was in an envelope and the teachers were instructed to ask the children to take the forms home, have their parents read them, and return them to school. Extra envelopes were available for the teachers to distribute to children or parents who had mislaid the forms. Eventually after a few weeks all the forms were returned with five

parents in both classes asking that their children not be included in the study. Any action or result by those children was not recorded. For the action research cycle conducted in 2005, only the target children were given the forms and consent was sought from both children and parents.

#### ***4.4 Data gathering tools***

##### ***4.4.1 Introduction***

Cycle 1 of the second order action research study, my research, was designed to gather data about the “inclusiveness” of the two classrooms’ pedagogy and the contextual factors that impacted on the teachers’ ability to provide for the learning of all of their students (Research Question 1). Knowing the ecology of the classrooms, therefore, becomes critical because it can influence the progress of the research study and its outcomes. Further, in this action research study, it was also important for the participant teachers to have valid and reliable information from which to choose a practice or knowledge concern with which to begin their own action research studies (see Section 3.5.3).

Gathering information about the ecology of the classroom also allows for the researcher to build up trust with the teachers as a relationship of trust is necessary for the teachers to take risks with their practice, reflect on their practice and trial new ideas. Consequently, each data gathering tool was chosen because of its ability to: contribute to the ecological knowledge of the classroom, assist in gathering data which would help in answering the research questions, give overlapping data so that triangulation was possible, encourage the teachers to view the information in a manner which would encourage them to question their values, beliefs, prejudices and practices, and provide data from which to formulate a research question for their own classroom studies. A comprehensive knowledge of the classrooms was required and so this study took the advice of Nastasi and Schensul (2005) who said that, “*Qualitative researchers make use of multiple sources of data to represent the range of viewpoints that characterise the emic perspective of the target population...*” (p.183)

#### **4.4.2 Questionnaires**

As with all data gathering tools, questionnaires have acknowledged strengths and weaknesses. A particular strength of the questionnaires used in this study is that they were able to be constructed for different audiences but sought similar information (Cohen et al., 2000). In my study, I used three versions of a questionnaire targeted to parents, school staff and children seeking information about pedagogy. Further, I was able to build on an additional strength by including a Likert scale which built in a degree of sensitivity and differentiation. The inclusion of the Likert scale enabled the respondents to have a greater ability to offer an opinion than they would have if a simple Yes/No response was sought.

Anonymity of respondent is both a strength and weakness of a questionnaire. For the respondent, being anonymous means that they are free to reflect their true opinions about a matter without having to reveal it publicly. For instance, children in this research revealed a concern around bullying that was not revealed by either the parent or staff respondents. However, such anonymity is also a weakness because it is difficult for the researcher to follow up on issues raised either individually or collectively.

Researcher bias in the construction of a questionnaire is also viewed as a weakness by Cohen et al. (2000). Such bias may have been a factor in this study because, although the questionnaire was modelled on another data collecting tool, I made some choices as to which items I would use. That different respondents may interpret the same words differently is also viewed as a weakness in using questionnaires, as there is no mechanism to check this, as compared to interviews where a researcher is able to probe for further meaning. Provision for this limitation was made in this study by including a choice labelled, “*need more information*”. Ensuring a return rate large enough to give useful information is also considered a difficulty for questionnaires. In this study the return rate from parents and children was very high (see Section 5.2) because there were incentives for the children to return their parents and their own forms. However, the return rate from the staff was only fair.

Having understood the relative strengths and weaknesses of questionnaires, I chose to use them to access information, particularly from parents that would have been difficult to obtain in an expedient manner by other means. The three versions of the questionnaire also permitted me to compare the views of the three groups of respondents, and later to triangulate data from the staff and child questionnaires with individual interviews.

The Index for Inclusion (Booth & Ainscow, 2002) was the model for the questionnaires used in this research. Whilst the Index for Inclusion is primarily a self-review tool, it does lend itself to adaptation into a questionnaire. Permission to do this was obtained from one of the authors (T. Booth, personal communication, August 18, 2003). Questionnaires were sent home to be completed by parents of children in the two research classes (Appendix G), distributed to the school staff to complete (Appendix G) and to the children in Janine's class (Appendix H). It was not given to the children in the New Entrant class as they would be unable to read it, and to invite an adult to interpret it for them could compromise the results.

Each questionnaire contained two sections: school and classroom. Whilst the statements or indicators in the questionnaires were taken from the index, they were modified, where needed, to particularly apply to the school and classrooms in which the research was being conducted. Teachers and parents were asked to rate a statement (e.g. "----- *School celebrates our culture and our community*") by marking one of four boxes: definitely agree; agree to some extent; disagree; need more information. Children were asked to circle a face which represented Yes (☺), Not sure (☹), and No (☹). One of the statements was deliberately reversed in the child questionnaire to ensure that the children did not just mark the same face in one column.

#### ***4.4.3 Assessing the class social networks (Sociogram)***

*"Learning is a social process and children learn best in the context of able peers"* (Lyle, 2004) p.5. Whilst this author asserts a positive statement about the social learning of children with special education needs, an analysis of research reported in 2002 suggests that the research is equivocal about whether this happens

(Nakken & Pijl, 2002). Nakken's analysis found studies that tended to support the statement above and others that did not. However, none of his studies reported that children with special needs were worse off when in mainstream settings with their able peers. In this current research, as part of gathering information about the classroom environments, I wanted to determine whether all the children had friends. Having friends is generally seen as a part of being accepted within a school environment and, therefore, assists with participation and learning (Grenot-Scheyer, 2004; Woolley, Armitage, Bishop, Curtis & Ginsborg, 2006). Where there are positive peer relationships, students feel safe to contribute, to learn from each other and take risks with their learning (Bevan-Brown, 2006). Without risk there is little growth in learning.

While observation and interview may have obtained useful information about friendship patterns within the classes, the use of a sociogram is recommended as being more efficient and giving better information of friendship choices, groups, 'stars' and 'isolates' and a fair measure of the social cohesion of the class (Leung & Silberling, 2006; Markus, 1980; Sale & Carey, 1995; Salend, 2000).

One of the strengths of using sociometric techniques is that they are simple to use and can be used frequently (Leung & Silberling, 2006). As such, they can be used to track changes in friendship patterns; for example, as a result of an intervention designed to raise the level of inclusion within a class. Leung (2006) also believes that sociograms are a good measure to triangulate teachers' perceptions of how well children are included within a class.

However, children's preference change over time is also viewed as a disadvantage of the sociogram (Sale & Carey, 1995). These authors advise that sociometric data is only a snapshot in time. They caution that preference change is most predominant in primary school aged children.

An asset of sociometric techniques is that they can be uni- or bi-directional, depending on the nature of the enquiry (criterion) (Leung & Silberling, 2006; Sale & Carey, 1995). For example, it is possible to ask questions about children's likes, dislikes, or both, which can then be plotted into a table (sociomatrix) or

drawn on to a map (sociogram). For a detailed example of each refer to Hoffman (2001) or Markus (1980). Whilst historically the actual plotting of results is referred to as a sociogram, currently the term is generally applied to the whole process (Hoffman, 2001; Leung & Silberling, 2006; Salend, 2000).

Having considered the strengths and weaknesses of the sociogram, I decided to administer one to both classes towards the end of the second term of the first year of the project (see Appendix I). This time was chosen because the children had had six months together in the class and it was expected that friendship patterns would have developed. Specifically, I was interested in the whole class patterns and also the friendship relationships of those children who were challenged by their academic learning. Whilst some authors suggest that the questions in a sociogram reflect both peer likes and dislikes (Salend, 2000), I decided to only ask a positive value question as I was interested in the patterns of the friendships rather than social contexts in this instance. A question about playing with non-friends was included in the children's interview.

In the Year 5 & 6 class, the children were given a written form to complete (Appendix I) whereas, in the new entrant class, I administered the sociogram orally to each child. An analysis of friendship patterns was completed through plotting on a map, sharing the maps with the classroom teachers and discussing and reflecting on interesting patterns of friendship (see Section 5.4).

#### **4.4.4 Interviews**

Because a move to a more inclusive model of education can require some fundamental pedagogical changes within the school and classrooms, it is important to listen to the school's stakeholders so that they "*can assist in identifying key components of successful inclusion programs and in identifying barriers to inclusion.*" (Wilczenski, Barry-Schneider, Reddington, Blais, Carreira & Daniello, 1997, p.2) Encouraging students, teachers and parents to talk about their thoughts, experiences, beliefs, preferences, viewpoints and opinions can be facilitated through the use of the interview technique (Salend, 2000). Interviews can be open, structured or semi-structured or a combination of all three. The interviews that were conducted during this research had a base set of questions

which all participants were asked, but there was an ability to ask supplementary questions or seek clarification if the answers given by the respondents suggested that there was further important or interesting information to be gleaned.

Whilst questionnaires are highly structured and seek a breadth of views around a topic, interviews are less structured and offer the ability to gain in depth views of chosen individuals. Further, a strong point of interviews is that they allow the researcher an opportunity to clarify with the interviewee opinions that are not clear or lacking in detail. Interviews also allow for the immediate exploration of innovative or interesting answers to interview questions. Cohen et al. (2000) consider that because of the relationship between interviewer and interviewee, the interview is not just about collection data on life, it is a part of life.

Because interviewee and researcher are in visual proximity, they are able to use social cues to assist them in the interview. Both can respond when an emotion is visually displayed through body stance, facial expression or hand movement. For the researcher, such visual cues add to the richness of the participant's responses and give more comprehensive data. Nastasi and Schensul (2005) consider that one of the features of a qualitative enquiry is its ongoing, iterative and participatory nature. Interviews conducted with critical participants contribute to these qualitative features.

Bias in interviews is both a strength and a weakness. Being able to record the personal opinions of an individual about the factors under consideration gives a research study data that is unique and detailed. It can also be emancipatory for the participant where they are free to offer opinion, prejudice and assumption knowing that they are being listened to and their utterances are valued. When investigating classroom ecology, such individual data is crucial. However, biases of researcher and participant need to be controlled, alternative views need to be sought where possible and the questions asked need to elicit the participant's views rather than reflect those of the researcher. Where the researcher has a bias, this should be communicated, both to the participant and to any potential reader.

Because the interviews in this study followed the classroom observations and the questionnaires, it was possible to elicit further information about some of the findings from those data gathering tools. Not only did this allow for clarification and analysis but it also permitted triangulation of data.

Formal interviews were conducted with the teachers twice, once in 2004 and again in 2005, with selected children twice, once in each year, (see Appendix W for a completed child interview), and with two parents of the senior class in 2004 (Appendix K). Informal discussions were held with all participants at times and some of these were written down or noted in the research diary. (For completed teacher interviews see Appendices L, M, N and O).

Seeking the voice of the children was an integral part of this study. Whilst observations might have given an impression of what occurred in the classrooms, it did not give a full picture. The use of questionnaires added to the picture but there was no opportunity for the child to ask questions, seek clarification or give extra information to the researcher. We are also reminded that we should not make assumptions about what children think without asking them (Jones, 2005). The children's interviews, in both years, occurred after I had visited the classrooms many times and had interacted with the children.

All of the formal interviews were taped, transcribed and given back to the interviewee for them to amend or add to the information gathered. Ongoing analysis of the interviews was undertaken so that emerging trends could be further investigated.

### ***Respect for persons***

In interviewing the children I was conscious of a need to make sure that their person was respected. The children in the new entrant class were interviewed individually in the teacher's office at the back of the classroom for the interviews, and in a cloak bay for the sociogram. In both situations, the children were able to be viewed by their peers and the teacher through an open door. The senior pupils were interviewed individually in an interview room adjacent to the school reception area. Both of the school administration officers and any other adult in

the area were able to view the children through a glass pane in the door of the room.

In all cases, the children were given the opportunity to decline to take part. This was the first question that I asked in each interview. It is acknowledged that there is still a power imbalance in this situation. However, it was hoped that my presence in their classrooms prior to the interviews would allow them to feel safe to refuse to take part if they were concerned. Following the interviews, each child was asked to tell their parent that they had been interviewed and a transcript of the interview was given to them, at a later date, to take home. While this means that the children's interviews were not confidential, I considered that the parents needed to see these transcripts and, if they were unhappy with anything that their child had said, then it could be ignored in the analysis.

#### ***4.4.5 Document Analysis***

An analysis of school documents is one method of discovering how the school officially views matters relating to pedagogy. The purpose of developing these documents is that schools are required, by the Ministry of Education, to consult with their community about various matters and record those consultations formally. Not only do they give a local flavour to pedagogical matters, they also inform the external and internal stakeholders how the school officially views the subjects of the document. Whilst it is interesting to discover what this public view is, it is of equal interest to discover how the public view measures up with what is happening at the classroom level. Of further interest is whether the teachers, and other staff, have read relevant policies.

Some writers have suggested that all school documents should be analysed in certain situations, especially when attempting to demonstrate that a new programme or service has made a difference (Salend, 2000). Such documents as teacher plans, student report cards, individual education plans and student work books are all suggested as possible documents that might be analysed. In this research, only one official school policy document was analysed. This was because I wanted to discover the nature of the guide that was available to the staff to assist them with managing their paraprofessional assistants.

#### ***4.4.6 Demonstrating child progress***

Children's academic progress can be monitored in various ways, including interviewing each child and observing their progress as they attempt curriculum tasks. Student journals and logs, portfolios, standardised assessment and authentic performance-based assessment are also options (Salend, 2000). However, any data gathering tool used to harvest information about academic progress must have both face validity for the teacher, and be relevant to the curriculum area under review.

As well as the obvious need to measure academic progress to demonstrate that an intervention was successful, an equally important purpose arises if teacher change is a desired outcome. Teacher change is part of a cyclical process and a crucial stage in the cycle is for the teacher to have student data on which to reflect. Both Guskey (2002a) and Roettger (2006) posit that only where there is data which demonstrates that the students have improved, will a teacher sustain any changes in practice that they have made during the implementation of the intervention.

Therefore, bearing in mind the need for face validity, curriculum relevance and data demonstrating student improvement, negotiations began with the teachers to choose their data gathering tools for their action research projects. The advantage of having several data gathering points was communicated to the teachers and they subsequently planned for them. In the new entrant class the teacher used three tests. From "Reading: the patterning of complex behaviour", (Clay, 1979) Tina chose a test of alphabet knowledge and a test of basic word knowledge. To determine the level of the writing stage reached, an informal assessment tool was constructed by Tina from exemplars provided by the Ministry of Education and personal knowledge of the development of early writing skills (Appendix P). Researcher guidance was provided in the construction of this informal assessment tool.

In contrast, in the senior class, the teacher, Janine, used two measures of time: length of time to start a task and average length of time on-task, and one of the number of times the students were 'off-task' during the required activity. Both

sets of measures were appropriate to the outcomes that the teachers set for their projects and also met the requirements of validity, curriculum relevance and data demonstrating change.

#### **4.4.7 Observations**

Observational data are attractive and useful to researchers because they enable, “*researchers to understand the context of programmes, to be open-ended and inductive, to see things that might be unconsciously missed, to discover things that participants might not freely talk about in interview situations, to move beyond perception-based data (e.g., opinion in interviews), and to access personal knowledge*” (Cohen et al., 2000, p. 305). Alongside these strengths, observation is also a data collection tool to use when constructing a montage of the ecology of the classroom, because it is capable of giving both novel information and information which can be used in triangulation.

A variant of observation, participant observation, where the researcher participates in the environment being observed, has a major forte. It allows the researcher to experience the ‘*life*’ of the environment and become accepted, over time, as a ‘*member of the group*’. In this study, this was an important consideration as, through becoming accepted as a member of each of the classes I was studying, I was able to develop a level of trust with both teachers and students which facilitated later data gathering by the researcher and risk taking by the teachers.

Bogdan and Biklen (2007) caution researchers about getting too involved in classroom activities when acting as participant observers, particularly as the field work begins. The authors suggest that initially the participation should be minimal with the focus being on observing what is happening in the environment. As the relationships develop the researcher can become more participatory but must always keep the purpose of the study to the fore. Participant observation also permits the researcher the freedom to follow interesting ‘*leads*’ as they observe what is happening in a classroom (Bogdan & Biklen, 2007). For instance, noticing that certain students are prevented from full participation in the activities of the class might encourage more observations around that phenomenon and, in turn, formulate future interview questions. Such flexibility

during observation is a major strength and necessary in a complex environment such as a classroom.

Whilst observation, in its various forms, has a number of strengths which recommend the data gathering tool to observers, there are factors, which if not controlled, could be viewed as detractors. In any community, the introduction of an ‘outsider’ has an affect on the typical interactions that take place. In a classroom, for instance, the children may become subdued or very unsettled. Over time, such researcher effects should dissipate but, if the researcher suspects that what they are observing is negatively affected by their presence, they need to discuss this with the participants to ascertain how the affect can be overcome. Further, observations do not capture information which is related to the person in terms of opinion, prejudice, assumption or belief and, therefore, on their own they are insufficient to build a comprehensive picture of the community. Other data gathering tools need to be used to supplement and enrich the data, preferably following the observations.

Cohen et al. (2000) sum up the major reason for the use of observation within a qualitative study when they state that, “*The qualitative researcher seeks to catch the dynamic nature of events, to seek intentionality and to seek large trends and patterns over time.*” (p. 306)

In this research, all the observations were participant observations and focussed on the classroom interactions by writing down what the researcher observed. Prior to observing in the classrooms, a ‘trial’ was attempted in another school to see if audio equipment could be used to capture the vocal interactions of the members of the classes. Unfortunately, the audio equipment available to the researcher was not of sufficient power to record voices in a noisy classroom. Manual coding of the transcribed data was also initially trialled but after the researcher had been trained in N’Vivo (QSR International, 2004) for another research project, coding was documented through N’Vivo (see following Section 4.5). Following the class visits, transcripts of the observations were made and emailed to the teachers for their information, comment, audit and reflection.

#### ***4.5 Data Analysis using N'Vivo***

N'Vivo (QSR International, 2004) is data analysis software which assists the researcher to analyse their qualitative data. This is achieved where the researcher scans the data, identifies data of interest, attaches descriptors to that data of interest and is able to classify, sort and arrange the descriptors. Having scanned the data many times and attached descriptors, the researcher is then able to generate emerging themes.

Whilst it is not necessary, it is helpful to have some descriptors in mind before beginning the first scan. A descriptor (e.g., student assessment) is entered into the software with an explanation of its meaning. Each time a word, phrase, sentence or paragraph is considered to be an example of the descriptor, it is 'tagged'. For an example of tagged data please refer to Appendix Q. Over successive scans new descriptors can be generated from the data. Descriptors can also be classified into superior 'nodes' or units (e.g., classroom planning incorporating assessment, resource use, evaluation, goal setting). For a list of nodes and descriptors used to analyse the 2005 teacher interviews, refer to Appendix R. Reference to this appendix will also demonstrate superior and inferior nodes.

Following successive scans of a document, it is possible to sort the data according to the descriptor (see Appendix S). Such a sort assists the researcher to ensure that data ascribed to a node matches its description and permits an analysis of the varying instances of data relating to a particular node. For example, all instances of 'assessment' can be viewed, and further analysis can be undertaken relating to how often it occurs, in what settings it occurs and in what manner it occurs. Such analysis might lead to further nodes being constructed. It also assists with the construction of emerging themes.

Many emerging themes are constructed from one set of data (e.g. teacher interviews) but, as other data are analysed, some themes begin to assume a greater importance for the research. This depends on a number of factors, including their

relevance to the research questions, their suggestion of innovation and their relevance to the direction that the thesis is taking.

N'Vivo (QSR International, 2004) remains a software tool which greatly assists the analysis of qualitative data but the decisions around the themes to highlight and further explore remains with the researcher.

#### ***4.6 Critical Friend Role***

Encouraging teachers to plan and participate in their own classroom research imposed a responsibility for me to provide the teachers with support and guidance. In this research I did this by adopting the role of critical friend, while maintaining my primary role of researcher.

Several recent research studies report having used the critical friend role or recommended its use (Carrington & Robinson, 2004; Giangreco, Edelman & Broen, 2003; Salisbury et al., 1997). Giangreco sees the critical friend as, “*a knowledgeable individual who would be available to participate as a planning team member to provide perspectives ‘outside the system’.*” (p.76) Carrington & Robinson and Salisbury who both used the role in their respective research studies, list some of the duties that a critical friend might perform including: facilitator, dialogue developer, collaborative planner, self-reflection advocate, and consultant and research colleague. Carrington & Robinson suggest that in order to fulfil the role well, the researcher must get close to the teachers and earn their trust.

In this current research project the researcher, in his role as critical friend, provided several services to the teachers including: feedback to the teachers following the various data analyses exercises, development of a self-reflection exercise in preparation for the action research cycles, construction of a research proposal template to encourage the teachers to describe not only the methods of their research studies but also the reasons for conducting them, provision of some training around how to plan and conduct action research, visiting the classrooms at regular intervals during the action research cycles, and providing general support and guidance to them

Further descriptions of some of these services will follow in the procedures section (4.7). Dialogue was maintained by face to face meetings with each teacher, email and phone calls. Parallel with the critical friend role the researcher also conducted data gathering for the second order research. Discussions were held with the two teachers prior to them beginning their own projects around these dual roles of critical friend and researcher.

## **4.7 Procedures**

### **4.7.1 Reflection exercise**

Within any model of action research the reflective phase is very important because it is the primary catalyst to change. Whilst the Deakin model, as presented, might suggest that the four phases of the model occurs in sequence what happens in practice is often different. Reflection in various guises occurs throughout the entire cycle. Interventions can alter as a result of reflection-in-action, during the action phase, as well as a result of reflection-on-action at the conclusion of the cycle (Scanlan, Care & Udod, 2002). This ability to alter an intervention is a feature of the action research design.

Reflection on practice is said to contribute to a number of important pedagogical and personal factors for the classroom teacher, including increased job satisfaction and the ongoing quest of linking theory and practice (Page & Meerabeau, 2000). Teachers use tacit knowledge in their practice that they have developed from a variety of sources including experience, assumption and philosophy. Reflection is believed to assist with raising this tacit knowledge to the conscious so that the teacher is able to examine it and if found in need of change, the teacher will attempt to change it (Scanlan et al., 2002). Improving and maintaining the level of collaboration is viewed as a positive outcome of reflection where more than one person is involved in the reflection (Salisbury & McGregor, 2002).

A model which was used to guide the researcher in reflective thinking was a three tier model developed in New Zealand (Teekman, 2000). This model which was constructed from his research in nursing, contains three levels the base of which is

reflective thinking-for-action which is focussed on “*the nature of the situation, and choose from a range of options ... considered to be the most appropriate intervention*” (p.1131). In the classroom this would have the effect of facilitating the smooth running of a teacher’s programme allowing for problem solving and consideration of options. Issues of a technical nature including accountability and effectiveness would be considered by the teacher at this level of reflective thinking. Reflective thinking-for-evaluation, the second stage in the hierarchy, has as its main focus “*analysing and clarifying individual experiences, meanings, and assumptions in order to evaluate both actions and beliefs*”. (p.1131). Reflecting at this level allows the teacher both to understand their own practice and also their practice in relation to the totality of their classroom and school. In the practical situation of the classroom, the teacher would consider their own teaching, the students’ reaction to it and its success in terms of both the students’ achievements and the teacher’s own objectives.

At the apex of the hierarchy is reflecting for-critical-enquiry which is considered by Teekman to be emancipatory because it allows the reflector to examine the circumstances of their thinking and become reflexive. Here the tacit knowledge that guides personal and professional actions is considered. Whilst this level of reflection is desirable it is also difficult to obtain because it requires the teacher to stand aside from their teaching and consider the deeper and wider picture. It also requires them to consider attitudes, beliefs and opinions that may have been developed and shaped over a long period. Because inclusive pedagogy is about ensuring that all children are encouraged to contribute and participate, how the teacher structures the classroom environment to achieve this, will depend on what tacit knowledge is guiding their pedagogy. Being able to examine these deeper behaviours through reflection, therefore, becomes important.

Some cautions are also voiced around the practice of reflection. One such concern is that the teacher may have to alter some cherished practice or belief. Power imbalances can also inhibit the change that a teacher wishes to make following reflection and this may lead to frustration and a diminution of the practice of reflection (Page & Meerabeau, 2000). For example, the teacher might

wish to change a practice that is a long standing practice of a school dictated by the principal or a deputy.

Using a framework to guide reflective practice is suggested by some writers (Bulman & Schutz, 2004; Scanlan et al., 2002). As a template for the framework, Bulman & Schutz (2004) suggest that Gibbs (1988) reflective cycle is appropriate (see Appendix T). In the reflective cycle are six stages including: a description of what happened, the reflector's feelings and thoughts, an evaluation of the experience, an analysis of the experience, a conclusion (what else could have been done that was not), and an action plan (what could be done another time).

Although Bulman & Schutz (2004) stress that the framework is a guide and not a prescription, I decided that a reflection exercise prior to beginning their action research projects might be a worthwhile exercise for the teachers. The exercise was prescriptive in that it asked questions based on the reflective cycle above and because the teachers did not have the time or ability to undergo a more extensive training in reflection. Consequently, I devised a template (Appendix J) and asked that the teachers choose a classroom activity and reflect on it using the template. It was anticipated that completing this exercise in reflection would assist the teachers when it came to reflecting on their action research projects. Each teacher completed several reflections over a two month period. As a critical friend I fed back my thoughts as each reflection was emailed to me. I did this with each teacher as I visited their classrooms. As a researcher, I analysed the reflective journals for further evidence of the themes I was constructing or for emergent themes. The reflection exercise was Cycle 2 of the major research.

#### ***4.7.2 Proposal exercise***

Following the reflective exercise, I met with the teachers and discussed with them what classroom difficulty they wanted to explore using the action research. Over several weeks we discussed many ideas. Each time we met I encouraged them to narrow down the focus to one that was doable in the context of their classroom practice (M. Fisher et al., 2001). Finally, with some anticipation and trepidation, I asked them to complete a mini proposal (Appendix U). There were several reasons for requesting that the teachers complete a proposal. Conceptualising

what they were going to do in writing was the main reason for the exercise. I also wanted to ensure that the teachers had an overall view of the research that they were going to do.

Demonstrating that they had, or had not, made a difference was a further reason for requesting the proposal exercise. Such matters as the data gathering tools to be used, the timing of the data gathering, the reasons for using a particular tool and how many measures were important pieces of information to think about before beginning the project. One important piece of research method I wanted to ensure was that the teachers do some baseline gathering so that they had data against which to compare following the intervention. Doing this would be crucial to their research project.

Although the definition of inclusion that is guiding this research suggests that meeting the needs of all students is important, the teachers were encouraged to concentrate on a group of students whose learning needs were causing them concern. Not only did this make the research doable but it allowed for the teachers to focus their efforts.

Choosing an intervention that they considered might meet the group's learning need was a final reason for asking the teachers to complete a proposal. By having to write down what they intended to do it was hoped that they would be able to think through their intervention strategy and why they had chosen it. The proposal exercise became the planning phase of the teachers' first cycle of action research, and an action phase of the second order research.

#### ***4.8 Action research***

Within this research there were two separate action research projects: the primary action research project carried out by me and two action research projects carried out by the two participating teachers. The teacher action research projects were nested within the third action research cycle of the primary project.

#### ***4.8.1 Teacher action research***

The teacher action research proposals were completed towards the end of Term 2 of the second year. Following the completion of the proposals and further discussion the teachers were urged to begin their baseline data gathering so that they could implement their actions at the beginning of Term 3.

During Term 3 visits were made to each classroom and discussions were held with the teachers around the implementation of the action. At the end of the term a half day meeting was held with both of the teachers. Data had already been collected and the teachers were invited to complete an interim evaluation (see Appendix V for a completed sample). By completing the evaluation during the meeting the critical friend was able to assist with its formation. As well, the teachers exchanged reflections about their projects including the thoughts, feelings and learning that they had experienced. Reflecting within authentic contexts is viewed as an important concept because it gives a realistic framework to the process of reflection (R. Robinson & Carrington, 2002). Having a friend or colleague to reflect with is also considered important because it allows for one's reflections to be challenged and validated (Bulman & Schutz, 2004). Finally, the teachers were invited to consider how they might change their intervention strategy for the next cycle.

As in the previous term, several visits were made to the classrooms to view the intervention projects during Term 4. Of particular interest was the intervention in the junior class where the teacher had agreed, following a suggestion from me, to use peer tutors. A half day meeting was again scheduled at the end of the term to reflect on the second cycle of the action research. The teachers completed two reflection and evaluation forms: one specifically concerned with the second cycle and the other reflecting on the process of action research in a classroom. Although another cycle was not planned as part of this research, the teachers were asked to detail what they might have changed in their interventions had another cycle occurred.

**Table 1**

***Overview of Fieldwork Data Collection***

School Terms	Year One	Year Two
One	<p>Observations in classrooms</p> <p>Questionnaires to parents, staff and older children distributed and collected</p>	<p>Development of reflection exercises</p> <p>Preliminary analysis of data from teacher, child and parent interviews and feedback to teachers</p> <p>Discussion with teachers – action research and its elements</p>
Two	<p>Observations in classrooms</p> <p>Questionnaires collated and analysed</p> <p>Children’s sociograms in both classrooms</p>	<p>Reflection exercises by teachers</p> <p>Teachers develop proposals for their own action research studies</p>
Three	<p>Preliminary analysis of observations using N’Vivo</p> <p>Continuing contact with teachers and feedback on observations.</p>	<p>Teachers implement their first cycles</p> <p>Researcher visits classrooms and discusses research</p> <p>Reviews of first cycles by teachers and researcher and planning for second cycle</p>
Four	<p>Children’s interviews</p> <p>Parents’ interviews</p> <p>Teacher interviews</p>	<p>Teachers implement second cycle of research</p> <p>Researcher visits classrooms</p> <p>Reviews of second cycles by teachers</p> <p>Second teacher interviews</p> <p>Second child interviews</p>

#### **4.8.2 Researcher action research**

While the teachers were conducting their classroom research studies the researcher was also continuing his research. Such a model of action research where the main researcher has a nested participant action research cycle or cycles within the main action research is discussed by Elliott in a paper on supervision within teacher research (Elliott, 1990). He refers to the broader research as second-order-action-research and says that this action research cycle could profitably clarify and resolve any difficulties with the classroom research being conducted by the teachers. Clearly he sees the second order research as being a technical approach to action research having supportive, facilitative and reflective roles but basically providing the supervision and support for the teacher research to proceed. Whilst my own research questions were important to answer, so too were the questions of the teachers and, consequently, collaboration between researcher and teacher was necessary to develop. Therefore, whilst my action research remained at a general level, the action research conducted by the teachers was more participatory because they not only conducted it but interacted with me at a variety of levels including critical friend, researcher, supervisor and guide. As well, the teachers interacted daily with their students.

How the design elements of action research were applied in this research study have been outlined in this chapter. Both the first order research study of the teachers and the second order study of the researcher have been described. The results obtained from these research studies are detailed in the next two chapters with Chapter 5 detailing the results from the first cycle of the second order study only and Chapter 6 reporting the rest of the results.

Chapter 5

**Results: Cycle One of action research - Assessing the classroom ecology: People, relationships, and pedagogy**

***5.1 Introduction***

The results from this study are presented in two chapters because the study itself naturally divides into two parts. In this chapter the teachers are passive research participants; in Chapter 6 the teachers become active participants. Chapter 5 reports on data gathered from the classroom environment. Several data gathering techniques were used including classroom observations, interviews and questionnaires. Results from each data collection method are examined in turn, emerging themes are drawn, and a brief reflection on those themes is presented.

In this first cycle of action research, information needed to be gathered to fulfil two objectives of the research: to understand the classroom and its ecology, particularly how the teachers met the educational needs of all of their children, and to examine, from the learner's perspective, how they are facilitated to participate, interact, learn and develop skills and knowledge in their classrooms and school. As well as these two objectives, a third research objective became apparent as data were gathered and analysed. A high level of trust needed to be established between the two teachers and researcher so that a partnership could be established. This partnership was needed so that the teachers could be empowered to become researchers, through using action research to solve their pedagogical challenges.

In Cycle 1 the teachers were primarily passive participants in terms of the research as most of the data gathering was carried out by the researcher. However, as the findings demonstrate, this did not prevent the teachers from evaluating and reflecting on their pedagogy, and making classroom programme adjustments, from time to time, as they received oral and written feedback from analysis of research data.

As the primary researcher, my role in Cycle 1 was to gather and analyse data as they were collected. As the data gathering and analysis proceeded, I made adjustments to the timetable of when to intervene, with which data gathering tools and I also made weekly decisions as to what I would observe in the classrooms, based on emerging themes. Action research accommodates these adjustments due to its flexible approach.

Analysed data from the observations, interview transcripts, questionnaires and sociograms were given to the teachers by email, and through informal discussion, on a regular basis. This was done to promote professional reflection, and to demonstrate transparency. Trust between people begins with transparency. By involving the teachers in the data gathering process at this initial and secondary level, partnership was being modelled.

The research study was based around three major dimensions. The first is inclusion which is the context for the research. Secondly action research is a methodology particularly suited to classroom studies as it permits flexibility and fluidity within recognised parameters, and is able to be implemented within a classroom environment. Professional development is the third element. Developing inclusive practice requires the teacher to examine current pedagogy and develop and enhance practice, whilst focussing on the individual student within a classroom environment. These three dimensions underpin the results and the emerging themes.

### ***5.1.1 Processes of theme development in the thesis***

Before outlining the findings of the study in these results chapters, it is timely to discuss the processes by which the themes were developed in this thesis.

#### ***Inductive-deductive reasoning***

Experience, reasoning and research are the three broad processes that people use to understand what is happening in their world (Cohen et al., 2000). The processes are viewed as complementary and overlapping and all three contributed to the development of the themes in this study. Within the process of reasoning Bogdan and Biklen (2007) consider that, “*qualitative researchers tend to analyse*

*their data inductively*” (p.6). However, Cohen et al (2000) would argue that both methods of reasoning are helpful in analysing data and suggest that, at first, inductive approaches are used as data are analysed and themes developed but then deductive reasoning is applied as the emerging themes are compared to a generality (in this study, inclusion) to determine if they are valid. The two processes are repeated in cycles as initial and subsequent themes are continually refined and developed until the major themes of the research study are presented. In this study, the generality of inclusion is contained in the first sections of the Literature Review and more specifically in the sections containing a definition (2.2.3) and key principles and characteristics (2.2.5). Further factors influencing the choice of themes (e.g., research questions) will be discussed as this section (5.5.1) is developed.

#### ***Purposes guiding data analysis***

Two purposes were guiding the data collection and analysis of the first cycle of this action research study: forming a picture of the ecology of the classroom with which to answer the first two research questions (Section 2.6.1) and assisting with the planning and implementation of the teacher action research projects through developing a collaborative and cooperative relationship with the teachers. Questionnaires, observations, interviews and friendship analysis through sociograms were the data collection tools used in the first cycle. The second and third cycles of the research study employed teacher reflective thinking exercises and teacher action research studies as the data gathering tools. The purpose in choosing these latter tools was to assist in answering the second two research questions.

#### ***Interpretation, analysis and theme development processes used in this thesis***

As the data from each tool were produced they were transcribed into electronic form so that interpretation and analysis could be facilitated. Initially, I read and re-read each transcription looking for factors that appeared to be repetitive or novel. For instance, the classroom observations revealed factors relating to assessment, grouping, teacher-paraprofessional relationships, teacher planning, child-paraprofessional relationships and teacher isolation. These were noted for further analysis or for follow up in subsequent observations. Once the series of

observations were completed, an analysis of them through the use of N'Vivo (QSR International, 2004) was undertaken (see Section 4.5 for a description of this process). This preliminary analysis, which was repeated with data gathered by other tools, resulted in many emerging themes and findings. At the conclusion of each of the data gathering activities of Cycle 1, a paper was written which attempted to: outline the themes, relate them to the literature, indicate possible directions in which the themes were leading the research, indicate their relevance to the research questions, and to validate them in terms of the notion of inclusion.

***Criteria developed to narrow and consolidate themes***

Multiple emerging themes existed at the conclusion of the discrete data gathering activities in Cycle 1. These emerging themes were tabulated and compared. Using a self compiled set of criteria, the number of emerging theses was reduced and reconsidered several times until only a few remained. The criteria developed included: evidence for the theme available from more than one data source (triangulation), relevance to the research questions and literature, novelty (not apparent in the literature), relevance to the notion of inclusion, contribution to an emerging substantive theme and, finally, my belief that a particular theme or group of themes was important to the study. A similar process was employed at the conclusion of Cycles 2 and 3 of the study.

Some early emerging themes that appeared to be important in the initial analysis of the data either were discarded as the process of theme development progressed or they were absorbed into a larger more substantive theme. An example of the latter was the theme related to the role of paraprofessionals in the classroom. In Cycle 1, this theme was important as it was perceived as a barrier to inclusive pedagogy but, through the teacher action research cycles, its importance was subsumed into the more substantive theme of collaboration. An early emerging theme that was discarded as the process developed was metacognition. Although important for learning in the classroom, it lost its relevance as the theme development progressed and was not triangulated by other data gathering processes.

### ***The importance of researcher reflection***

Researcher reflection also contributed to the development of substantive themes. As the research study progressed, new findings and ideas emerged which guided me to re-evaluate earlier findings and themes. For instance, during the teacher interviews, strong evidence emerged as to the independent and autonomous practice of the teachers. This caused me to review the data from the children's interviews, the questionnaires and the classroom observations (which had all preceded the teacher interviews – see Table 1). Whilst there was evidence in those data, it had not been strong enough to have registered as a theme on its own but, triangulated with the other data sources, it strongly contributed to the major theme relating to collaboration and partnership.

The role of a critical friend was a theme that developed slowly. It was not obviously evident during Cycle 1 of the research but assumed greater importance as the teachers began to implement their action research projects. Its importance was in its contribution to all of the four substantive themes in the discussion chapter and also that, on researcher reflection, it had been found to be in the background throughout the study. This finding highlights the importance of delving back into prior data to look for instances of major themes that were not apparent in the initial analysis and interpretation of data.

### ***Substantive themes emerge***

The development of the themes for this thesis was guided by reference to data gathering literature (Bogdan & Biklen, 2007; Cohen et al., 2000), discussion with supervisors and colleagues, a reading of other theses, the assistance of a computer data analysis programme (QSR International, 2004) and a growing experience with a theme development cycle. Decisions made during the data gathering cycles and after them contributed to the combined inductive-deductive approach that was taken. From the numerous emerging themes, the processes that I followed narrowed and consolidated these emerging themes into four substantive themes. These substantive themes assisted in answering the research questions, added to the literature, were relevant and valid in terms of inclusion, were very reflective of the findings of the thesis and the context of the classrooms, and formed the basis of the conclusions of this thesis.

## ***5.2 Stakeholder Views: Surveying parents, teachers, and children regarding school and classroom culture, policies, and practices***

The Index for Inclusion (Booth & Ainscow, 2002) provided the source for the statements used in a questionnaire. The index is designed primarily for self-review by a school to determine in what areas they are practising inclusion and in what areas they need to modify and/or change their practice. This modified version sought to gather views about aspects of inclusive practice in both the school and the classroom.

Questionnaires were distributed to, and completed by, a group of parents, a class of children and a volunteer of staff members in order to get a range of views. There was a 78% return rate from the parents, a 98% return rate from the senior class of children but only a 20% return rate from staff members. Fortunately there was a spread of experience and diverse jobholding of the staff returns, with para-professional and support staff, teachers and senior teachers all contributing.

### ***5.2.1 Questionnaire Responses***

Appendices G & H contain the questionnaires. All questions were analysed, but in order to give the reader an overview of the dominant themes, the major trends for each dimension of inclusion are provided in Table 2.

**Table 2**

#### ***Overview of Questionnaire Trends***

Dimensions	Children	Staff	Parents
Building community	23/31 children considered school was a place they liked to go each day	All the staff agreed that the school was a good place for teachers, pupils and the community	35/40 parents considered that the school and the classrooms were places their children wanted to be  36/38 parents felt welcomed and had their concerns listened to
Establishing inclusive values	29/31 children believed that teachers thought all children are important  12/31 were not sure that high achievement was important to teachers in the school but 21/31	4/9 Staff agreed to some extent that meeting the needs of children was the responsibility of all teachers.	41/44 parents felt that their teacher had high expectations for their child  38/41 parent considered children's culture was valued by the teachers

*Enhancing teacher learning in inclusion*

Dimensions	Children	Staff	Parents
	<p>were certain that their own teacher valued it</p> <p>12/31 of children not sure that some children were more important to the teacher and 5 more considered that some children were more important</p>		
Developing the school for all	<p>27/31 considered new children were assisted to settle into class</p> <p>16/31 not sure about children with wheelchairs getting around the school. This in spite of fact that there was a student in wheelchair in the class. 7 children considered that such a student would experience difficulties</p>	<p>3/9 did not agree and 5/9 only agreed to some extent that new staff were mentored.</p>	
Organising support for diversity	<p>28/31 children knew that there were rules about bullying but 23/31 also believed that children were picked on in school and class. 14/31 considered that children were asked to help with bullying</p>	<p>6/9 respondents agreed to some extent that this staff development took place in diversity</p>	<p>18/41 parents definitely agreed that bullying was absent, 14/41 agreed to some extent but 7/41 said that it did occur.</p>
Orchestrated Learning	<p>18/31 children considered that they were given choices around how they completed work in school but 28/31 considered that they had choice with homework</p> <p>10 of the children considered that they were involved in assessing their own learning and 6 believed that had a decision in what they would learn.</p> <p>16/31 considered that student interests were used to decide what learning would take place with 11 not sure</p> <p>14 children did not agree or were unsure if the teacher aide worked with everyone in the class.</p>	<p>4/9 only gave conditional agreement that staff planned together.</p> <p>Staff considered that reflective thinking was a teacher practice in this school</p> <p>Staff gave conditional agreement to the statement that student interests were used to decide about learning activities in the school</p>	<p>36 parents believed that teachers were able to meet diverse needs within the classroom</p> <p>Staff were good at communicating about a child's progress according to all parent respondents except one.</p>
Mobilising resources	<p>14 children were unsure and 3 did not agree that peer tutoring was used in the class</p>	<p>All respondents agreed that staff were encouraged to develop own teaching styles and methods</p> <p>7/9 respondents considered that co-teaching and peer tutoring was used in the school</p>	<p>Parents believed that staff used a variety of techniques such as peer tutoring, cooperative learning and group work.</p>

Accepting that the dimensions in the Index for Inclusion are indicators of inclusive practice, then the three categories of respondents to the questionnaires generally gave positive views about the culture, policies and practices in the school and classrooms, and in so doing considered there to be inclusive practices occurring. The parent respondents were the most favourable whilst the staff respondents had some reservations about some dimensions. For example, mentoring of staff, organising support for diversity and evolving inclusive practices were areas that staff respondents gave an indication that there were opportunities to grow and develop. Student responses, however, were not as positive as the other two categories of respondents and, whilst not negative, they were often unable, or unsure as to express an opinion. Therefore, further data were needed around the children's views, obtained directly in the child interviews and indirectly in the classroom observations.

### ***5.2.2 Themes emerging from the questionnaire responses***

The themes presented below have been selected because of their relation to inclusive practice or emerging research themes. Analysis of questionnaire data indicated a need to include definitions when seeking opinion about pedagogical techniques such as peer tutoring and reflection because there appeared to be some dissonance between respondents' beliefs and subsequent observations of the actual practice in the classroom.

Inclusive practice puts an emphasis on making sure that everyone feels valued and has a sense of belonging. In the Year 5/6 class a minority of the children expressed a view that they did not know if they were valued by the teacher. This was an important finding because the teacher of the senior class reported that she set out, both in her planning and her practice, to demonstrate that she valued each child. Further, she planned activities, such as a class camp, to ensure that the children felt valued, not only by the teacher but also by their peers.

In another aspect, creating inclusive cultures, the authors of the Index for Inclusion consider that all children in a school are the responsibility of all staff. Whilst the number of responses of the staff was small only four out of the nine respondents definitely agreed that the requirements of disabled children were the

responsibility of all staff. One of the manifestations of the view represented in this theme is when teachers are on duty in the playground. Some teachers deal with all incidents, whereas other staff members were observed to refer the child back to their own teacher, or to the school office.

Collaboration amongst teachers was viewed as happening in the school by all three categories of respondents with seven out of the nine staff members definitely agreeing and the other two agreeing to some extent. Twenty five out of the thirty one child respondents considered that other teachers helped out in their classroom, and no parent respondents disagreed. At the macro level of planning, collaboration amongst the teachers was evident and the two participating teachers confirmed that it happened around major projects such as school musicals, syndicate topics, sports events and assemblies. However, there were few instances observed of collaboration amongst staff in the classroom. Teacher interviews and observations indicated that teachers planned and practised alone for their day to day lessons. Teacher isolation in the classroom became an emerging research theme.

Incidents of bullying were reported by a majority of children (23/31), and a minority (7/31) of parents. Teachers were not asked a direct question about the extent of bullying but all agreed that there were school policies around the practice. Bullying is a difficult issue for schools to deal with. The fact that a majority of children, but a minority of parents, identified it as happening suggests that children may not be reporting it to their parents. Bullying leads to children being excluded from full participation in school activities and is, therefore, a barrier to inclusive practice.

Whilst staff and parents considered that techniques like peer tutoring, cooperative learning and group work were occurring in the two classrooms, the children were less certain. Subsequent observation and teacher interviews confirmed that, whilst informal peer assistance and group work occurred, there was no peer tutoring or other formal forms of children supporting one another, for example, collaborative learning.

Staff respondents in the questionnaire considered that reflection was teacher behaviour in the classroom. This question was included because reflection is an important component of action research and writers in the field of reflection (Page & Meerabeau, 2000; R. Robinson & Carrington, 2002; Scanlan et al., 2002; Schon, 1987, 1995) consider it an essential precursor to pedagogical change. Both the participating teachers agreed that they tried to be reflective, when considering their practice, but reflection was not a regular occurrence. Further, as subsequent findings reveal, the level of reflection practised by the two teachers was at a surface level relating to accountability, rather than examination of feelings, opinions and assumptions.

### ***5.2.3 Researcher reflection***

An initial analysis of the questionnaires suggested that inclusive cultures, policies and practices were evident in the two classrooms. However, as I continued to analyse the responses I was also observing in the classrooms and having discussions with the teachers on an informal basis. Dissonances were emerging between stakeholder belief, classroom observation and teacher discussion. I became particularly interested in three aspects of practice; independent practice, reflective thinking and assessment/planning practices.

### ***5.3 Assessing the classroom ecology: Classroom observations***

Initially, it was planned that general observations would be made and as the observations proceeded and some preliminary analysis was done, specific observations would be conducted. However, as the observations proceeded, I became more familiar with the classrooms, and after some preliminary analysis was completed, I decided to gather as much information as possible within the classrooms so as to identify enablers and barriers to inclusion. I became increasingly interested in how the teachers met the diverse needs of all of the children. Action research, as a research design, allows for this as it encourages ongoing evaluation and reflection and a change of emphasis in data collection when necessary.

A formative analysis of the observations was undertaken as the field notes were transcribed. At the end of each transcription, interactions and behaviours that

were observed during the sessions were organised into categories and were included in the typed notes. The categories were developed around the inclusion theme and the question that was implicit in the objective for this cycle of action research, which behaviours and interactions in the class might enable or inhibit inclusion? When all the observations were concluded they were analysed with the help of N’Vivo Software, with the nodes being the categories that had been developed by the formative analysis of the transcripts.

### ***5.3.1 Classroom observation data***

From repeated analyses of the classroom observation data, nine discrete, but allied, categories were constructed. Within these categories the data were summarised and are presented in Table 3. Included in the summaries is the most relevant information to support the themes.

**Table 3**

#### ***Classroom Observations: Categories of Gathered Data***

Category	Tina	Janine
Assessment and Planning	<ol style="list-style-type: none"> <li>1. Children self-evaluate</li> <li>2. Assessment - continually by the teacher</li> <li>3. Questions – Major assessment technique</li> <li>4. Some chances for assessment are missed due to class organisation</li> <li>5. Planning completed for both groups and whole class</li> </ol>	<ol style="list-style-type: none"> <li>1.Children encouraged to self-assess and to set goals</li> <li>2. Informal assessment activity as teacher moves around class</li> <li>3. Formal assessment by teacher not observed to lead to individual or change in group planning</li> </ol>
Curriculum Focus	<ol style="list-style-type: none"> <li>1. Primary focus literacy and numeracy - Reading and writing start from day one</li> </ol>	<ol style="list-style-type: none"> <li>1. Literacy and numeracy viewed as tools to facilitate learning</li> </ol>
Resource Use	<ol style="list-style-type: none"> <li>1. Whiteboard</li> <li>2. Classroom walls</li> <li>3. Primary readers</li> <li>4. Reinforcement - verbal and graphic</li> </ol>	<ol style="list-style-type: none"> <li>1. Classroom walls</li> <li>2. Co-teacher in information technology,</li> <li>3. Teacher aides</li> <li>4. Variety of reinforcement methods</li> <li>5. Laptops</li> </ol>
Teaching delivery methods	<ol style="list-style-type: none"> <li>1. Withdrawal of child from room for additional support</li> <li>2. Grouping</li> <li>3. Whole class</li> <li>4. Individual within group particularly in reading</li> <li>5. Incidental individual assistance from teacher</li> <li>6. Incidental buddy help</li> <li>7. Primarily a verbal delivery medium in classroom with some visual</li> </ol>	<ol style="list-style-type: none"> <li>1. Withdrawal of child for additional support</li> <li>2. Grouping</li> <li>3. Whole class</li> <li>4. Individual within group</li> <li>5. Incidental buddy help – buddy initiated</li> <li>6. Delivery - verbal, written and visual</li> <li>7. One example of cooperative work in groups observed</li> <li>8. Use of contracts</li> </ol>
Pedagogical strategies	<ol style="list-style-type: none"> <li>1. Questioning</li> <li>2. Modelling</li> <li>3. Planned ignoring</li> <li>4. Building independence</li> </ol>	<ol style="list-style-type: none"> <li>1. Questioning</li> <li>2. Modelling</li> <li>3. Building independent skills</li> <li>4. Positive</li> </ol>

Category	Tina	Janine
	<ol style="list-style-type: none"> <li>5. Positive</li> <li>6. Setting expectations</li> <li>7. Reorient to task - Behaviour strategy</li> <li>8. Constant repetition of concept or skill</li> <li>9. Advance organisers</li> <li>10. Use of routine</li> <li>11. Learning concepts reinforced – variety of methods</li> </ol>	<ol style="list-style-type: none"> <li>5. Setting expectations</li> <li>6. Advance organisers</li> <li>7. Use of withdrawal spaces for independent study</li> </ol>
Adult/adult classroom interactions	<ol style="list-style-type: none"> <li>1. No occasions observed when another adult was in the room.</li> </ol>	<ol style="list-style-type: none"> <li>1. Occasional conference between teacher aide and teacher during observations</li> <li>2. Observed discussion between teacher and IT teacher in IT room</li> </ol>
Adult/child classroom interactions	<ol style="list-style-type: none"> <li>1. Teacher/Child interactions only - interactions generally initiated by the teacher</li> </ol>	<ol style="list-style-type: none"> <li>1. Teacher aide primarily assists target but occasionally others</li> <li>2. Target not complete tasks unless adult in close proximity</li> </ol>
Verbal and non-verbal communication	<ol style="list-style-type: none"> <li>1. Positive verbal communication</li> <li>2. Inclusive language used by teacher e.g. referring to family events</li> <li>3. Teacher communicates expectations</li> <li>4. Teacher praises before limit setting</li> </ol>	<ol style="list-style-type: none"> <li>1. Some verbal messages given were exclusive</li> <li>2. Fewer positives given by teacher</li> <li>3. Task stickers in books</li> <li>4. Less verbal communication in this class. Some communication is written and others are visual.</li> </ol>
Child/child interactions	<ol style="list-style-type: none"> <li>1. Formal – working together in groups</li> <li>2. Informal – verbal and physical interactions when not directly supervised or directed</li> </ol>	<ol style="list-style-type: none"> <li>1. Formal – working together in groups</li> <li>2. Informal - buddy help, social activities in class</li> </ol>

### 5.3.2 Themes emerging from the classroom observations

Formal and informal assessment was a strong feature of the pedagogy practised by the teachers. Both teachers collected large amounts of data around the progress of the children. Potentially teacher assessment data would inform individual planning. The following extracts from Tina’s class demonstrate both formative and summative methods of assessment.

*Teacher “I am going to be listening to you as you read the book again and I will write up your books.”*

[CO – T – 17/03]

*Teacher moves around each child and makes positive comments about the printing. Specifically comment, to certain children, on little letters in middle of name which has been identified as an area of concern.*

[CO – T – 1/04]

However, the observations, and later confirmed by teacher interviews, identified that assessment was primarily used to guide class or group teaching rather than to identify and plan for individual student need.

As well as being used for group and class planning, results of the assessments were used for reporting purposes both to parents and school administration. Assessment is both an enabler and a barrier to inclusion, depending on its use. Where it is used to identify needs and leads to a teaching programme, then it is an enabler. Where it is used to assist the teacher to better organise the class, then it may become a barrier, because individual child learning needs could be subsumed to teacher organisational needs. In both classes the teachers used assessment for each of the above purposes. An example of this occurred when Janine, and also Tina, spent several days assessing the children individually on the NUMP test which is a criterion referenced test of numeracy. Not only was a cumulative score obtained for each child but the individual objectives understood by the child were available. Some group, but no individual, planning occurred from this assessment activity. Consider this extract from a maths lesson in the senior class following the NUMP assessment.

*Maths – Class activity*

*Teacher puts the numbers 7, 9, 5, 4, 3 on white board*

*Teacher asks the children to use the above numbers to*

- *make the highest number*
- *make the lowest number*
- *make the highest even number*
- *make the lowest even number, etc*

*Class then work on solving the puzzles by using playing cards inside a ‘house structure’*

All of the children were expected to complete this activity which from the observations some children were not able to do.

*Teacher goes over to help Don*

*- then asks another child [B] to repeat – he couldn’t*

[CO – J – 29/04]

The observations demonstrate that delivery of the curriculum in both classes has a focus on group work. Although some class and a little individual planning were evident from the classroom observations, it was for groups that the teachers put in their predominant planning. Whilst there is nothing inherently wrong in grouping for instruction, the formation of the groups needs to be based on skill need. In

both classes, once the groups were formed at the beginning of the year they seldom re-formed. The classroom observations indicated that a large amount of individual assessment took place in both classrooms, but that the individual assessment data rarely informed subsequent teaching and learning for individual students, an important finding hindering pedagogical practice for inclusion.

Observation and the use of questioning appear to be a major component of teacher assessment methods, especially when working directly with the children in group or class work. Tina, the junior class teacher, was particularly skilled in the use of these two techniques especially during literacy activities such as reading and writing. Not only did she use it with her group work but she used it when she was listening to an individual read or observing the writing of a child. Often some immediate individual teaching would follow but it was not a planned activity. In this extract we see how a child's misunderstanding is corrected by the teacher through a small teaching sequence.

*Teacher - "What's happening to the bread?"*

*Child makes incorrect statement*

*T returns to the book to confirm what is happening.*

*2<sup>nd</sup> page – Teacher - "Is the bread the same size?"*

*Teacher - "What is happening to it?"*

*Teacher - "Look carefully at the ants and what they are doing with it."*

*Teacher - "Has that bread got even smaller?"*

*Teacher - "Where are the ants coming from?"*

*Teacher - "What was happening to the bread while the animals were worried about it?"*

*Child responds correctly (The ants were eating it)*

[CO – T – 17/3]

In this sequence the teacher pauses after each question to allow the child time to look at the pictures on each page.

Janine, the senior class teacher, used observational and questioning techniques but in different forms. As an example she would set formal questions at the start of a lesson for the children to find answers to. She would then observe how the

children went about their activity, what problem solving strategies they used, and note any collaborative efforts that they demonstrated.

*Spelling activity*

*Teacher – create either a word find or a crossword from your spelling words – if you are choosing a crossword don't put in words, just the clues*

*Children begin task – chatter amongst selves*

*Teacher walks around class – looks at children's work and gives suggestions.*

*Makes comments. Also models what to do to some children.*

[CO – J – 29/04]

However, individual tuition delivered in classes by the teachers was observed to be spontaneous and serendipitous. This is particularly so of the practice of Tina. One example is in reading where, while listening to a child read, she observes what the child is doing and questions the child about what processes are being used. A quick analysis of the answer is made and, if necessary, a skill is taught, enhanced or extended. Janine also used this technique especially when the children were engaged in 'at desk' tasks and the teacher was wandering around the room, observing, questioning and teaching (see extract above). Whilst this practice does provide good individual teaching it is a haphazard way of meeting needs, in that meeting need is not planned for, and if the teacher was not present when an error was made then it would not be corrected.

The year 5 & 6 children were strongly encouraged to use resources to help them to achieve. The teacher had a range of resources available for the children including their peers, the teacher, other adults in the classroom (e.g. teacher aides), computers, books, magazines, etc. There was a rule in the class that the student had to access other resources, including peers, before approaching the teacher for assistance. Certainly this encouragement of peers, as one of the available classroom resources, is inclusive in its character because it encourages greater social and learning participation.

Specialist, and extra, tuition is primarily delivered out of the classroom for both groups and individuals. In both classes, children were observed to leave the room, either singly, or in groups, to receive extra tuition. Such activities as Tape

Assisted Reading, individual tuition in reading and language and oral language groups were delivered. Often the withdrawal activities were not planned by the teacher or informed by her assessment and analysis. Feedback to the teacher from the other tutors was rarely observed by the researcher, and later confirmed by teacher interview. Such withdrawal practices, especially where the classroom teacher is not involved, are considered a barrier to inclusive practice as they isolate the child from their peers, and in so doing lessen participation. On occasions a child in the senior class was seen to be withdrawn during participation in a group activity. The merit of withdrawing children from the class in order to provide for their individual needs has been debated in the literature. Writers in the area of inclusion have referred to the debate as the dilemma of difference (Florian, 2005; Terzi, 2005). Basically, the dilemma of difference considers how the disabled child might have their individual needs met whilst at the same time allowing them to fully participate in classroom activities. Does one withdraw the child to give them extra one-to-one tuition, which they need, or does one have them complete the group activity achieving as much as they are able or is there another solution? What Florian argues is that the teacher must remove barriers that prevent the child from achieving and give them the resources to do so. The focus moves from the disabled child to the pedagogy.

Withdrawing children from the class for extra tuition is one factor in an emerging theme around the independent practice of teachers within the classroom. The classroom observations only recorded two instances of other teachers being involved with the children, with one teacher specialising in music and teaching half the class at a time whilst the other half visited the computer laboratory where there was an additional teacher available for technical support. The classroom teacher did not plan the music programme, nor was she consulted about its execution. The classroom teacher did plan the computer activities but not in conjunction with the teacher technician. The additional specialist teacher for the child in the Ongoing and Reviewable Resourcing Scheme did not plan in conjunction with the teacher, and all activity took place outside of the regular classroom. The classroom observations confirmed that once in the classroom the teachers practised their pedagogy alone, contrary to the need for collaborative teacher activity in order to build communities of inclusiveness.

Researcher observations suggest that teacher aide support does not necessarily lead to independent outcomes for the child. During the classroom observations only one class had teacher aide support and that was for a named student. Observations of the interactions between the teacher aides and the student in the classroom suggested that the student had become dependent on adult support and, in many instances, was unwilling to work unless the aide was assisting in a very supportive manner.

*1112 hrs*

*Decide to observe target and her group. Have to do a language activity.*

*Receive a story starter – What if there was no such thing as rain?*

*Tony and Trent begin to write straight away but Don, target, John and a girl in the group fail to begin. Teacher aide was trying to cue target*

*Teacher – Fantastic Room 15 – a lot of on task working*

*Target slow to start writing – Teacher Aide standing alongside – Target copies out starter sentence. Teacher aide says something to target who gives a shrug of her body (negatively). Tony has written about 30 words by this time. Jules has now written a few words as has Junior. Don wrote a sentence after researcher's prompt.*

*Target takes considerable effort by Teacher aide before she begins to write anything. Many strategies used which appear to delay writing – looking around class, listening to others talking, shaking of head, fiddling with pencil and rubber. Teacher aide tries to cue. Teacher aide asks her what the problem is. Target answers that she can't think.*

*1135hrs*

*Target has written 5 words following Teacher aide prompts.*

*1142hrs*

*Target has done 4 more words*

[CO – J – 05/05]

In this extract we note that the target child has only written 9 words in 30 minutes and with teacher aide support. Observations also suggested that the aide became a barrier to social interactions between this student and her peers, both within the classroom and at break times. The student would seek out adults, including the

school nurse, at break times rather than talk to peers. While these observations were around one child they confirmed observations of other writers who have expressed concerns about the potential barriers that teacher aides create (Grenot-Scheyer, 2004; Lai, Sinclair, Naidoo, Naidoo & Robinson, 2003; Villa & Thousand, 2003) not only in pupil-pupil interactions but also teacher-pupil interactions.

Peer support occurred in both classes but the form and the initiation was different. Formal peer tutoring was not a feature of the pedagogy in either class during Cycle 1, but peer support was fostered. In the senior class the student was expected to access it before accessing the teacher whereas in the junior class the teacher generally directed a child to support another. The support of, and for, peers is considered to be an inclusive practice because it encourages contribution by one child and participation by the other. Further, peer support fosters and provides security for children while at the same time providing a network of relationships in which to practise social skills (Grenot-Scheyer, 2004).

Both teachers used a range of pedagogical strategies including scaffolding which is designed to assist the children to learn and to deepen the learning. One of the pedagogical strategies that were used in both classes to individualise learning was the use of learning intentions and success criteria. These could be modified to apply to individuals, groups or the whole class. In the senior class, in particular, the teacher encouraged the children to construct their own learning intentions. A major influence in both teachers adopting and adapting the learning intentions and success criteria was the techniques used by the professional development facilitator, who worked closely with the teachers on an ongoing basis.

Verbal communications between teacher and children often have effects far beyond the surface level of what was said or intended. Positive feedback as demonstrated by both teachers has the power to make the child feel valued and included. Tina was very skilled at conveying this to her new entrant children because she personalised it and related it to familiar things such as family events. In an effort to encourage the children in the senior room to comply with instructions and produce output the teacher, on occasions, suggested that the

children would be better off being somewhere else. Such statements seek to exclude. Teacher verbal communications, therefore, can be both an enabler and a barrier to inclusive practice.

### ***5.3.3 Teacher Reflection***

Sharing of the transcribed observations with the teachers was intended to demonstrate transparency, address research ethics requirements, and to give the teachers an opportunity to correct any misinterpretations in the observations. What also resulted was that the teachers began to reflect on their practice. Tina informed me that having read the first batch of observations she noted how often she talked in the classroom. This concerned her because it was a class objective for the children to interact with one another as well as the teacher, and she considered that by talking so much she was raising barriers to the achievement of this objective. Although there was no confirmation that the teacher did reduce her talking, raising awareness starts the process of teacher change.

### ***5.3.4 Researcher reflection and summary***

After an initial interruption to the classroom routine, the impact of my presence as a researcher lessened as the teachers and children began to accept my being in the classrooms. Therefore, I was able to complete my observations whilst the normal classroom routine proceeded, and I was able to converse with the teachers and children when I wanted clarification around something observed. Observations were focussed on the research questions (refer Chapter 2, Section 2.6.1), although refinements to observations were made in response to emerging themes.

Respondents from the questionnaire considered that there was a large degree of collaboration amongst the staff but these observations did not confirm that view, especially in relation to the planning and delivery of teaching in the classroom. The stronger emerging theme was that the teachers in this school participated as independent practitioners.

Themes dealing with the nature of assessment practices, individual and peer learning situations, the practice of withdrawing children for additional support, the

role of the para-professional, and the importance of verbal communication by the teachers, have all been identified from analysis of the observations.

#### ***5.4 Assessing the classroom ecology: Children's friendships and interactions***

'Students help each other' is an indicator in the Creating Inclusive Cultures section of the Index for Inclusion (Booth & Ainscow, 2002). When considering whether this happens in a class, index reviewers are asked a number of questions including two related to friendships. Both participating teachers informed me that they encouraged the children in their classes to form friendships with one another as a preliminary step to encouraging and developing mutual help, respect and valuing diversity. To judge how well the teachers had succeeded in getting the children to achieve this preliminary step of forming friendships I conducted a sociogram in each class. In the senior class the children completed a small questionnaire (see Appendix I), whereas in the junior class I interviewed each child. I was looking for friendships in the class rather than friendships in general. The information for the sociogram was collected later in term two as this allowed the children sufficient time to form friendships within the class.

##### ***5.4.1 Findings from the sociograms***

1. In the new entrant class both genders were comfortable about choosing friends of either sex whereas in the senior class this only happened twice with two boys each choosing a girl.
2. Most of the new entrant children had been at school for less than a year but there were only three boys and two girls who were not chosen as a friend. One of the boys had recently started school. One of the other two boys was observed to constantly annoy his classmates. In the senior class there were three boys and one girl who were not chosen as a friend. Two of the isolate boys were observed to struggle with their learning but were also observed to play with one another in the playground. Why they did not nominate each other as a friend is not known. Their choice of friend may have been a friendship desire, rather than a reality.
3. In the senior class one boy was chosen as a friend by nine out of the 12 boys in the class. During the classroom observations this lad did not present as a popular boy. The teacher suggested that the boy was popular because he was very able at

sports. Amongst the girls in the senior class there was a core group of four girls who gathered others around them.

4. An important finding from the sociogram was that a girl with physical and learning needs in the senior class appeared to form a group of three with two other classmates. However, observations and discussion with the teacher suggested that this grouping did not generally translate to playing outside the classroom.

#### ***5.4.2 Themes emerging from the sociograms***

Developmental differences are evident around the choice of friends when comparing five year olds and ten year olds. There was a definite separation of the genders at age ten which was not evident at age five. Further, the gender choice appeared to be also affected by adolescent traits in the senior class where boys looked to achievers in sport as nominated friends whereas a group of girls who were popular tended to attract other girls to nominate them as friends. Knowing these developmental differences helps the teacher who is planning activities that assist children without friends to become more included participants in classroom and playground activities.

Whilst there were some isolated children in each room, the numbers were small, suggesting that the teachers' efforts to encourage friendships were generally successful. Friendships within a classroom facilitate inclusion because they pave the path towards tolerance and an understanding of diversity which, in turn, tends to enhance participation because the children choose to assist one another to participate.

#### ***5.4.3 Researcher reflection***

The sociogram provides information that a teacher can analyse and use to enhance the formation of friendships. Knowing that there are developmental differences in friendship choice, that there are gender differences in friendship development and that sometimes these exercises identify friendship desire rather than reality is important information for a teacher. Using a sociogram is another method of gathering data about the relationships within a class and as such is assessment. However, the teacher's analysis of that assessment data is the key to its usefulness.

My assumptions surrounding the use of this assessment tool was that it would provide useful information which would contribute to a larger picture. On that basis it largely succeeded. More information could have been added if I had further questioned some of the children, following my analysis of their responses.

### ***5.5 Stakeholder views: Surveying the children about their classroom***

A group of children in the Year 5/6 class were invited to be interviewed. Child interviews were included in the research for two reasons. The first of these was to meet a research objective relating to obtaining the child's perspective on how they were facilitated to learn. Secondly, the information gathered in the interviews would assist with the triangulation of data.

Following a review of the literature around inclusion and aided by the Index for Inclusion (Booth & Ainscow, 2002) the questions were constructed during the planning phase of Cycle 1. An assumption guiding my choice of questions, and indeed the rationale for including a children's interview, was that as participants in the classroom the children would be good observers of what happens. I had also assumed that the children would be able to reflect on those observations and thereby be able to provide answers to the questions. A completed transcript of one child's interview can be found in Appendix W.

Children who were selected for the interviews represented a reasonable cross-section of the pupils in the Year 5/6 class. Two of the children, one of each gender, had special educational needs, whilst two others, also one from each gender, were high achieving pupils. Following an analysis of the sociogram a boy and a girl who were considered to be popular by their classmates were also included. Finally, I invited the teacher to choose two average achieving children. There was a slight gender imbalance with five boys and three girls chosen.

The interviews were conducted individually in a separate room and each child was asked if they wished to take part. Prior approval had been obtained from their parents. The interviews were taped, transcribed, and then given to the children to

correct if they wished. They were also encouraged to take them home to share with their parents.

### ***5.5.1 Data from the children’s interviews***

A preliminary analysis of the data was performed following the transcription using N’Vivo (QSR International, 2004) and was written up, critiqued and further analysed. A summary of those responses which informed the subsequent themes is presented.

**Table 4**

#### ***Children’s Interviews: Summary of Data***

Categories of Questions	Child B (male)	Child C (male)	Child D (male – secondary target)	Child K (female)
Peer Support – giving of and receiving	Receives assistance Gives support	Receives support Gives support	Peer support Support to target	Ask peer Assists peers
Learning Support – how does the child access?	Room 15 Yellow Pages Grouping for tasks When finished tasks help others	Approach three peers, then teacher	Three peers, teacher, teacher aide	Teacher system for learning support with peers Special groups for task working
Catering for Individual Differences	Groups	Groups	Groups Individual theme work	Groups
Other adult support available in the class	Teacher aides	Target child does	Teacher aides	Teacher aides
Resources available to the child in the classroom	Computer Internet Room 15 Yellow Pages Group points Class money	Child used as demonstrator in P.E.	Personnel mentioned	Special furniture for target
Perceptions of the class	Friendly no bullies	Likes teacher Enjoys projects Wanted to expel a bully	“Funny” teacher Enjoys work mates in class	Likes teacher Enjoys art
Friendships	Friends in class – only plays with them	Has friends Will play with others	Friends in the class Teacher request to play with others	Friends in class Offers help to lonely classmate

Categories of Questions	Child R (male)	Child S (female target)	Child St (female)	Child T (male – most popular boy in class)
Peer Support – giving of and receiving	Help from buddies Helps others	Receives support (prompt given)	Receives support – receives ‘clues’ – gives support	Receives help and offers help.
Learning Support – how does the child access?	Buddy help, group rules, teacher aides	Teacher aides, teacher	Grouping, teacher aides, teacher	Peers, teacher aides, teacher.

Categories of Questions	Child R (male)	Child S (female target)	Child St (female)	Child T (male – most popular boy in class)
Catering for Individual Differences	Groups, Whole class	Groups, Whole class	Groups, individual project work	Grouping
Other adult support available in the class	Teacher aides	Teacher aides	2 teacher aides	Teacher aide
Resources available to the child in the classroom	People mentioned		Dictionary, task board, goals in books	People mentioned
Perceptions of the class	Friendly - no one is mean	It's fun	Likes everything	Teacher cool. Made friends Happy
Friendships	Friends in class Plays with others.	Friends in class Different friends at breaks	Friends in class Plays with others	Friends in class Plays with others

### 5.5.2 Themes resulting from the children's interviews

The children who were interviewed considered that grouping was the main technique that the teacher used for providing for individual differences. When prompted, most conceded that in theme work they were able to work individually, but not all did. However, the individual work that the student participated in was not based on a learning need but basically allowed students freedom of expression around the presentation of their ideas. This finding triangulated the data from the observations and the teacher interviews. In the following extract child D eventually agrees that she does do something different from other children in her theme work. When this child discusses the different work that the children did in their groups, she was referring to rotation of activities rather than working on different levels. However, the two top groups did have a more difficult level of work, from time to time, but even at this level what they did was not directly based on need but rather on achievement. Child D sums up what is happening in the class.

*(Researcher) With so many differences in your class how does the teacher teach everyone?*

*(Child D) Everybody is in groups and stuff.*

*(Researcher) Right ok, so you've got groups in your class?*

*(Child D) Yeah. And they do like different work.*

*(Researcher) Can you give me some examples?*

*(Child D) For maths she has games, knowledge activities, there like the knowledge activities of bingo, snakes, something with the other one and then the*

*games are like review games, maths games.*

*(Researcher) Is there anything else the teacher does, like, is there anything you do by yourself, that's different from everyone else in the class?*

*(Child D) My theme work.*

*(Researcher) Do you all have the same theme or do you have different themes?*

*(Child D) We have the same theme but, but I do other stuff with it.*

*(Researcher) You do your own work with it?*

*(Child D) Yeah.*

[CI – Child D – 2004]

Peer support was available to the students in the senior class. Although the teacher had several structures in place that directed children towards peer support, it was not formalised and children had to access it with little direction from the teacher. There was no mention by the children, or observations in the class, of cooperative learning activities. In the following extract Child B, a high achiever, summarises the options that were available to him to access support.

*(Researcher) What things do your classmates do to help one another with their work?*

*(Child B) They like, people who want help they go and ask people before you ask the teacher.*

*(Researcher) Is that a rule in your class?*

*(Child B) Yes, and plus also we've got the Room 15 Yellow Pages.*

*(Researcher) What's that?*

*(Child B) It's a sheet of paper and it's got everything that people might have problems with and it's got people beside who you can ask.*

*(Researcher) OK so it's sort of like the yellow pages in the telephone book.*

*(Child B) Yeah.*

[CI – Child B – 2004]

Interestingly, this child was the only interviewee that mentioned this scaffolding technique for peer support. Other children had mentioned the rule about asking peers before approaching the teacher. Utilizing child help is a practical method of meeting individual needs within a busy classroom.

Whilst all the children interviewed acknowledged that the two teacher aides were primarily in the room to assist Child S, they did view them as providing support to other children in the class. However, observations and teacher interviews also confirmed that what the aides did with other children was incidental to what they did with the target child. In effect, the two teacher aides aided the child rather than the teacher. An excellent resource equivalent to two hours per day was not utilized in a formal manner to help the teacher to meet individual needs. In the following extract, Child K detailed the timetables of the two teacher aides whilst acknowledging that their primary purpose was for Child S.

*(Researcher) Does the teacher have any other adults to help you in the class?*

*(Child K) Well she has Ms B to look after Child S in the morning, during maths and that and during and after morning tea and during lunch we have reading and Ms H helps us if (the teacher) is talking to a group on the floor.*

*(Researcher) Ok, so Ms B, she just helps Child S?*

*(Child K) Yeah, but she helps us as well.*

*(Researcher) Oh so she helps you as well?*

*(Child K) Yeah, but she's mainly for Child S.*

*(Researcher) What about Mrs H?*

*(Child K) Yeah, she's mainly there for Child S but if we're really stuck and we can't find anything out or we asked someone, like if we want to go to the toilet or something, then we can ask them.*

*(Researcher) What about with your work. Will she come and help?*

*(Child K) If we put our hand up or go ask her she will come help us.*

[CI – Child K – 2004]

In a class that promotes participation of all children the class atmosphere is important, especially as perceived by the students. The finding in these interviews was that this classroom atmosphere was viewed as supportive and a feeling of belonging was expressed by the students. All of the children interviewed felt comfortable and happy in the class and, apart from one interviewee, they did not want to change anything. The teacher was also the subject of positive comments by four out of the eight children and no one mentioned negative feelings. In the extract below, Child St sums up the feelings of the children both from those interviewed and from my perceptions of the class.

During my classroom observations it was noted, that from time to time, Janine expressed negative comments to either the class, when they were noisy or to individual children when they were off-task. However, that did not appear to influence the perceptions of the interviewees.

*(Child St) I like the teacher, I like all the kids, I like the work that we get, I like how we go out for games or programmes inside. I like basically the whole everything.*

[CI – Child St – 2004]

All of the interviewed children reported that they had friends in the class, even though some did not always play with them at playtimes and lunch time, as they also had friends in other classes. This confirmed the findings of the sociogram, and also confirmed that a teacher objective of having the children appreciate and support one another appeared to have been achieved. Friendships amongst classmates, and the wider school community, are viewed by Booth and Ainscow (2002) as being necessary before students are able to help one another.

*(Child B) The thing I like about the class is that everyone is friendly and there are no bullies in the class and that when you ask someone if you want to join in with something the answer is always yes.*

[CI – Child B – 2004]

Although indirectly, the students identified an important enabler of inclusive practice – a supportive class atmosphere enabling them to participate and contribute. Having friends, and being in an environment that they enjoy, assists with participation. The teacher of this class had a goal to move the children to a position where they were mutually supportive. The findings from the children's interviews suggest that she had succeeded.

Adults, apart from teacher aides, providing support to the teacher or class were not mentioned by any of the interviewees. This finding was a surprise to the teacher, and to me, as there were a number of other teachers who provided support to the children. Some, such as the computer teacher and the music teacher, provided support at regular times each week. Others, such as the ORRS specialist teacher and a reading teacher, provided support to different individuals and groups, from

time to time. Because none of the other teachers actually provided the support *in* the classroom, the children may have taken the question literally.

When discussing how the teacher provided support for their learning in the class the interview children were able to identify, with some questioning, some of the resources. It was a surprising finding that the children did not identify more resources than they did. I had in my many visits to the class seen a variety of teacher resources that were designed to scaffold the individual student. The learning intentions and criteria for success were used frequently as a class, a group, an individual scaffold, and were identified by the children. In this classroom, at this time, these two techniques were used ubiquitously. Other techniques such as the Class Yellow Pages, the buddy help in reading, the pairing of more able children with less able ones, and the use of dictionaries, word lists, and games, were all identified but not consistently by all participants. Providing such scaffolds assisted the children individually and assisted the teacher to better meet diverse needs.

### ***5.5.3 Researcher reflection***

Many of the themes presented above were triangulated by the information from the children's interviews. For instance, the children confirmed from their interviews that they generally felt supported by the teacher and were encouraged to learn which reflected their responses to the questionnaire questions. That they did not mention other teacher support and several of the scaffolding techniques operating in the room, was a surprising finding. When discussing this finding with the teacher she told me that she intended changing her practice and would specifically identify, to the children, what she was doing and why.

The findings from the interviews support emerging themes including grouping for instruction, informal peer support, teacher aides being seen as child aides, and positive classroom atmosphere leading to student participation and mutual support. The interviews also found that the children could identify learning supports provided for them but their identification was inconsistent.

On reflection, it would have been useful to have been able to analyse the interviews and then go back to the children to seek clarification and extra information. The extra information would have enhanced the data and perhaps allowed for further themes to emerge.

### ***5.6 Stakeholder views: Surveying the teachers through interview***

The teacher interviews were held in term four following my interviews with the children. Although the interview questions were formulated during my planning phase of this first action research cycle, there was still enough flexibility to investigate issues that had arisen from other data gathering methods such as the classroom observations, questionnaire responses and the children's interviews.

The core questions in the interviews reflected aspects of inclusive practice from the literature. Programme planning, evaluation, professional development, cooperative efforts in planning and teaching, teaching intervention techniques, and classroom management were canvassed. I also sought the teachers' views on inclusion in practice and on diversity within their classroom.

#### ***5.6.1 Data from the teacher interviews***

The responses to the questions were analysed several times. Not only was I looking for factors that enabled or hindered inclusion, my research objective, but I was also interested to see if there were any themes that were common to the two classes and their teachers or any themes that might be different. These differences might be due to teacher factors, child factors or the interaction between them. I was also interested to note whether the themes that emerged earlier in this cycle with prior data analysis were triangulated, or modified, by the data from this intervention tool. Finally, I wanted to know whether the teachers were sufficiently interested in the research project to be willing to participate longer. This was important because their original agreement to participate in the research was for one calendar year.

Table 5 summarises the teachers' responses to the above mentioned aspects of inclusion. The final column is my analysis of their responses. (See Appendix K for a copy of the questions)

**Table 5**

***Teacher interviews: An Analysis of Responses***

<b>Question</b>	<b>Tina</b>	<b>Janine</b>	<b>Analysis of responses</b>
Diversity	Stressors – no support, lack of knowledge around diversity Rewards – children succeed, positive parent comments	Stressors – lack of support – high expectations Rewards – social interactions	Teachers on own with little support - isolated High expectations of self as teachers
Evaluation	Observations Reflection on action and in action but at surface level Children not taking risks Lack of engagement by children	Children complete self evaluation termly Reflection on action Feedback from children	Reflection at action level Change results from other's behaviour rather than self enquiry
Inclusion	Inclusion means everyone in class Mainstreaming is different Resourcing would affect inclusion	No matter what the child's ability they are a functional part of the class Mainstreaming same as inclusion Parents should know about special schools	Agreement that inclusion refers all children Reservations expressed when pressed about children with severe needs
Planning	Learning intentions and success criteria assist	Learning intentions and success criteria assist	Observations confirmed its adoption by both teachers of learning intentions in their practice.
<ul style="list-style-type: none"> <li>• Courses contributing</li> </ul>	School policies not read	Exemplars, source books, curriculum documents	School policies and procedures not read.
<ul style="list-style-type: none"> <li>• policies guiding</li> </ul>	Observation initially Standardised tests Self-assessment by children. Formative assessment	Assessment Diagnostic testing Grouping Modifying curriculum	Range of assessment measures used Ongoing assessment appeared to be the basis of the planning.
<ul style="list-style-type: none"> <li>• planning for all</li> </ul>	Modelling to others Contributions in class Buddy Help – Leader and follower.	Group work Buddy help Individual expression in projects	Diversity not used to enhance curriculum programme - used to assist with social interaction
<ul style="list-style-type: none"> <li>• using diversity</li> </ul>	Integrated unit at macro level	Integrated units at macro level	School organisation appeared to be a barrier to teacher cooperation
<ul style="list-style-type: none"> <li>• teacher collaboration</li> </ul>	Little – can ask Team Leader In class on own	Day to day planning – none	Classroom isolation of teacher.
<ul style="list-style-type: none"> <li>• assistance from other staff</li> </ul>	Observation, Reflection, Assessment Notebook to jot ideas down Focus on a skill at a time	Ongoing assessment Working with kids in groups	Ongoing assessment through observation during in class and permanent products in children's books
<ul style="list-style-type: none"> <li>• primary planning tool</li> </ul>	Team Leader	Te Kete Ipurangi	Support amongst teachers not apparent
<ul style="list-style-type: none"> <li>• planning assistance</li> </ul>	Observation and discussion with colleagues	Teachers College Professional Development	Various sources both pre and in-service.
<ul style="list-style-type: none"> <li>• learn to plan</li> </ul>			

Question	Tina	Janine	Analysis of responses
	– several years as relief teacher		
Research in the classroom • how might it affect practice?	Question not asked	Aware of own assumptions – Research might change methods	Teacher aware she had assumptions
Teaching • co-teaching or cooperative teaching?  • Role of Specialist Teacher  • Role of Teacher aide	No real knowledge of terms  No specialist teacher	No knowledge of terms  Removes child from room – ST tells CT what she is doing. CT asked ST to take class so CT could work with targets – suggestion not activated  Oral discussions with teacher – no structured format	Not used in classes  Class teacher had no input into what was taught to the target during these sessions.  Teacher Aides performed routine duties with little discussion with teacher
Teaching • learning techniques used  • structuring the class to facilitate teaching	Learning intentions Classroom routines  Grouping with a little individual	Bricks Think Hat for children Plus, Minus, Interesting Learning Intentions Self-assessment Thinking about thinking (Meta-cognition)  Groups Whole class Informal buddy help	Range of techniques used.  Grouping and whole class predominate

### 5.6.2 Themes resulting from the teachers' interviews

#### *Teacher independent practice*

The teacher interviews gave further evidence that they were independent practitioners when it came to their classroom practice. There were several aspects to this theme; teachers attempting to meet needs from within their own resources, little support from colleagues, and guidance from school policies and procedures absent from teacher pedagogy.

*(Researcher) Is there anything you do with other teachers, plan with other teachers, any activity you plan?*

*(Janine) Our integrated units are sort of. The general overview of it is discussed as a team. Like tabloid sports, one off activities like that we do as a team. But as I say day to day classroom learning is done individually.*

*(Researcher) But for instance you haven't done something like sat down the three of you and said "Right we've got the three classes, the variability in maths is huge, let's pick all the kids up and re-group?"*

*(Janine) No it's been discussed but it's something that has always been put in the too hard basket because of timetabling*

[TI – J – 2004]

This teacher also mentioned that when bereft of ideas for her lessons she was more likely to go to the internet than to a colleague, although the other teacher indicated that she would seek the view of her team leader.

Individual characteristics of a teacher may be a barrier to cooperation with colleagues, and, consequently, teacher cooperation in pedagogy may need to be planned for, supported, and mentored. In answer to a question around collegial cooperation Janine had this to say.

*(Janine) You know it's hard sometimes Ron because I'm me and I've come into teaching with a lot of personal experiences that I think shaped who I am and how I teach and I often clash with a lot of teachers because they are quite staunch in the opposite sense.*

[TI – J – 2004]

Critical reflection, as a teacher initiated behaviour, would assist Janine to examine the assumptions underlying her pedagogy and, with the help of a mentor, may point the way to lessen these clashes and encourage collaboration and cooperation with her colleagues.

### ***Pedagogical Change***

Pedagogical change can occur as a result of influences from outside the classroom and from within the classroom. Professional development which comes from outside but is incorporated inside appears to be both enduring and an enabler of change. Both of the teachers, as evidenced in the extracts below, found that where the professional development was delivered in a manner that was supportive, contextual and ongoing they found it meaningful and, therefore, were prepared to incorporate into their practice. This particular piece of professional

development also contributed to the theme of inclusive practice as it encouraged the teachers to focus on the needs of the individual.

*(Researcher) You mentioned that you've had some in-service training since you came to [R] school, and you talk about [TT]. What is it about that course that has helped you?*

*(Janine) The fact that she's the first person, and I'm meaning this in the sense of teachers college, who has actually given professional development in a meaningful context. At teacher's college we were trained but it didn't mean anything to us. We'd never taught before and so it was a real gross generalisation and an overview of everything, whereas [TT] has come into [R] and got to know [R]. Got to know the classes and she's worked with the teachers, not quite one on one but very specialised for the children we've got. It's such a big difference. Everyone raves about how wonderful it's been and it's because she knows what she's talking about because she's also been a teacher and a principal. So she's realistic about what is achievable and I think that's what also it is - it's not the lip service. She's been honest and she's given it to us as appropriately as possible.*

[TI – J – 2004]

And from Tina

*(Tina) Our professional development for the last two years here at [R] has been looking at formative assessment, with [TT] from [named] University, so that's probably more what you are talking about isn't it? And that's using the likes of your learning intentions and success criteria, feed forward comments and those sorts of things. So for me that's been huge and made a huge impact in my teaching I think, probably because A came last year and I was back in the classroom again and it was just the perfect timing for me cause it gave me something to work with and I think I found too that it does work*

[TI – T – 2004]

Context, relationship with the facilitator, and facilitator's knowledge of the teacher and their needs were three important elements of successful professional development highlighted by the teachers, and that encouraged them to adapt the ideas and so modify their practice. A reaction of the children was also a catalyst

for a self examination of practice. Tina noted in her interview that it was the children not taking risks and not engaging with the lessons that would encourage her to change her practice. Janine also referred to the behaviour of the children as stimulants for teacher change.

### ***Reflective thinking***

Reflective thinking is considered an important element in pedagogical change and was a part of the teachers' pedagogy but it tended to focus on technical matters such as accountability, content and delivery. In the following extract, however, the teacher is beginning to move from a technical interest to a pedagogical one.

*(Researcher) Do you look at yourself?*

*(Tina) Yeah I suppose I do and there are times when you do things and it hasn't worked and you know why. You have to think in your head, "I thought that would be a good little unit I was going to do and it didn't work out". And thinking about - well ok we didn't really approach it in the right way or the kids just didn't have the interest level in that particular thing, so I think you are probably forever reflecting on what you do as a teacher, and [on] your planning. And often you do some pretty good planning and then that impromptu lesson that comes out of the blue, because someone brought something along, that you didn't actually even plan for, is a better lesson*

[TI – T – 2004]

Whilst in the above extract Tina is really talking about evaluating her practice, the fact that she is thinking about what she is doing as a teacher is the beginning of critical reflection because it is moving her thoughts inwards towards examining her rationale, her feelings, and her assumptions. But as yet, she has not moved beyond the immediate experience towards an examination of her tacit knowledge (Teekman, 2000).

### ***Assessment and analysis***

Ongoing and continual assessment guided both teachers' planning. This theme is important because assessment is considered to be the kernel of individual planning. Both teachers were frequently assessing their students' progress, formally in tests and informally as they moved around the classroom or listened to

answers from questions they posed to the children. However, a deeper, and more focussed, analysis of the assessment results would have assisted the teachers to better plan to meet individual needs. In the extract below Tina reveals that much assessment is a requirement from senior staff, generally for the purpose of reporting progress, both individual and class.

*(Researcher) What you're saying is that what you see in the classroom guides your future planning.*

*(Tina) Yeah I think it does. I do do a lot of assessment. But I think sometimes probably the observations over-run the assessment because sometimes on paper kids might have really good alphabet recognition but they're not using it. So it's sort of like they might look good - oh yes they know all those basic sight words but when it comes to strategies they don't know how to attack the unknown words. A lot of assessment is because we have to, but I think a lot of it, especially at this level, is observation based and seeing what their needs are.*

[TI – T – 2004]

As was evident from the classroom observations individual assessment did not, in the majority of instances, lead to individual planning. Rather, assessments were primarily used to group children so that teaching instruction was better facilitated, or to plan for the whole group or class. Where individual instruction was delivered it tended to be from informal teacher observations in the classroom and delivered immediately and serendipitously. Grouping in both classes also tended to be around a level e.g. reading age or math stage, rather than around the need to understand a concept e.g. multiplication of fractions.

*(Researcher) How do you plan for the needs of all your kids?*

*(Janine) Children for maths are grouped by their test outcome, their results from the Nump<sup>4</sup> tests that we do. Children are grouped for reading by their running records and also through their level of comprehension when I test them with prose inventory. So it's sort of, my planning for the needs of the kids is sort of done as a group, overall of the group and then you modify each activity and help each kid as you go along.*

*(Researcher) Is there one main thing that helps you with your planning?*

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<sup>4</sup> See Glossary

*(Janine) Just ongoing assessment. Assessing where the kids are at, constantly. Knowing my kids. Working with them in group situations. With our class sizes it is impossible to work individually with each child each day so it is just through working with them in groups and group discussion.*

[TI – J – 2004]

In the above extract, Janine acknowledges implicitly that individual assessment should lead to individual planning but offers the size of the class as a reason for not planning for individuals. Janine's action research study facilitated individual planning and delivery (discussed in Chapter 6).

### ***5.6.3 Researcher reflection***

Teachers were prepared to share their thoughts, feelings and practices with the researcher. The trust that I had been hoping for in this cycle did eventuate. The information was varied because many aspects of classroom practice were revealed from planning, through intervention to evaluation and reflection, so mirroring the action research cycle. As well, some insightful revelations came to the surface. One such example was Janine's disclosure regarding her worries about not being sufficiently prepared to teach the children, and how that worry affected her behaviour.

*I do a lot of it (planning and preparation) at home not at school. I'd hate to come to school in my nightie. That would be my biggest fear Ron. It would be seriously like sitting in front of an audience naked to do a speech, I just hate, if I'm not prepared I feel very scared.*

[TI – J – 2004]

Teacher interview data triangulated themes that had emerged in the classroom observations and the children's interviews. In particular the isolation of the teachers within their classrooms, the individual assessment leading to group, rather than individual student, teaching and the stimulants for change in practice were evident in these findings.

Finally, the teacher interviews presented me, as the researcher, with a dilemma. One of the objectives of this cycle was to be able to identify enablers and barriers

to inclusive practice. What I discovered was that those practices that could be termed as enablers also became barriers in certain situations, for example, assessment. Both teachers were assiduous in assessing the children's progress, both formally and informally. Individual assessment is viewed as an enabler of inclusive practice because it has the potential to identify individual needs and plan to meet them. However, it becomes a barrier when the analysis of the assessment does not lead to planning for the learning of individual students.

### ***5.7 Stakeholder views: Surveying parents through interview***

Parents too provide a perspective. It is often biased towards their child, and their position within the community of learners, but can also be insightful into aspects of the classroom interactions and their own world view. Both the parents interviewed were the mothers of two children in the senior class most challenged by their learning. As it transpired, the parents' knowledge and interest of what occurred in the classroom was quite dissimilar.

Because the interview questions were required to be formulated prior to ethics approval and some months before the interviews took place, the construction of the questions was influenced by the literature review conducted at that time. However, the core questions did lead to supplementary questions. Each interview was audio taped with permission. Both interviews were read a number of times to derive categories and themes.

#### ***5.7.1 Parents' interview: Researcher summary***

The contrast between the two parents interviewed was informative. One mother was quite knowledgeable about the classroom and had clear expectations for her child. The other mother knew very little about what happened at school but was satisfied with her son's education.

Both parents conveyed in different ways that school included academic learning and important social interactive components for their children. The parents' generally positive views of what was occurring in the classroom mirrored what parents had reported through the questionnaires.

Academic provision by the teacher in the senior class was considered to be good by both parents, but was not considered a priority for either. For these two parents social interaction with peers was the priority, as reflected in this conversation.

*(Researcher) The academic side is fine?*

*(Mother 1) It's the social. It's more to me, when someone has a special need. OK, S has got the intellectual need. She's not fully intellectually disabled but there is a little bit. But for some children who have got special needs they need the social skills more to get on with their life rather than the yeah. It's a hard one. Cause they need to learn how to make friends. They need to learn how to voice and speak out for themselves rather than one plus one is two.*

*And getting the balance right is difficult too. I mean we here have those discussions all the time especially when it comes to IEP (Individual Educational Plan) times.*

[PI – Mother 1 – 2004]

This mother voices concerns about discussions in preparation of an IEP, particularly teachers' limited attention to parents' priorities for their children. Mother 1 was principally concerned about her child's social interactions and considered that insufficient attention was paid to this aspect of her child's development. Both parents indicated during the interviews that they considered that their children were well accepted in the classroom by the teacher and their peers. These parental views triangulated the findings of the sociogram which revealed that both the children were able to name friends and had other friends name them.

Another concern voiced by Mother 1 was that for some activities her child was an onlooker rather than a participant. Physical activity was a concern for this mother. She considered that the teacher, and the school, could provide alternate activities that her child could do when the other children were engaging in sport and recreation. She considered that with the level of paraprofessional assistance that was available her daughter could have been encouraged to participate more fully.

Although both of these parents had disabled children, they had not been invited to become involved in crafting school policy, especially that relating to special educational needs. Mother 1 considered that her regular attendance at Individual Education Plan meetings might have given the school ideas as to how she considered the school might meet diverse needs. Mother 2 did not have such an avenue to express her views as there had never been an Individual Education Plan for her son.

### ***5.7.2 A theme to emerge from the parent interviews***

An important theme from these interviews was communication; the parents were not consulted about their views as to their child's progress or invited to contribute to the planning around their learning programmes. For one parent, the communication appeared to be parent initiated as she sought to have her views made known whilst for the other parent there was scant consultative communication. Communication from the school to the homes did not appear to be planned, or initiated, frequently. Communication was mostly initiated by a mother when she considered there was a problem. The other mother did not know what was happening to her child but because he was happy and in the school she wanted she did not initiate contact. However, whether this should have been perpetuated given the learning difficulties of the child is interesting in terms of the principles and characteristics of an inclusive pedagogy.

### ***5.7.3 Researcher reflection***

Perhaps the most valuable aspect of these interviews was that they added to the ecological data of the classroom. Teachers, when preparing to meet the diverse needs of their students benefit from acknowledging, consulting with, and integrating into their planning, the views, needs, and assumptions of the parents because the parents have dimensions to offer that are not available from other sources. Having knowledge of the family, their culture and their aspirations is likely to result in more pertinent learning programmes for individual students.

## ***5.8 Revealing the classroom ecology: A summary of people, relationships, and pedagogy***

Exploring the variables present in the classroom that impact on the teacher's ability to develop inclusive practices was facilitated by action research. The following themes, arising from research within the classroom, are discussed in this summary: classroom climate, assessment leading into planning, the role of para-professionals, independent teaching practice, collaboration between professionals, feedback, and reflective practice. To assist with answers to Research Question 1 (see Section 2.6.1), within each theme contextual factors which enable or inhibit inclusive practice will be identified.

### ***5.8.1 Classroom climate***

Classroom climate is an important determiner of inclusion. A supportive environment encourages friendships to develop where diversity is viewed as the norm. The sociogram, and children's interviews, revealed that almost all of the children had friends in the class and that they felt supported and valued by the teacher and their classmates. Both of the parents confirmed that their children liked to go to school. Both teachers had peer support as a learning goal for their class, as reported in their interviews. This goal was achieved through a variety of strategies (e.g., 'yellow pages' in the senior class) and classroom organisation (e.g., incidental buddy help in the junior class). Stability of the classroom environment was also important for providing support for the students. Both teachers maintained a strong routine including the use of visual task board planners and advance organisers. The positive classroom climate was also achieved through the use of positive reinforcement, encouraging the children to achieve, providing scaffolding and presenting interesting tasks for the children to complete.

### ***5.8.2 Assessment leading into planning***

Learning needs are identified through assessment. Both of the participating teachers used a variety of assessment techniques and assessment was a ubiquitous practice. However, the assessment was often used to group children to facilitate instruction, or to report progress, rather than to gather data to plan individual

learning programmes. Both of the teachers grouped their children according to the scores on tests rather than looking at a skill deficit and then forming a group to facilitate learning of that skill. Reading, language and maths groups were formed on the basis of the closeness of their level scores (e.g. reading age). No observations were made of groups formed to assist the learning of a particular skill (e.g. proof reading). Each teacher understood that they should plan for individual progress, as revealed in their interviews. Individual assessment did not, in the most part, lead to individual planning.

Where the teachers did provide some individual tuition, this tuition tended to be informal and serendipitous. It often resulted from the teacher noticing a skill need during a group lesson or whilst observing the children completing a set task. Spontaneous individual teaching would then follow. Whilst such spontaneous teaching may be beneficial to the student at that moment, providing for individual student progress and development needs a greater degree of planning and follow up. Thus, the use of assessment information by these teachers was a barrier to the development of inclusive pedagogy.

### ***5.8.3 Paraprofessional role***

Paraprofessionals, who can be a great help to teachers in the classroom, are also viewed as a barrier to inclusive practice because they often interfere with children's ability to extend themselves and achieve skill development and independence (Villa & Thousand, 2003). This was particularly evident in the senior class, where a child who had a dedicated paraprofessional was observed to rely on adult assistance for most of her output. When adult support was not available the child's engagement in learning decreased. Further, the use of paraprofessionals can interfere with the interactions between peers and the encouragement of children to look out for one another. Professional development in the class with the teacher and teacher aide may turn a barrier into an enabler.

### ***5.8.4 Independent teaching practice***

Writers in the area of inclusion (Ainscow, 2003; Evans et al., 1999; Prochnow et al., 2000; Vaughn, Schumm & Arguelles, 1997) suggest that one of the greatest enablers of inclusive practice is for teachers within a school to collaborate,

because collectively they have a greater array of skills and knowledge to help meet the needs of all children within a school. Along with this collaboration is an underlying assumption that there is a collective responsibility for all the children in a school, not just those within an individual teacher's class. In this study, there was minimal evidence of collaboration between the two participating teachers in this cycle, or with other teachers in the school. Both teachers were, in fact, independent practitioners with only the occasional assistance of a teacher aide. Some collaboration among teachers in a syndicate did occur at a macro level (e.g. musicals, themes) but when it came down to the classroom practice the teachers taught alone within their classrooms. Each teacher had techniques for seeking assistance when needed for their teaching (e.g., internet, asking a colleague). There appeared, though, to be no organised or collaborative effort at joint or group pedagogical planning or implementation. This finding of independent practice and limited collaboration was, therefore, an important finding.

#### ***5.8.5 Collaboration between professionals***

Communication and collaboration is also necessary between teachers who teach a child or group of children. Plans, teaching strategies, and learning goals need to be coordinated, in order that the child experiences no dissonance with its learning and how it is being taught, and can generalise skills taught to other situations. Further, the combined experience of the teachers should be used to the greatest advantage of the child. In both of the classes individual children, and groups of children, received extra teaching from other teachers, usually outside of the classroom. Most of this teaching occurred because a learning need had been identified (e.g., reading) but observations showed, confirmed by teacher interview, that there was no joint planning, no class teacher input into the content, little feedback on individual progress and often no forward communication as to when the extra lessons would occur. The classroom teacher who should have been the most involved was effectively left out of the process. A school strategy designed to meet the extra learning needs of a child became a barrier to inclusive practice and consolidated independent practice of the teachers.

### ***5.8.6 Feedback***

Listening to feedback and making subsequent adjustments to practice is the sign of a teacher who wants to improve and develop. During this Cycle 1 of the research study both teachers received feedback from the researcher through reading transcripts and verbal discussion. From this feedback both indicated that they wanted to make changes to their teaching practice. Feedback from students (e.g., reaction to a lesson) was also reported by the teachers as a catalyst to change. However, neither teacher mentioned feedback from parents in connection with change. Parents are essential members of the collaborative team around a child and their feedback is important. Therefore, whilst acting on feedback is an enabler of inclusive pedagogy, failure to heed the views of parents would be seen as a barrier.

### ***5.8.7 Reflective thinking***

From discussion, observation, and interview, a picture of teacher reflection on practice emerged. Evaluation of children's progress, monitoring children's reaction to lessons, and consideration of their own preparation and planning, were some of the reflective activities that the teachers engaged in. The teachers did not report that they regularly considered their feelings, opinions and assumptions. As will be demonstrated in Cycles 2 and 3 the teachers found this deeper reflection difficult even when guided to do so. Reflecting critically is viewed as an enabler of inclusive pedagogy because it assists in a consideration of the tacit knowledge that guides practice.

As is evident from this summary, most of the factors enabling inclusive practice can also be viewed as barriers. How each factor is viewed depends on a number of matters including classroom use, underlying teacher assumptions, historical pedagogy, professional development, and teacher mentoring. From the findings of Cycle 1 a theory is beginning to emerge. Given that teachers have an independent practice it is posited that a mentor, who has the trust and support of the teachers, and is available to develop and guide a reflection process, may provide a critical link to assist teachers towards a more inclusive practice. The second results chapter reports on professional development undertaken by the teachers, facilitated by the researcher who also acted in the role of a critical friend.

Chapter 6

## **Results: Developing skills in context**

### ***6.1 Introduction***

The previous chapter contained emerging themes from the first cycle of action research. Analysis of teacher observations, teacher, student and parent interviews, questionnaire data and student friendship analysis revealed themes related to: prevalent teacher assessment practice, planning for group rather than individual student learning, supportive classroom climate, role of para-professionals being child rather than teacher aides, limited collaborative practice between teachers in the school, teachers' growing reflective practice, and emerging teacher interest in researching their own practice.

This second results chapter builds on these themes and examines newly emerging themes arising from the teacher action research projects and the reflection journals. The underlying continuing theme is that of teachers' growing practice in reflection. Findings are discussed in sub-themes of: findings from the reflection journals exercise, increased individual children's achievements, teachers' critical evaluation of the projects, and teacher questioning of their practice. Each of these themes is examined in the chapter and a summary of the key themes concludes the chapter.

### ***6.2 Cycle two of action research - Teacher reflection on practice***

Reflection, when skilfully practised, assists the teacher to systematically review their pedagogy, and is a critical component of action research. Because the teachers had not been observed practising it in a systematic or ongoing manner during Cycle 1, both teachers were invited to undertake a research exercise on reflection prior to beginning their own research projects.

Findings from Cycle 1 suggested that the teachers were generally independent practitioners who were more likely to modify their practice through professional

development when it was delivered in context, was considered to be relevant to their teaching, and was delivered by a mentor/critical friend who was trusted.

This research exercise had several purposes: to ascertain how the teachers were able to reflect, to develop and enhance their reflective skills, and to prepare them to undertake their own action research projects in their classrooms. Cycle 2 also provided an opportunity for the teachers to be active research participants.

### ***6.2.1 Roles and process***

The teachers' role in this action research exercise was to reflect on recent lessons that they had planned and implemented with their class, using a researcher designed template to guide their reflection. My role was to provide information on the nature of reflection, to negotiate their participation, to design the template, to receive their reflections and to provide feedback. Information provided to the teachers included a copy of, and discussion around, a reflective cycle example constructed by Gibbs (1988 as cited in Bulman & Schutz, 2004), and a review of the guiding template. It was suggested to the teachers that the template be used as a guide to their reflective thinking and that they could elaborate and develop any areas of choice.

At the beginning of the cycle the teachers were then invited to choose lessons to reflect on, use the template to guide their reflection and email their reflection journals to me. The teachers were able to contact me for assistance. No direction was given as to which lessons they should reflect on but it was suggested that they should vary the curriculum areas. Advice was also given that the reflection should proceed as close as possible to the lesson so that recall was strong. Both teachers reported that they used a variety of methods to aid recall including materials produced by the children (e.g. art constructions), children's achievement data and some teacher notes made during the lessons. Following receipt of the reflections I emailed feedback to them. The teachers reflected on a chosen lesson once a fortnight over a two month period.

From the reflection journals completed by the teachers, a summary of the data was constructed and can be viewed in appendix X. The summary was constructed to

assist with an analysis of: the teachers' ability to reflect on their pedagogy from within authentic contexts, the extent to which the teachers were able to examine their own behaviour, thoughts and feelings, and the extent to which the teachers were able to question their assumptions.

### ***6.2.2 Findings from the teacher reflection journals***

Data arising from the reflection exercise contributed to the research outcomes in two ways. From an analysis of the data, information was gained which enabled feedback to be given to the teachers around the enhancement of their reflective behaviours. As an example of this feedback I made the following comment in an email to Janine

*“As you rightly point out, by implication, if it isn't broken don't fix it. Reflection doesn't always need to mean change - it could mean consolidation which is what you are doing.”*

[RJ – Reply to Janine]

Secondly the data the teachers generated allowed me to consider some of the ways that teachers reflect on their practice, and how professional development might empower them to reflect more deeply.

#### ***Reflection levels achieved***

In the reflective exercise the results demonstrate that both teachers tended to focus, according to Teekman's model (see Chapter 4, Section 4.6.1), at the levels of action and evaluation. However, as the paragraphs in this section (6.2.2) demonstrate, factors contributing to inclusive pedagogy were identified by the researcher within these levels. This was an expected finding because the teachers were concerned about their ability to deliver a lesson that would lead to increased learning for the children. Their reflections were generally around whether that was achieved. The template did, nevertheless, cue them into looking at evaluative matters such as their feelings, the way they had structured the lesson and how they might change it in the future. Consider this entry from Janine who is expressing a feeling about having achieved a goal

*“I felt good that the students had developed an understanding of what an adverb's/ adjective's job was and how to use them appropriately.”*

[RJ – 3 – Janine]

In this extract Janine is considering her feelings and why she had those feelings. It is non-threatening because the feelings are positive. Expressing positive feelings frequently opens up the possibility to an expression of negative feelings and an examination of why one has them.

***Recognising the need to plan for all students and to remove barriers to participation***

Because these reflections occurred following the lessons they were reflection-on-action and, therefore, any changes considered would be for a future lesson. Some of the considered changes related to providing for all of the students as indicated in this extract.

*“Because it’s a concept that needs to be covered almost daily at the moment I would also introduce games and different ways to involve the children in different formats so that they don’t get sick of the same old and I cater for both ends of the spectrum.”*

[RJ – 2 – Tina]

Facilitating the teachers to consider the learning of all the children in the class was one of the goals of this reflection journal exercise.

In the following extract, Janine indicates that she is aware of the need to ensure that all children are able to participate by removing barriers

*“3 students were hindered by their lack of fine motor skills to write with pencil (2 used ibooks in the end)”.*

[RJ – 4 – Janine]

Recognising barriers to participation and understanding that all planning must encompass the range of abilities in a class are important aspects of inclusive pedagogy because teachers have a *“responsibility to provide active and successful learning experiences for the learners in each class ...”* (Carrington & Robinson, 2006). Through the use of this reflective journal the teachers were able to recognise areas where they could plan to be more inclusive in their practice.

***Recognising the importance of data***

In order to decide whether a lesson has been effective for any student a teacher must have relevant data. In this extract from Tina the importance of having data for determining individual student progress is revealed.

*“My evaluation involved looking at the process the children used as well and if there was an improvement in their technique of sketching animals. We did a sketch before all the art started and will complete one at the end. This will determine for me how much their sketching skills have improved after focussing on the process.”*

[RJ – 3 – Tina]

Gathering data is important in inclusive pedagogy because it has the potential to set the learning goals and the programme for individual students assuring that they are able to participate and contribute in the classroom. Understanding that regular probes are necessary to determine progress is also important when conducting classroom research.

***Difficulties in reflecting on self***

Consider the following reply from Janine to a cue question asking her to describe any opinions, feelings or emotions.

*“I was excited that the students had begun to recognise personification for the previous activities and that they liked this poem.”*

[RJ – 4 – Janine]

In this extract, Janine is expressing an emotion but it is focussed on the achievement of the children. There is no insight into her feeling or further disclosure. Most of the teacher reflection and evaluation in the journals was of the children and their behaviours rather than on their own behaviours, beliefs or assumptions. Where there was some self-disclosure of assumptions it took the form of a statement without the accompanying examination of the basis of that assumption.

*“I assumed that most children would have experienced and have understanding of some aspect of art.”*

[RJ – 1- Tina]

*“I thought that with all the rain that we have had lately that it would help the students think of descriptive ideas and feelings.”*

[RJ – 3 – Janine]

However, these extracts are examples of the beginnings of teacher reflection around their own beliefs and assumptions because feelings are a portal to deeper reflection. This is an important beginning because previous results in Cycle 1 had not demonstrated that this was occurring. Feedback was given to the teachers that when stating a personal assumption not only should it be stated but that some examination of the factors that support it should be undertaken so that they could determine on what the assumption was based.

### ***Difficulties in reflecting on routine teaching methods***

The teachers experienced some difficulty in reflecting and evaluating pedagogy that was routine and in which they were very comfortable not only with its delivery but also in the results that it brought for the children. Janine gives an example of reflecting on a spelling lesson.

*“After doing this reflective journal activity I have decided that when you have been doing something for a long time without reflecting on it, that the activity becomes part of your routine and it is very difficult to reflect on.”*

[RJ – 2 – Janine]

Consequently, it appears that it is important in reflective thinking to encourage teachers not only to review and reflect on lessons that they are concerned about, but also to look at those lessons that are a regular feature in their pedagogy and appear to be proceeding well. There is a concern that routine may merely be confirming assumptions.

### ***Use of templates and verbal interactions***

Using a template to guide the teachers may have been, on my reflection, a barrier to their deeper reflection, even though I had asked them to use the templates as guides. An analysis of the efforts of the teachers suggests that they tended to answer the template questions rather than using them as cues to develop deeper

and wider responses. For example, when asked to discuss any aspect of their lesson that they might consider changing in a future occurrence Tina replied,

*“Next time I would take it slower and look at each area better.”*

[RJ – 1 – Tina]

Tina’s response is too general to identify specific future actions. More verbal interaction between teacher and researcher, following the completion of each journal, could have elicited more reflection and cued the teacher to deeper considerations of her pedagogy.

### ***Extending reflective thinking to students***

Janine, in her final interview reported that she had begun to ask the children in her class to reflect on aspects of the class programme. She considered that such feedback added to the reflection that she might do as the teacher. She reported that she would incorporate such feedback into the reflective journals that she was going to keep in the following year.

### ***6.2.3 Summary of findings from the teacher professional development reflection exercise***

Comfort with and predictability of pedagogy appears to make reflective thinking more difficult. Janine attempted to examine her spelling programme that she had been conducting for three years. For her it was a comfortable method of teaching spelling and it gave her the results that she wanted for the children. Because she is not yet able to question the assumptions underlying her pedagogy she is unable to identify aspects for potential improvement.

Much of the reflective thinking by the teachers was focussed on their practice and how to improve it on a practical plane. Considering practice at this level is a good stepping stone to deeper reflection because evaluation of practice begins the process of asking questions about oneself. In these reflection journals the teachers began to ask questions around their own actions which, while not at a critical level, required them to look at their own behaviours, feelings and opinions. In the Teekman Model (2000) it meant that they were both looking at themselves and at the wider classroom picture. Factors enhancing inclusive pedagogy were

also identified by the teachers where they acknowledged, in an emerging manner, the need to plan for all students.

The reflection journals allowed for some professional learning prior to the teachers beginning their own action research projects. Teacher learning occurred in two areas: when reflecting the actions of the teachers and their interactions with the children are as important as the students' achievement results, and factors such as teacher emotions, assumptions and beliefs need to be considered when reflecting on teaching. It also gave both the teachers and researcher a base from which future professional development might proceed to enhance reflective practice. For example, because one of the teachers found it difficult to reflect on established teacher practices, in Spelling, it became important that these established practices were routinely reflected on. From a research perspective it confirmed an emerging trend around teachers needing support and guidance, in context, to allow them to develop knowledge and skill that would allow for change to enhance inclusive practice. It also added to the emerging theory that teachers in independent practice need school or classroom based professional development that occurs in context, is guided by a critical friend who converses with the participants, is ongoing and is considered relevant to their needs as a teacher.

The findings from the reflection research have added to the emerging themes in several ways. One of the most important is that it is crucial to have ongoing dialogue in order to develop reflective skills. The results suggest that to just set tasks and expect the teachers to learn from them may be insufficient to develop skills; some form of reciprocity is necessary. Reflection on practice is important for change in practice especially where the teachers are independent practitioners and do not have regular interaction with a mentor or peers. Whilst the reflection journal exercise might not have resulted in immediate change in practice it did raise awareness about their practice. Consider this extract from Tina who was reflecting following her action research project.

*Reflection activity prior to phase one – was very good at helping me to accept that I still have some learning to do around my teaching.”*

[ARR – 2 – Tina]

Finally, reflection needs to occur on a regular basis and that all aspects of teaching, including entrenched and enduring practice, need to be considered.

During the reflection journal activity the teachers had been considering what learning challenges they wanted to research using action research. The next section of this chapter presents the results from the teacher action research projects.

### ***6.3 Cycle three of action research - teacher action research***

Whilst Cycle 2 of the research gave the teachers an opportunity to systematically reflect on their practice, Cycle 3 introduced the teachers to action research that would give them another approach to solving classroom challenges. Because the focus of the challenges was on students' individual needs and how to provide for them, the context of inclusive practice was present. Outside facilitators are not always available to assist with professional development but my assumption around the learning from this research activity was that action research could empower the teachers to take responsibility for their own professional development. This chapter, therefore, contributes to an emerging theory on developing inclusive pedagogy.

Previous interactions with the teachers in which I observed, discussed, questioned and fed back material to them (Cycle 1), enabled them to agree to participate in a further extension of my research that had the potential to question aspects of their pedagogy. However, the teachers told me, in a review session, that they also recognised that the research project had the potential to enhance and extend their skills and knowledge, not only around action research but also in helping to overcome pedagogical challenges. Whereas in the first cycle the teachers had been mainly emergent participants, Cycle 2, the reflective journals, had moved their participation from emergent towards active because they had to collect data on which to reflect and evaluate their own teaching. Therefore, Cycle 3 moved the teachers towards being researchers in investigating children's needs and developing their own practice.

My research had proposed that action research would assist teachers to solve classroom pedagogical challenges and in so doing improve inclusive practice. Thus the teachers were invited to conduct their own action research projects around classroom challenges that they currently had.

### ***6.3.1 Setting***

The teacher action research project was carried out in the two classrooms that had been the setting for the other cycles of my research.

### ***6.3.2 Participants***

Each of the teachers, Janine and Tina, profiled in the methodology section of this thesis participated in the teacher action research project. However, the students in each class had changed as this third phase of the investigation was conducted in a new school year. The class levels remained the same with Janine teaching a Year 5/6 composite class and Tina teaching a new entrant class. The numbers of children also remained the same with 33 in the senior class and 25 in the junior class.

### ***6.3.3 Role of the external researcher***

One of the major functions of the external researcher was to empower the teachers to conduct action research in their classrooms. Initially an explanation of action research was given, including the reasons for its choice, the assumptions I had about its use in the classroom setting and a description of the components of the action research cycle. Three hand-outs were given to the teachers detailing the basic elements of action research (Dick, 1997; Dick & Swepson, 1997; Webb, 2000). The handouts were discussed with the teachers and questions answered. I was assisted in this briefing task by Janine who had been introduced to the method in pre-service teacher education. The cycles and spiral diagram (Chapter 3, Section 3.6.3.6) were discussed with the teachers and related to their method of teacher planning which was to assess, plan, teach and evaluate. During the planning stage of the cycle a template was provided to guide the teachers in their preparation and they in effect produced a mini-proposal, a copy of which is included as Appendix U. Templates were also provided to guide reflection and evaluation at the conclusion of each cycle.

To ensure that the teachers might evaluate the progress of the children they were also encouraged to explore data gathering measures both as a pre-project baseline and to monitor students' progress. The teachers chose their own assessment tools following discussion and with some assistance from me.

I arranged for the teachers to be released for a half-day on three occasions; prior to development of the plan and at the completion of each of the two cycles. The purpose of the release time was to ensure that the teachers were free of teaching pressures to interact and discuss relevant research and project matters with me. To assist with identified pedagogical or learning challenges the teachers were encouraged to find ideas and evidence that might guide their intervention planning. Sources of information such as the school library, on-line resources, teacher resources and colleagues were discussed.

During the teacher action research projects I visited the two classrooms on a regular schedule. A major reason for these visits was to provide support and guidance to the teachers. Observation in the classrooms was followed by discussion with the teachers. I listened to the concerns of the teachers and problem solved with them around their individual projects. The decision by Tina to introduce physical activity prior to written language was an example of these discussions. A further reason for the visits was to ensure that the teachers were following the action research plans that they had developed and that any amendments were the subject of reflection and evaluation on their part, and that the changes were documented. Finally, it was also important to gather data on my research project.

#### ***6.3.4 Teacher action research processes***

In each of the following sub-sections the action research project developed by Tina is discussed first with that of Janine following.

##### ***Planning and choice of topic***

*Tina*

Tina identified that a group of five of her children appeared, from observation and assessment, reluctant to take risks during written language. She wanted to lessen their dependence on the teacher to guide their production of words and sentences. Importantly, she wanted to discover if it was she, as the class teacher, who was a barrier to the children taking risks. Before deciding on intervention strategies for Cycle 1 of her project, Tina consulted a reference article (Robertson, 2001) which presented ideas on how to assist learners who were considered to be strategy inefficient.

Part of Tina's intervention was to develop individual learning intentions for her target, and other children. These were based on individual need and each child was asked before they began their writing the question, "*What do you need to remember today?*" The child then referred to their individual learning intention. Examples of a learning intention included making a space between words, beginning with a capital letter or finishing a sentence with a full stop.

#### *Janine*

Task orientation and staying on task were concerns for Janine. She identified a group of four boys who exhibited task avoidance strategies, both at the beginning of a task and during its execution. She considered that these behaviours were preventing the boys from effectively learning and achieving. The question she wanted answered was whether there was an effective method for motivating students to begin a task and to remain on it for a longer period. As with Tina, this teacher was particularly concerned about written language tasks.

#### ***Intervention***

##### *Tina*

The action research plan devised by Tina was a combination of elements including; teacher modelling, placement of children to facilitate peer modelling, choosing a time of day that best suits written language tasks, use of "brain food" prior to the lesson, use of exercise prior to the lesson, encouraging the children to know when and where to seek appropriate help and careful daily monitoring of the target group of children's progress. Prior to intervention Tina was advised to

vary some of the elements, e.g. brain food and exercise, so that she might be able to determine which one might be having an effect.

During the first intervention stage changes were made to the plan as a result of the teacher's observations and ongoing assessment. For example, Tina introduced mind mapping and key words as scaffolds for the target children. In her Cycle 2 a major change occurred in the intervention plan as a result of teacher reflection and discussion. Peer tutors were trained and placed alongside the target children. The rationale for this change was that previous research has suggested that peer tutoring is a successful method of assisting children who struggle with written language (Medcalf, Glynn & Moore, 2004). Peer support is also viewed by writers in the field as being a technique that promotes inclusion in the class programme because, whilst it focuses on an individual's need, it focuses on the participation of individuals within the whole class programme (Cameron, 2002; Hardin & Hardin, 2002).

A further change implemented in Cycle 2 of her research was that she re-located some of her students. In Cycle 1 the students were grouped according to ability in written language. Tina observed that the target students who were all in the same group tended to prevent one another from completing their tasks by unproductive behaviour. Tina dispersed the target children amongst other groups.

#### *Janine*

The method that Janine chose for her teacher research was to divide written language task into discrete tasks. Following the introduction and discussion phase of the lesson the teacher broke the rest of the lesson time into thinking, writing or rest periods. The periods were delineated by the use of a liquid egg timer. This written language intervention was performed three to four times per week with the whole class. By having discrete periods the teacher believed that she would be able to more effectively monitor which tasks were giving her target group the most challenge.

Once a week the children completed a "free" written language task during which, following an introductory discussion no further help was given. The teacher then timed how long it took the four target children to begin the task of writing, how

long they stayed on-task and recorded the number of occasions they were off-task. A running record for each target child was kept in which off-task episodes were noted. Over the cycle these data were averaged out.

The intervention plan for Cycle 2 contained some changes. The liquid timer was replaced by a stop watch because the teacher noticed that many children were watching the liquid egg timer slowly empty which took their attention from their writing task. During Cycle 2 the target children were seated together. The teacher did this because she considered that the competition between the targets might have encouraged them to stay on task longer. It also afforded the teacher a better opportunity to assess the children's progress because she had a reduced field of vision in which to scan the target children more frequently (c.f. Tina's approach). This flexibility to make change is a feature of action research.

In both cycles the whole class performed the free written language activity but with only the target children's task behaviours being specifically monitored. All of the children had their writing output assessed by the teacher at the end of writing session, usually after school. The teacher reported that she used verbal prompts during the intervention sessions with the target children at what she considered was a higher rate than with the rest of the class.

### ***Reflection and evaluation***

At the completion of each cycle the teachers reflected and evaluated on their project using a template. The purpose of the template was to give some direction to the reporting of findings and to lead the teachers into some reflective behaviour. At the conclusion of the two cycles of their action research project the teachers also completed a template which guided reflection and evaluation around the use of action research to conduct research in the classroom. The purpose of this final task was so that the teachers could feed back to me their thoughts about the usefulness of action research in the classroom environment, how it helped them meet the needs of children and whether they might use it in the future.

### ***Data Analysis***

Student observation, teacher rating and the child's progress against a pre-intervention baseline were the major data collected by the teachers.

#### ***Tina***

Tina had both quantitative and qualitative data to examine. The quantitative data related to the children's knowledge of alphabet and basic sight words using pre and post intervention results. The children were also rated on a criterion scale against the stage of writing that they had reached (see Appendix P). To do this Tina took several samples of recent writing at the close of each cycle and compared them against the criterion. The children were compared against their learning intentions and success criteria.

#### ***Janine***

In her research Janine analysed her data in terms of the increase in productivity or the decrease in 'off-task' time that the children engaged in. She used a simple comparison of the results at the end of each cycle with the previous results.

## ***6.4 Findings of, and discussion on, the teacher action research projects***

From the teacher action research projects, findings have been organised under the following emerging themes: increased individual children's achievements, teachers' critical evaluation of the action research projects, and teacher reflections on their action research projects

### ***6.4.1 Increased individual children's achievements***

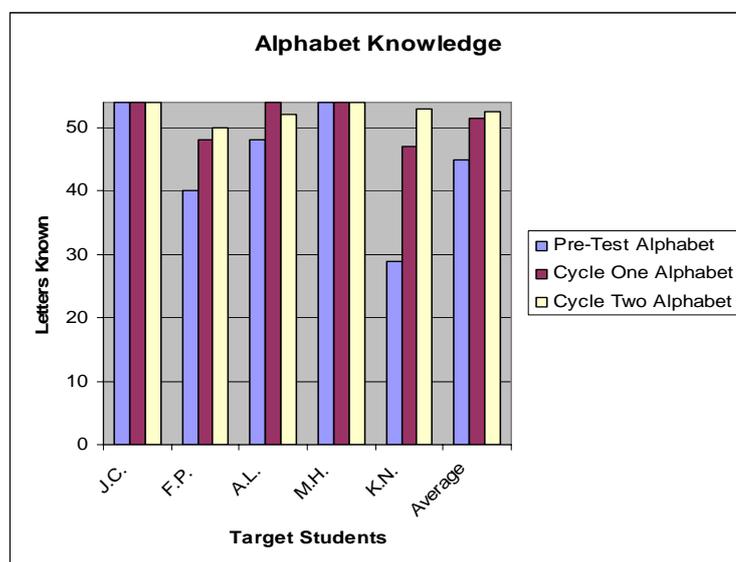
For the reader the presentation, in this section, of the children's achievements may be viewed as minor and inconsequential but for the teachers' professional development these results were important. The teachers were encouraged to use action research as a method of solving classroom challenges relating to the learning needs of identified children. Possessing problem solving methods and a repertoire of skills is considered important in inclusive pedagogy because there is no single method of meeting needs (Florian, 2007; Rouse, 2006). Having planned and implemented action research to address classroom challenges the teachers had data on which to reflect and evaluate. Guskey (2002a) and Roettger (2006) stress the importance of collecting and reflecting on data because teachers need to

experience both successful professional development and enhanced student learning before they are likely to sustain any changes in their practice. The data presented here, therefore, are part of a cyclical process leading to sustainability of practice. Changes in teacher practice, resulting from their action research projects, are presented in this section and the next one (6.4 and 6.5).

*Tina*

With the focus on written language, measures of underlying alphabet and basic word knowledge were undertaken by the teacher prior to the project beginning and again at the conclusion of each intervention phase. However, to measure progress in the construction of sentences a criterion referenced checklist was developed by the teacher with researcher assistance (Appendix P). The bases of the checklist were exemplars provided to schools by the Ministry of Education. A further refining of these exemplars took place using the teacher’s knowledge of sentence construction progress amongst children of this age. Qualitative comments about the children’s progress were also recorded by the teacher.

**Figure 2. Alphabet knowledge**

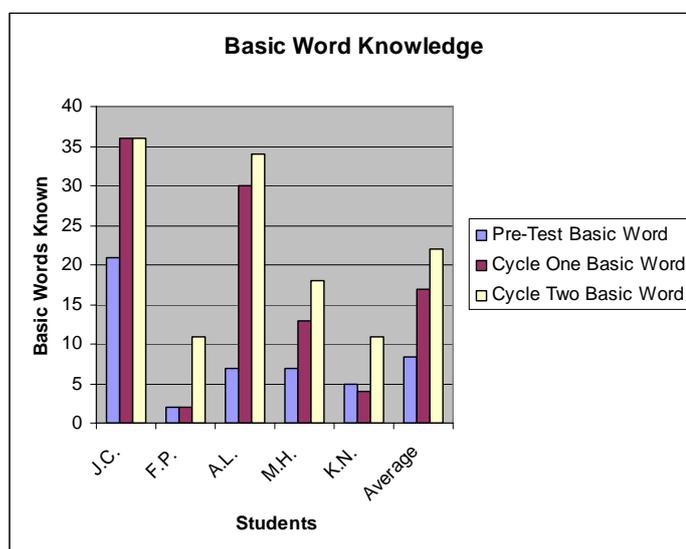


As is evident from the data in Figure 2, the level of alphabet knowledge was substantial at the beginning of the project but the teacher wanted to improve it even further because she considered a complete

understanding and knowledge of the alphabet to be fundamental to students taking a risk with their writing. Students at this level of ability and development, Year One, are encouraged to begin writing by ‘trying to write words’. This can only be done when the letters and the sounds of the alphabet are known. All of the

target children knew at least 50 out of the 54 letters by the end of Cycle 2, with the greatest gains being in Cycle 1.

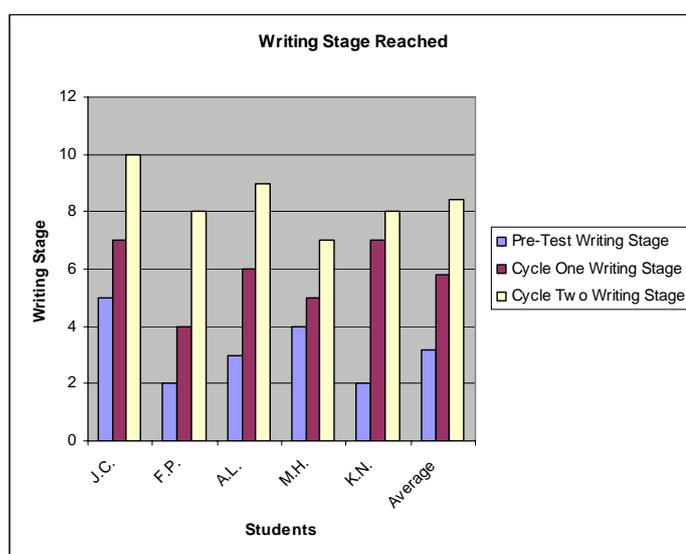
**Figure 3. Basic word knowledge**



On average the children in the target group recognised, read, 8 basic words at the pre-test stage. The range was from 2 to 21. The average had increased to 17 by the end of Cycle 1 and 22 by the end of the project. All of the children could recognise

by sight at least 11 basic words by the end of Cycle 2. With eleven basic words recognised and the ability to find other words from desk cards and posters around the room the children were beginning the ability to construct basic sentences.

**Figure 4. Writing stage reached**



For this teacher, the results graphed in Figure 4 were the most satisfying. At the beginning of the action research project most of the children were at the stage of writing random letters or the first letter of a word. By the end of the first cycle they were

writing some of their own words independently and by the end of Cycle 2 they were able to find unknown words from environmental repositories. Because they

were now at the stage of writing words independently they had the ability to construct a basic sentence. This ability to construct a sentence is the substantive base for future achievement in written language.

During Cycle 1 following her observations of the children, Tina introduced a small period of fitness training prior to each class writing lesson. This was because the writing lesson followed a mathematics one and the teacher had noticed that some of the children appeared fatigued at the end of mathematics. It was Tina's perception that the children appeared more motivated to write following the introduction of the fitness training.

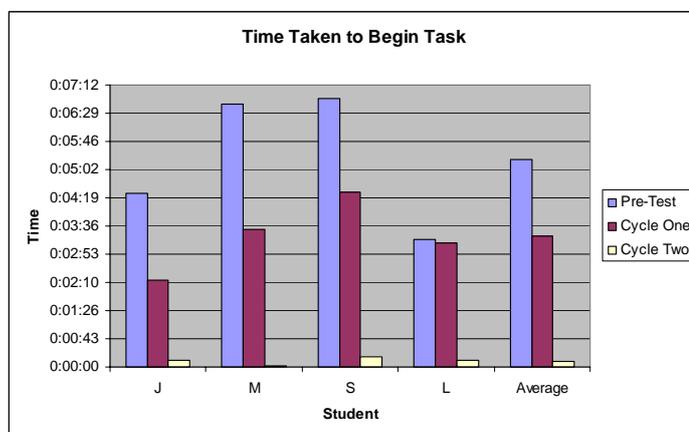
During Cycle 2 the teacher, following a discussion with me, decided to train peer tutors and place them with the target children. The teacher reported that she noticed that the target children interacted favourably with these tutors. However, it is not possible to make any substantial claims about the effect of the peer tutoring on the children's achievement data because the tutors only had about half of the cycle with the targets because of the length of time it took to train them. It did not have a negative effect because the results in Figure 4 suggest that all target children continued to make progress during that cycle. As will be discussed later, the introduction of the peer tutors did have an effect on the teacher's pedagogy and her assumptions regarding children's abilities.

Focussing on children who were at risk of underachieving in their learning, identifying barriers to that learning, planning to enhance their learning and ensuring that the children participated successfully in the classroom programme were behaviours that Tina demonstrated in her research project. Further she collaborated with an outside researcher and consulted literature. According to the definition of inclusion developed for this research (Chapter 2, Section 2.2.2.1) Tina was developing skills and knowledge towards an inclusive pedagogy.

Janine

As with Tina, Janine concentrated on written language. In contrast to Tina, who focussed on content, Janine focussed on process. Janine was keen to ensure that the children settled to task and stayed on task. Janine was unsure as to whether the target group of boys was unable to complete tasks or was unwilling to do so. Time and counts of occurrences were the data gathering techniques used by the teacher.

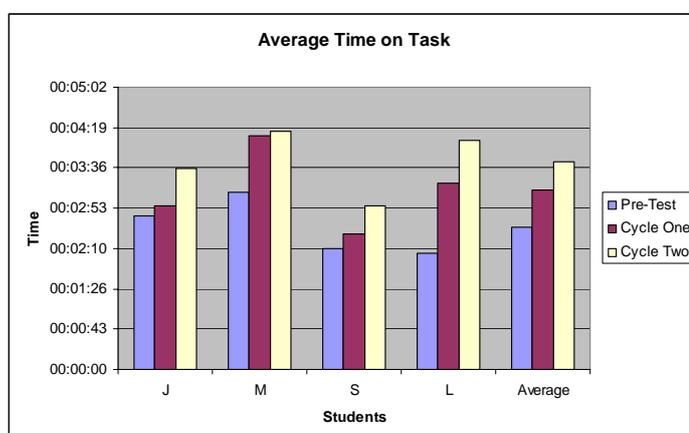
**Figure 5. Time taken to begin a task**



The data presented in Figure 5 demonstrated that the time taken to begin a task was no longer a problem at the conclusion of Cycle 2. The teacher believed that this was due to two

factors: the practice of giving the children “thinking time” before beginning a writing task and their awareness that the teacher was timing them.

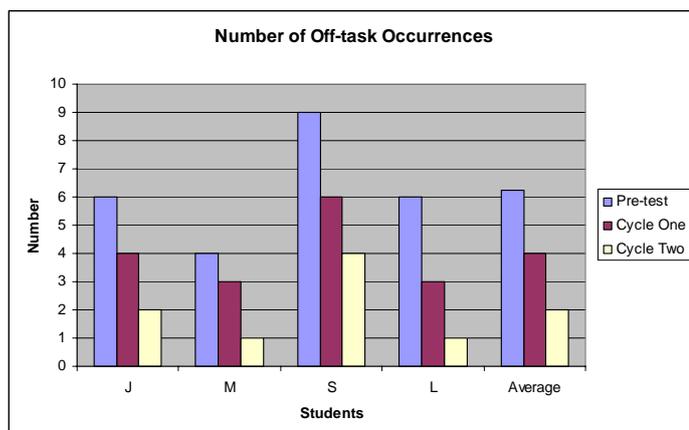
**Figure 6. Time spent on-task**



Whilst not as dramatic as the results graphed in Figure 5, Figure 6 demonstrated that the teacher was able to increase the amount of time that the students were spending on writing

tasks.

**Figure 7. Number of off-task occurrences**



With the increase in time spent on task the number of off-task occurrences decreased to the point where the teacher considered that this group of children were no longer in need of additional supports for

this aspect of their writing behaviour. A further action that the teacher took during Cycle 2 was to place the four target children together during writing so that they might compete against each other. The teacher reported that this placement also facilitated her to prompt the children with verbal praise and to more easily observe their behaviour.

Although it does not completely answer the question set by Janine, the results she obtained in her project suggest that it may have been unwillingness rather than an inability to write that these boys were demonstrating in their pre-project behaviour. Introducing the competitive element into her intervention plan may also have been a motivating factor for the target students. Results from the data demonstrate that the chosen range of intervention strategies have contributed to the increased on-task behaviours, quicker settling to task and a decrease in off-task behaviour.

In her action research project Janine demonstrated behaviours that contribute to inclusive pedagogy. Initially she identified barriers to the children's ability to achieve and then developed a programme to remove them. While programming to meet the needs of specific children, Janine structured her intervention within her normal written language programme and in doing so allowed each child to achieve at their level. The target children were not identified to their peers. Thus whilst she was specifically concentrating on a target group of students, all the students in the class were able to benefit from the intervention.

## **6.4.2 Teachers' critical evaluation of the projects**

### ***Refocusing skills to facilitate action research***

The teacher projects involved all four phases of action research. Innovation was a feature of both plans, not only in terms of trying something new but also pairing a known technique with a new situation. The teachers were able to determine that, with the help of a mentor, they had brought forward from cognitive repositories many aspects of their knowledge and skill to formulate and implement a research project.

*“But I’m definitely a different teacher from before I started and I think about everything now, not just the reading and the maths abilities. It’s the fine motor skills – is that what’s slowing them down or has she got things going on at home? And you know mixed abilities – is it just about actual academic ability? It’s social things as well. So it’s opened my mind up.”*

[TI – 2005 – Janine]

*“Enjoyed the opportunity to plan for outcomes and then find that they happened.”*

[ARR – 2 – Tina]

### ***Modifying plans, identifying barriers and extending research***

Within the intervention phases the teachers reported being able to monitor their plan and to introduce additional elements. Within action research this modification is crucial as it demonstrates that the teacher is focussed on needs and is continually evaluating and re-planning, rather than rigidly adhering to an original intervention plan.

*“During the modelling session at the beginning of each writing session I introduced the use of key words and some simple thinking maps. These seemed to benefit (some named children).”*

[ARR – 1 – Tina]

From time to time an intervention plan contains elements that turn out to be barriers to progress towards achievement. Being able to identify barriers to progress during the intervention phase was another skill that the teachers reported in their evaluation as having used. Both teachers identified environmental,

student and interaction elements that needed modification, and subsequently amended their plans to meet these unexpected challenges.

*“It was a few sessions trying this method that I realised that the liquid timer was a distraction and the students were focussing on this and how long was left rather than doing the work. So I had to modify this.”*

[ARR – 1 – Janine]

Janine goes on to describe how she overcame this barrier by substituting another timer and removing it from view. Tina notes in her first phase review that she changed the seating of the target children.

*“Changing seating of children. All benefited from being placed beside less social and more motivated children.”*

[ARR – 1 – Tina]

Although there were only two cycles in the teacher action research project, both teachers were able to evaluate their results and describe how they would amend their intervention had they entered a third cycle.

*“I would use a video camera to observe the beginning of the activity and how long it took the students to get back on task”*

[ARR – 2 – Janine]

Janine planned this change as her evaluation had demonstrated that she was missing valuable observational data of the target children because she had distractions from other children in the class who also needed her attention. There is a dilemma implicit here between the teacher in her role as a teacher and a researcher. It is important for an external researcher or mentor to be aware of such dilemmas and to facilitate their solving.

*“Would have extended the peer tutoring so that the tutors had more time to develop their skills and work more frequently with the targets.”*

[ARR – 2 – Tina]

The use of the peer tutors in Tina’s second cycle was limited because of the training of the tutors. Her observations of the work that they did with the target

children convinced her that this was a successful method of helping children to develop their language skills.

### ***Understanding the importance of data***

To evaluate any intervention there has to be data. The data collected by the teachers allowed them to conclude that the interventions that they had planned and modified had achieved most of the goals for their students. Tina conducted probes at two points; prior to intervention and at the conclusion of each cycle. Janine conducted weekly probes in a special writing session and then averaged her data for each student over the cycle to provide a progress report for that cycle. The evaluations that the teachers completed were possible due to ongoing and continuous observation of the children's progress and aspects of their own pedagogy. For Tina, observation was a crucial part of her decision as to which writing stage the children had attained.

### ***Evaluating the usefulness of action research for the classroom***

At the conclusion of the project the teachers were asked to evaluate the process of action research following their use of it in their classrooms. The purpose of the exercise was to find out information about its usefulness for busy classroom teachers and how it might be better used. The teacher evaluations are summarised below.

When asked about the most challenging aspect of the action research process, Tina identified the planning phase prior to Cycle 1.

*“Planning – deciding how to go about it at my level. Looking at the needs and different ways I could approach the problem. Which way would possibly be of most benefit within the time frame and would cater for the different needs and levels of the children.”*

[ARR – 3 – Tina]

In this extract we note that Tina is considering individual needs within teacher action research which was a research question. It is also part of the process of inclusive pedagogy. By contrast, Janine found the first intervention phase the most challenging.

*“Implementation as I had to keep refining the methods to time as they distracted the students.”*

[ARR – 3 – Janine]

What the teachers found most useful about the action research process was interesting in that they both mentioned being able to use the process to find solutions to pedagogical difficulties. In their daily interactions with students, teachers experience constant challenges and do find them troublesome at times because solutions do not always present themselves. Janine considered that the process helped her to find solutions to some of those challenges whereas Tina found it useful to have the opportunity to trial some different approaches and to see what did and did not work in her classroom situation.

*“Focussing on an aspect that troubled me – finding ways to fix it – looking at how well it worked.”*

[ ARR – 3 – Janine]

*“The reflection of different approaches. Having a look at what did and didn’t work. Thinking of different ways, approaches to the problems of children not being risk takers (which was my focus).”*

[ARR – 3 – Tina]

Having decided on a focus, action research afforded both of the teachers an opportunity and an empirical process to trial new ideas and evaluate them. Inclusive pedagogy presents a constant dilemma to the classroom teacher around the practice of meeting the needs of the individual within a classroom environment. Whilst in the first cycle of the research, the teachers had assessed the needs of the individual child they had generally planned for and delivered programmes to the children in broad ability groupings. The action research projects that the teachers undertook demonstrated to them, that it was possible to better deliver to the individual within the classroom or group structure by focussing on a skill need.

Both teachers considered that action research was effective because it provided the structure within which they could trial new ideas whilst maintaining a focus on

learning. Tina considered that action research had facilitated the children to begin to take more risks with their learning which was a student goal for her project.

*“Overall I feel the fitness, use of key words and the introduction of mind maps helped most of the children to grow in confidence, gain better time management skills and begin to take more risks to begin and progress through their written language.”*

[ARR – 1 – Tina]

Janine mentioned that teacher action research had given her a focus, an opportunity to experiment and a chance to look at something that was challenging. Consider this extract in which Janine talks about how something important to her was able to be addressed through the research.

*“...my action research was keeping a group of kids on task for a sustained amount of time. Now to me that’s a real learning problem ... you worry about them not reading or you worry about them not being able to add and this actually, this problem actually affects them right across the board.”*

[TI – 2005 – Janine]

Janine mentioned that some of her colleagues had questioned her focus for her project but she noted that to her not staying on task was a major barrier to learning.

### ***Identifying barriers to using action research in the classroom***

Two major barriers were identified by the teachers as hindering the use of action research in the classroom environment: time and large classes. Finding research to assist with the building of new practice was also mentioned. Having the time to do this was a factor but a larger barrier was having the portals to find the research. Whilst the internet was freely available to both the teachers through their school provided laptops, they did not have access to searchable databases such as those supplied to students enrolled in university courses. Community libraries are able to search databases but this takes extra time and expense. The website, Te Kete Ipurangi, was accessed frequently by one of the teachers who found it helpful for some new ideas to trial but not for research.

Another barrier identified was ensuring the target children were willing participants. Each teacher individually worked on a variety of strategies to ensure the interest of the target children. Janine used competitiveness as a strategy by timing the children and initially doing it openly so that the children could see both the progress of the time and the progress of their peers. Tina reported that she used verbal positive reinforcement at a higher rate than normal for her group of target children. She also made sure that they received extra reinforcement following the lesson with stickers and stamps which, for new entrant children, are a strong motivator.

In her review of her project Janine noted that she found meeting the needs of the other children whilst keeping a focus on the programme was a barrier.

*“I also struggled to record data down on a regular basis as I often found myself answering other student’s queries instead of observing.”*

[ARR – 2 – Janine]

Initially the target children were scattered around the room and as she had to shift her observation focus, from target to target, other children caught her eye and asked for attention. Later she partially solved this difficulty by placing the target children together for the writing lesson which allowed her to narrow her focus. Another strategy that both teachers used to overcome this identified barrier was to nest their project within the normal classroom programme so that all the children completed the same broad activity e.g. writing, at the same time but with individual and group objectives and programmes. Incidentally, by doing this they demonstrated that it is possible to meet individual needs within a class programme - an element of an inclusive classroom. As neither teacher had considered doing this before, it suggests that the action research process helps facilitate inclusive pedagogical change and perhaps could be a tool developed in pre-service education.

### ***Identifying future cycles of their research projects***

Identifying what changes they might make if they were to conduct a further action research project was one of the evaluations that the teachers made. For Janine

recording more written observations of the behaviours occurring in the class would be beneficial in future. She believed that she had started out well with her written observation but had relied more on memory in the latter stages of the project. This behaviour demonstrates a risk for having teachers as researchers, as their primary focus is teaching rather than research. Because there was no monitoring of her behaviour apart from visits and discussions by the external researcher the reliability of Janine's data could be questioned.

Beginning with a class focus and then gradually narrowing the focus on to the target children was a suggestion from Tina. She concluded that this change would make the process more manageable because it would allow the teacher to better plan the intervention. It would also allow for the change in teacher behaviour in planning from whole class lessons to planning for groups or individuals. The focus for Tina remains on those groups of learners who might be at risk of underachievement and for Janine it is ensuring that she has individual data on which to assess and plan. Both are considered to be inclusive pedagogy.

### ***6.4.3 Teacher reflection on their projects***

Two opportunities were given for the teachers to reflect on their action research projects. At the conclusion of the second cycle the teachers completed a reflection and evaluation form looking at the whole project. Later they took part in an interview which sought, amongst other things, their reflective views on the use of action research in their classroom programmes.

As with the pre-project reflection exercise, the teachers' reflections post-project tended to focus on content, process and interactions within the classrooms which were mainly at the action stage of the Teekman model. However, there was some reflection at the evaluation stage. In this extract Tina reflects that she must not allow her assumptions to be a barrier to children learning and developing especially where she is not certain of individual abilities and skills. Opportunities for children to practise their skills and display their knowledge must be offered.

*"...you have these little preconceived ideas too...but I've learnt that you don't take anything for granted and that they (the students) can become risk takers and they*

*can learn to think for themselves and self assess and learn to work with scaffolding type prompts.”*

[TI – 2005 – Tina]

This was an important development for Tina. Not only was she identifying a barrier to children’s learning but she was identifying that her assumptions could be that barrier. Providing opportunities for individual learning and development in order to foster participation and achievement, and the removal of learning barriers are both inclusive practices displayed by this teacher.

### ***Pedagogical focus changes***

A change in their pedagogical focus was a major theme that arose from the teachers’ reflection that followed their action research projects. Not only did they change their focus around children’s needs but they also changed their focus when reflecting on their pedagogy. Both teachers believed that post-project they had become more focussed on the learning of individual children when preparing and planning for their lessons. Janine reflected that prior to the reflective practice exercise she had tended to “whole class practice”, whereas post-project she was focussing differently on those children who were experiencing difficulties with their learning.

*“Because I started to focus on those children who weren’t learning, had learning difficulties more after... whereas before it was whole class practice.”*

[TI – 2005 – Janine]

Janine also reports that although she still tended to favour same ability grouping she now had the confidence to introduce mixed ability grouping. She also noted that she was dealing more with the children’s needs or their focus rather than with the children as a whole class. Consider this extract where she notes how she has changed her focus.

*“So like reading isn’t so much what year level they are reading at it’s whether or not they are comprehending text. Or it’s just the visual cues whether it be breaking up sat with Saturday ...”*

[TI – 2005 – Janine]

Introducing and trialling new ideas with individual children were examples of how Tina changed her pedagogical focus. Tina reflected how pre-project she tended to use “tried and true” methods, methods that she had been routinely using in her pedagogy, but that her classroom project experience had given her confidence to trial new ideas whilst continuing to use learning intentions with the children.

*“Yeah I’ve still focussed on the learning intentions and success criteria but looking at the children more in an individual way but looking at why some of them aren’t achieving or moving the way I wanted them to and introducing or trialling things to see if they make a difference to how we do it.”*

[TI – 2005 – Tina]

As a result of action research projects in their classes the teachers both reported that they had begun to focus on their own practice when considering the needs of their students.

*“Even though the focus was on the children and the class, it actually at the end of the day came back to me and I had to really look at was I catering for all needs?”*

[TI – 2005 – Tina]

Tina reflected that in her pedagogical practice there was only one constant and that was her because the children and their needs changed not only as each new cohort arrived but as the cohorts made their progress in learning. She made the observation that her practice had to cope with these differing needs.

*“... sticking to the same old isn’t the best way because there (are) other ways and every child is an individual and they don’t all learn the same way so you’ve got to have in place different things happening for those different learning styles.”*

[TI – 2005 – Tina]

Janine also reflected on having to look at what was influencing children. She concluded that the teacher in the classroom was the major influence and, as a result, that variable had to be examined.

*“So I mean it makes you not just look at the children and what’s influencing them, it’s also looking at you and how you are affecting them.”*

[TI – 2005 – Janine]

In her particular project she tried to examine whether the tasks she set for her children were meaningful enough to keep them “on-task”. However, the next logical step of examining her reasons for deciding on that particular curriculum or learning task did not take place. Small and tentative though these changes in focus were, they are important for moving the teachers to more inclusive practice.

### ***Extending new skills***

An associated theme with the change of focus was that both teachers began to feel confident to trial different pedagogical techniques in the classroom apart from those associated directly with their projects. For example, Janine decided to trial a change around how she grouped for instruction. Prior to participation in the project Janine tended to group her children according to ability. Following the reflection exercise and during the project she trialled working the children in mixed ability groups with the main criteria being skill need rather than ability. As an example she gave reading instruction where she decided to form groups around children who did not comprehend well, or a group around a skill need such as syllabification. Janine mentioned that this had implications for her planning because although the children had a similar skill need they also required their instruction pitched at differing levels. Janine acknowledged that she was still more comfortable with same ability groupings but was now more confident to trial the mixed ability-similar need group.

*“Last year I didn’t have the confidence to do mixed ability whereas this year I feel there is a bit more mixed ability happening...”*

[TI – 2005 – Janine]

Tina also began using trials to see if the ideas being trialled were able to make a difference for those children who were not moving the way she expected them to. As an example Tina mentioned that she trialled using children who had just acquired a skill as a model to those children who were yet to acquire. Both the tutors and the tutees were learning with the former consolidating their skills and the latter having the opportunity to learn from a peer.

*“It’s kind of like a boosting of the confidence of one and the other just getting that second or third look at what’s happening and not just the teacher doing it.”*

[TI – 2005 – Tina]

Both teachers mentioned that they had learned through their own project and also through participation in the larger research project, not to take matters around learning and teaching for granted. Tina, having successfully trialled peer tutoring with five year olds, realised that she had previously restricted the children's ability to take risks with their learning because her expectations for them had been pitched too low.

***Reflective thinking extended***

Reflection and evaluation are important in action research and in daily classroom practice. Whilst having time to reflect and evaluate is essential, having a structure that supports reflection is vital. For Janine the structures of action research allowed her to reflect on how the project was progressing and consider changes that she might make to the programme that she was implementing. She disclosed that the project allowed her to focus on her weaknesses because it also allowed her to see what her strengths were, particularly through the review and reflection phase of the cycle.

*“I found that I was more keen to reflect on my weaknesses as I could see the strengths I have as I'm looking closely at my practice.”*

[ARR – 3 – Janine]

Having to reflect as a part of the process of action research was also of benefit to Tina. She recalled in her reflection that sometimes things that you try do not work and she was pleased to use a structure that encouraged her to think about what she was doing and how it affected the children. Whilst assessment of children's ability might demonstrate their progress it does not address all the issues that contribute to that progress. Teacher behaviour, and the reasons for that behaviour, are other factors.

*“I had to be more specific in my planning and think about the individual children I was targeting – made me more focussed.”*

[ARR – 3 – Tina]

***Teacher reflection on action research: A summary***

Several important pedagogical changes occurred for the teachers as a result of their conducting action research in their classrooms: the focus of their work around the needs of the individual child gained momentum, planning became more individualised, methods of grouping changed from just ability to including skill needs, and tentative steps began toward considering their own practice. While not critically reflecting on their assumptions some initial examinations were beginning.

Tina summed up, for her, the value of using action research,

*“it slotted in and all it was, was just trialling a few little things for a little while and seeing if it made a difference. I think that’s a way of teaching now, you’re forever having to change and move.”*

[TI – 2005 – Tina]

For Tina, action research was seen as helpful to her improving her pedagogy so that she could better meet the needs of her children. Teaching children with diverse needs requires teachers to acquire new skills and knowledge because there are no single answers to pedagogical challenges (Rouse, 2006). Tina acknowledges this in her comment.

***6.5 Paraprofessional assistance***

Chapter 5 identified several difficulties around the role of the teacher aide within the senior class when they were primarily assigned to help meet the needs of an identified student. During my visits to the classes in the second year of the research I noted that both classes shared a teacher aide, who was in training and was a volunteer. The teacher aide was assigned to the class teacher, rather than to an individual child, as part of her teacher aide training so that she could experience the range of duties that a teacher aide might be required to undertake in a typical classroom. My classroom observations led me to conclude that the aide was assisting the teachers to deliver the teaching programme and was providing assistance at the teachers’ direction. In my final interviews with the teachers I asked about this changed relationship and how they interacted with the aide. Janine responded that initially she asked the aide to observe her class and

her interactions with the children. She also ensured that the aide knew what the programme was and where the emphasis needed to be.

*“But I made sure she had the weekly plan on the Monday morning and the learning intention, the goal, for each session. So she knew what I was hoping the children would get out of it.”*

[TI – 2005 – Janine]

In the previous year, Janine commented in her interview that she had not found having teacher aides useful to her. There was little communication between teacher and aides as the aides concentrated on one child.

As with Janine, Tina modelled to the aide how she wanted her to assist and interact with the children. She reported that she had intervened several times to ensure the aide was interacting correctly with the children particularly around not providing answers for the children’s work. Tina also discussed her planning with her aide.

*“...we’d touch base before school cause she’d come in a bit earlier and I’d show her my planning and talk about what my expectation is with them (the children)...”*

[TI – 2005 – Tina]

Assigning the aide to the teacher allowed for more children to benefit from the assistance and the teacher was directing their work. Many of the difficulties identified in Chapter 5, including interfering with social contact between the children, were no longer apparent.

Although the aides did not collaborate in planning the classroom programme they did collaborate in its execution and evaluation, they assisted children according to need, and were perceived as being available for all. These factors, and not identifying a child as different by concentrating on them, contribute to an inclusive pedagogy.

## ***6.6 Chapter summary: Emergent themes towards a more inclusive pedagogy***

Chapter 6 results reveal a number of themes: pedagogical focus change by the teachers, teachers solving learning challenges internally, the importance of reflection in assisting teacher change, collaboration with a mentor, making use of data to effect student and teacher learning, effective use of para-professionals, the dilemma of dual roles of teacher and researcher, and the difficulty in modifying teacher attitudes. Each of these emergent themes will now be outlined in this summary section of the chapter.

### ***Pedagogical focus change***

Changes in pedagogical focus were reported by the teachers and observed by the external researcher. Although the changes were tentative they were in the direction of developing a more inclusive pedagogy. Teachers began to focus more on the individual student and look for ways to enhance their participation and achievement (refers definition Section 2.2.2). Interview data in the first cycle of the research had revealed that the teachers knew they should be providing for the individual but they could not, at that time, see how it could be done. Their action research projects helped them both to identify barriers to individual student learning and develop strategies to overcome them.

Viewing their own pedagogy and how it affected their practice was a second focus for the teachers. While teachers' reflective thinking in Cycles 1 and 2 remained at the first and second stages of the Teekman model, by Cycle 3 the stating of assumptions and acknowledging that they affected their practice were significant developments for the teachers. Although there was a realisation by the teachers that their assumptions and tacit knowledge influenced practice they did not become reflexive.

### ***Collaboration with a mentor and each other***

Collaboration is viewed as inclusive because it facilitates problem solving, collaborative ownership and exchanges of ideas, thoughts and feelings. Reflective thinking is enhanced in a collaborative relationship. Results from the previous chapter suggested that for the major part of their teaching both teachers

in the research taught independently from each other and their school colleagues. The results from this chapter demonstrated that the teachers had begun to collaborate with each other and with the researcher. The teachers reported that the collaboration with the researcher enabled them to take risks with their pedagogy, solve learning challenges and reflect on their practice.

***The importance of reflection in assisting teacher change***

Results from both the reflective journals and the teacher action research projects demonstrated the importance of reflection on pedagogy in general and the development of inclusive practice in particular. This was evident to the teachers as they reported making tentative practice changes and to the researcher observing the changing learning focus of the teachers. Reflection assisted the identification of barriers to learning in the classroom and facilitated the teachers to consider their role in the classroom learning environment. Some declaration of their teaching assumptions and an understanding of how these affected pedagogy was also aided by reflective thinking. Finally, the importance of having reflective dialogue to facilitate deeper reflection was highlighted.

***Data is crucial in effecting student and teacher learning***

The importance of collecting data for both monitoring progress and for developing teaching programmes was an emphasis in the projects. The teachers learned that data could give them more confidence around making modifications to their projects or introducing new elements, for example, the introduction of key words by Tina. Data also enabled the teachers to evaluate the success of their projects, reflect on their practice and focus on the individual student.

***Effective use of para-professionals***

Results from Chapter 5 had identified that the assigning of a paraprofessional to a specific child could be a barrier to inclusion because it interfered with the development of peer social relationships and learning. Further, having an aide constantly in attendance highlighted a child's differences rather than met their needs. Collaboration between the teacher and aide appeared to be minimal as the aide primarily focussed on the child. Through teacher interviews and researcher observation it was apparent that these difficulties had begun to resolve when, in

the second year of the study, a para-professional was assigned to the teacher rather than to a specific child. A more collaborative relationship was formed.

***The dilemma of dual roles of teacher and researcher***

Through formal interview, and personal discussion, both the participating teachers disclosed that they found it difficult, at times, to maintain the rigour of the research. For example, they found it difficult to keep observational notes which were to aid their reflection and evaluation. Janine also cited the requirements of the other children for her attention as a distraction from her focus on her target children. These two examples highlight some of the difficulties of teachers having dual roles within classroom research as teacher and researcher.

***The difficulty in modifying teacher attitudes***

Routine, tacit knowledge, belief and perception are all strong determiners of classroom pedagogy. Modifying that pedagogy to become more inclusive requires a major change in the culture of the school by addressing the above factors. However, it is possible to affect some small changes by concentrating on the teacher and the classroom, as shown in the results of this study. Routine, however, is still influential even when there have been practice changes.

From these emergent themes and those in Chapter 5 some major themes are developed in the next chapter. These major themes will be examined and discussed with reference to literature, my research questions, and definition of inclusion.

Chapter 7

## **Discussion**

### ***7.1 Introduction***

#### ***7.1.1 Review of emerging themes and findings***

Before introducing the themes and structure of this discussion chapter, the emerging themes and findings from Chapters 5 and 6 are briefly outlined. In Chapter 5 the ecological assessment of the classroom was discussed in which factors promoting inclusive pedagogy were identified: a supportive classroom climate, growing collegial collaboration between researcher-teacher and teacher-teacher, a developing teacher interest in researching their own practice, and enhanced teacher assessment and evaluation practices. Barriers to the development of inclusive pedagogy were also identified: assessment leading to planning for instruction rather than learning, para-professional interruption of academic and social learning, independent practice of the teachers, and limited reflective thinking. Themes to emerge from Chapter 6 included a changed focus in teacher reflective thinking, an increasing level of collaboration and partnership, the increasing use of systematic data collection, changes in pedagogical focus, learning to solve classroom learning challenges internally, and the beginnings of a small community of practice. Many of the teacher changes were achieved through their active participation as practitioner researchers using action research in collaboration with the researcher. However, teacher change was tentative and attitude change difficult to achieve. Further, teacher difficulties in combining the dual roles of teacher and researcher were noted.

#### ***7.1.2 Inclusion as a context for discussion***

Inclusive pedagogy is the central focus of this thesis, of which there are six essential elements: all children are included, the learning environment is adjusted through continual cycles of examination, reflection, planning and action, barriers to inclusion are identified and removed, resources have equitable access and distribution, teachers ensure that all children participate, contribute and achieve,

and there is a strong collaborative relationship amongst teaching colleagues, with parents, students and the wider community.

The purpose of the study was to research how teachers were facilitated to develop skills and knowledge in order to become more inclusive in their pedagogy and to enhance and develop student learning.

### ***7.1.3 Outline of the chapter***

Teacher learning in inclusive pedagogy, the focus of this study, is explicated in relation to four major elements of practice: reflective thinking, informing planning through assessment and analysis, collaboration and partnership, and facilitating teacher change and student learning through teacher research. The importance of the role of a critical friend, the researcher, is also examined. Whilst each of the elements will be considered separately they are interrelated and will 'intrude' into discussions, and, as will be argued, are all necessary to develop teacher learning in inclusive pedagogy. Woven into the discussion will be the links that the teachers began to make between theory and practice and their forming of a small community of practice.

Within the chapter, convergences and divergences with the literature will be explored and findings linked to the research questions. Contributions to knowledge and theory are explicated.

## ***7.2 Reflective Thinking***

### ***7.2.1 Why reflect?***

Reflective thinking by teachers is advocated by a number of educational researchers and writers (Abernathy & Cheney, 2005; Carrington & Robinson, 2004; Guskey, 2002; Mansvelder-Longayroux, Beijaard & Verloop, 2007; Orland-Barak & Yinon, 2007; Roettger, 2006). When analysing the reasons for their advocacy the conjoint themes of enhanced pedagogy and improved student outcomes are revealed. Reflection is advocated because it is a process that assists with teacher change leading to the development of inclusive pedagogy (see Chapter 2, Section 2.3). The basis for this advocacy is an assumption that

reflective thinking allows teachers to examine their beliefs and make the connection between theory, both personal and pedagogical, and practice (Scanlan et al., 2002). Reflection is also considered to be emancipatory because it has the potential to free the teacher from assumptions, prejudices and opinions that prevent development of inclusionary practice. However, not all writers agree with this and a caution is issued, “*reflecting on your own beliefs assumes that you can distance yourself from your experiences and see that your beliefs play a role in your thinking and action.*” (Mansvelder-Longayroux et al., 2007, p.50)

As will be discussed, this level of critical reflection of examining one’s beliefs, proved difficult for the participating teachers. Various methods of scaffolding reflection are advanced in the literature: reflective portfolios (Mansvelder-Longayroux et al., 2007), guided reflection on lesson transcripts (Orland-Barak & Yinon, 2007), reflection as a process within action research (R. Robinson & Carrington, 2002), focus groups (Carrington & Robinson, 2004), and reflective writing (Flecknoe, 2005). In this research study the scaffolding provided included a reflection journal, a process within action research and feedback provided by the researcher. The teachers were able to consider their practice and plan to make changes, some of which enhanced their inclusive pedagogy. These considerations, plans and teacher changes will be discussed in this section.

### ***7.2.2 How did reflective thinking assist the teachers towards an enhanced inclusive pedagogy?***

From an analysis of the emerging themes, several changes in teacher practice and focus were found: a change in teacher focus towards individual children and their learning<sup>5</sup>, the identification of barriers to child participation and contribution, consideration of (teacher) self and role within the classroom, and extending reflective thinking to encompass the views of the children. An examination of each follows.

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<sup>5</sup> Learning includes all aspects of a child’s development including, but not limited to, emotional, social, physical, academic and behaviour.

***Change in teacher focus towards individual children and their learning***

Analysis of data gathered through an ecological analysis of the classroom, Cycle 1 of action research, revealed that whilst much individual student assessment information was gathered by the teachers it was not used for next step planning and teaching. Generally the catalyst for their teaching change was not an evaluation of their pedagogy but factors such as children's behavioural reactions, teacher perception of the success of a lesson and evaluation of group or class data. Reflective thinking by the teachers did occur at the level of action in the Teekman (2000) model in which teachers reflect on possible options for future action as a result of a situation where there was doubt, a difficulty or a perception. This is illustrated by Tina's response to a question about reflection,

*“Yeah, I suppose I do and there are times when you do things and it hasn't worked and you know why. You have to think in your head, ‘I thought that would be a good little unit I was going to do and it didn't work out.’ And thinking about – well – OK – we didn't really approach it in the right way or the kids just didn't have the interest level in that particular thing so I think you are probably forever reflecting on what you do as a teacher and your planning.”*

[TI – 2004 – Tina]

Following the reflective journal exercise, a change in teacher focus towards the learning of the individual child was begun, and later enhanced through using reflection in the teacher action research projects. Janine's experiments with mixed ability grouping and Tina's modification of her action research interventions are examples. A change of focus towards the individual begins to challenge the assumption that all children learn in the same way (Carrington & Robinson, 2006). Although the participating teachers would not espouse this theory, their primary delivery of teaching to groups and whole class is an example of 'theory in use' according to Carrington & Robinson (2006). One of the purposes of reflective thinking is for the teachers to consider dissonances between what they espouse and what they do. Participating teachers believed they catered for individual students but in practice they were oriented towards groups or whole class teaching. Moving the pedagogical focus towards considering the individual

is considered to be inclusive in terms of the definition developed in Chapter 2. As well it tends to reconcile the two theories noted by Carrington & Robinson (2006).

***Identifying barriers to participation and contribution***

The reflective journals cued the teachers into identifying barriers to the children's learning and invited them to consider the 'next step'. Within the journal exercise both of the teachers were able to do this, but the barriers they identified primarily related to child skills or knowledge. For example, Tina identified the need for pre-requisite construction skills, and Janine identified that the underdevelopment of a skill in one area would affect another (e.g. handwriting and written language). During, and following, the action research projects the teachers developed their reflection skills by considering a range of barriers which were not necessarily curriculum centred. Strategies to facilitate risk taking were identified by Tina who also noted that at times the children appeared to be very productive and occupied but were not achieving in their learning. Tina also recognised that this barrier related to her pedagogy.

Recognising that pedagogy can be a barrier to learning is an important development for a teacher because it is reflecting at a deeper level. This second stage of reflection, the Teekman model, has two main aspects of focus: 'situation in totality' and 'self' (Teekman, 2000, p.1131). Reflection at this level is an implicit acknowledgement that not all barriers to a student's learning reside within the child and that an examination of all ecological factors is required. This change in focus is also inclusive through the realisation that barriers can be created from numerous factors within the classroom community, rather than the child's ability.

***Consideration of (teacher) self and role within the classroom***

Following the conclusion of the teacher research projects Tina reported two related findings; that she needed to reflect and that her reflection needed to concentrate on her pedagogy.

*“But at the end of the day we as the class teachers are the ones that need to be reflecting...even though the focus was on the children and the class, it came back to me and I had to really look at – was I catering for all needs?”*

[TI – 2005 – Tina]

When asked what advantages that action research had brought to her teaching Janine commented,

*“So I mean it makes you not just look at the children and what’s influencing them, it’s also looking at you and how you are affecting them, what you need to do as a teacher to ensure that it is ... a two way thing.”*

[TI – 2005 – Janine]

For both teachers reflective thinking had encouraged them to examine their pedagogy with a focus on ‘self’. According to Robinson (2003) teachers have an ethical and professional obligation to do this because, *“the decisions they make about how and what to teach have profound and material consequences for the lives of children.”* (Robinson, 2003, p. 28) Robinson goes on to note that reflecting on practice through research, helps the teacher to improve student performance by developing ‘good practice’, which she conceptualises as practice that is based on frequent enquiry into the personal theories that guide teaching. Whilst the teachers in this research were able to report some of their assumptions they did not enquire at the deeper level of critical reflection as to why they might have held such assumptions. However, that the teachers came to the realisation that their assumptions affect how they teach, is an important result given that a best evidence synthesis of quality teaching found that up to 59% of the variance in student performance is attributable to differences between teachers (Alton-Lee, 2003).

One of the important assumptions challenged by their participation in the classroom research projects was the teachers’ beliefs about their students’ abilities. When peer tutoring amongst children was suggested for consideration by Tina she initially believed that her new entrant children did not have sufficient skills to become tutors. However, because there was a research project in place to guide experimentation, Tina agreed to trial training tutors and then use them

with their peers who were experiencing literacy difficulties. The training and the subsequent use of the peer tutors was judged successful by Tina who, in a post research conversation, revealed that she had continued their use with a subsequent class of new entrant children. The subsequent use of peer tutoring confirms Roettger's view that there needs to be a change in teachers' beliefs if there is to be a sustained change in practice (Roettger, 2006). Roettger stresses the importance of collecting, analysing and evaluating data in assisting with change. Tina's adoption of peer tutoring as a viable and useful technique for assisting new entrant children came following the application of these processes within her project.

Guskey (2002) has a belief that there is cyclical action involved in teacher change where professional development leads to a change in practice, followed by a change in student learning outcomes followed by a change in teacher belief and attitude. This is confirmed by what happened in this situation. The consideration of the option of peer tutoring, the planning and implementation and the subsequent evaluation were all professional development for this teacher. This professional development led to a change in belief and attitude which in turn led to subsequent professional development when the peer tutoring was again used, but with a different group of students. A teacher change was sustained and cyclical action contributed to it. Guskey acknowledges that, whilst there are some differing beliefs around what happens in which order in the move from professional development to attitude change, in his opinion, the most important factor is successful implementation. Guskey is not explicit about what counts as successful implementation but seems to suggest that if the attitude change eventuates then the implementation must have been successful. This research would offer that successful implementation is enhanced by having a structure that supports experimentation with new ideas (e.g., action research), a collaborative partnership in which experimentation can occur that is both critical and supportive, critical dialogue, and a context in which the new learning is considered as being needed by the teacher (e.g., following an assessment).

#### ***Extending reflective thinking to encompass the views of the children***

Including students in evaluating their own learning was practised by both teachers particularly through learning intentions and success criteria. Following her

production of reflective thinking journals, Janine decided to extend reflective thinking to the students as she explains,

*“I brought in a feeling circle when we started ‘Keeping Ourselves Safe’ this term and every time I did it I said to the class now is there anything we need to change? I was actually putting it back on to them because you can evaluate something on your own but its quite nice to hear it from (the children) and I wish I could have done reflection like that in my reflection journal for you. It was just sort of getting a couple of kids and different kids each time, snippets of how they felt. Because what I think about the learning could be quite different to them.”*

[TI – 2005 – Janine]

Two important findings are revealed in this extract: the recognition that reflection with others adds to the richness of the information and that children have a critical stake in the learning in the classroom. Involving students in reflective thinking about learning is a move towards building an inclusive learning community within the classroom (Carrington & Robinson, 2006). These authors suggest that students have an important role as interrogators “*challenging the discursive circumstances within which they ... operate.*” (p. 327). Teacher assumptions about classroom learning, which are an amalgam of their experiences, prejudices and pedagogical theories, are but one part of the classroom discourse. Adding the voice of the child enriches the reflection and potentially the pedagogy.

### ***7.2.3 How did scaffolds affect the reflective thinking of the teachers?***

Reflective thinking within the research was scaffolded in several ways: researcher feedback, reflective journals, action research processes, and dialogue. Some scaffolding was planned (e.g. reflective journals) and some arose as the research progressed (e.g. dialogue). A finding of this research is that dialogue between the teachers and between the teachers and researcher led to deeper reflective thinking.

Transcripts from the classroom observations and initial analyses of the children’s interviews and the questionnaires were emailed to the teachers in an effort to maintain transparency. Although not designed to do so, the transcripts provided scaffolds to the teachers to aid their reflection. For example, Tina, following receipt of transcripts of the classroom observations, reflected that she talked too

much in her interactions with her students. She wondered if her talking interfered with student interaction and learning. She resolved to talk less and encourage the children to talk more. While there is no direct evidence to demonstrate that this desired behaviour occurred, awareness of dissonance is the first step towards teacher change. Passive feedback leading to potential teacher change, as demonstrated in this example, is important because it is consistent with a 'bottom up' approach which encourages self-awareness (Ruthven, 2005). Ruthven argues that self-awareness results in sustainable teacher change because the teacher has come to their own conclusion rather than having ideas imposed by others. Further, the realisation of what needs to change has come from their practice and context. Finally, passive feedback is non-threatening and allows time for the teacher to make the decision to change.

Cycle 2 of the research invited each teacher to complete reflective journals designed to give them experience in active reflective thinking before they began their own action research projects. To scaffold the experience teachers were given a template that contained cue questions based on the idea of a reflective cycle (Gibbs, 1988 as cited in Bulman & Schutz, 2004). As the findings in Chapter 6 revealed, the teachers competently reflected on their lessons and were able to think about improvements at an action level and occasionally at an evaluative level. However, the teachers did not use the template as a scaffold for deeper reflection of their pedagogy at a critical level. Bulman & Schutz (2004) believe that frameworks do not tend to promote deeper reflection and this research's finding would support that belief. However, I also believe that the template assisted the teachers to review their lessons and reflect on them in a systematic manner, providing an environment in which to take risks. The reflective journals also served a purpose in preparing the teachers for the reflective phase of action research.

Whilst it is possible to reflect by oneself at an action level, it appears from the research findings that dialogue extends and deepens the reflection. Dialogue was held with the teachers on numerous occasions. Convery (1998) postulates a belief that teachers reflecting by themselves are unlikely to make essential changes to their practice. He suggests that in isolation a teacher may be reflective

but is not reflexive in asking such questions as, ‘*Why am I trying to make this work?*’ and ‘*Are my intentions in making it work realising or frustrating my espoused values or intentions?*’ (Convery, 1998, p. 200) Convery suggests that a teacher is more likely to sub-consciously avoid asking the hard personal theory questions when reflecting alone. Having a trusted colleague allows one to acknowledge protective defensiveness around practice and become critically self-aware.

Carrington & Robinson (2006) also argue for a critical friend who they believe, “*can provide focus, guidance and encourage processes that uncover the deeper aspects of thinking needed for reform.*” (Carrington & Robinson, 2006, p.326) Dialogue with self can begin the process of reflective thinking but runs the risk of confirming existing personal theories. Dialogue with another may help avoid confirming existing theories and also assist with deeper levels of reflection. Bulman & Schutz (2004) suggest that the ‘other’ can be a colleague whereas Carrington & Robinson (2006) strongly advocate for someone outside the school. Can a teaching colleague facilitate reflection at levels needed for teacher change or does it need the facilitative skills of an outsider? This research did not address this question which could be a topic for a future research.

Scaffolds including frameworks, journals, data, and dialogue do assist with reflective thinking as the findings of this research confirm. However, these research findings advocate that dialogue with another person has the greatest potential to lead reflection to critical levels, which in turn facilitates substantive teacher change.

#### ***7.2.4 What barriers were identified to teacher reflective thinking?***

Teacher practices of long standing were found to be more difficult to reflect on than newly developed ones. Janine found it difficult to reflect on her spelling programme. The particular programme that she had been using in her class had not been modified in the three years that she had been using it and her reflective thinking did not suggest any teaching or programme change was needed. This finding would suggest that as techniques and strategies are embedded in a

teacher's repertoire their continued practice continually affirms their current theories and beliefs, and are, for that reason, more resistant to change.

Before making a pedagogical change, a teacher has to acknowledge implicitly to themselves, or explicitly to another, that there is dissonance between what is currently happening and what needs to happen. Robinson and Carrington (2002), Page and Meerabeau (2000) and Bulman and Schutz (2004) all counsel that change can cause upset as 'cherished' theory and beliefs are examined. It is suggested that long standing teaching programmes become difficult to reflect on because there is a concern by the teacher that they might have to change to something that has the risk of failure. Therefore, it is not that the current practice might have to change but rather that it is low risk. Inhibiting defensive behaviours (Convery, 1998) protect a teacher as a competent practitioner and risk free practices are generally in the repertoire of such a teacher. However, as the findings of this research also found it is possible to provide an environment in which teachers are able to take risks with their practice, make changes and do so without appearing incompetent. Such an environment requires a collaborative partnership and is enhanced by action research. In such a partnership the views of the partners are valued, which facilitates reflective thinking at a critical level. This thesis would suggest that there are other important factors involved in a collaborative partnership including trust, reciprocity and mutual recognition. These factors will be discussed later in the section on collaboration.

In developing inclusive classroom pedagogy, reflective thinking is one of the important processes teachers need to engage in. Reflective thinking, as found in this research, aids the identification and removal of barriers to a student's participation, contribution and achievement (Alton-Lee, 2003; Booth & Ainscow, 2002). It also assists teachers to identify any dissonances between theories they espouse and theories they use (Carrington & Robinson, 2006). This is particularly important in inclusive pedagogy as espoused theories are not revealed by an observation and evaluation of practice. The findings of this research demonstrate that teacher change towards inclusive practice is tentative and difficult, but small steps along the journey are possible and that reflective thinking

aids those steps. Collaboration and teacher research also aid teacher change towards inclusive pedagogy and will be examined later in this chapter.

### ***7.2.5 Linking the development and enhancement of teacher reflective thinking skills to the research questions***

Within the classroom, teacher skills and knowledge are significant contextual factors and reflective thinking skills are a critical sub-set of these. Developing and enhancing their reflective thinking skills afforded the teachers opportunities to better provide learning support for all of their students. Further, skills and knowledge possessed by the researcher acting in the role as a critical friend assisted in the development of the teachers' reflective thinking as detailed in the preceding paragraphs. With the researcher adopting such a role within the study, it demonstrated that it would be possible for service delivery staff from outside the school to perform a similar role with the outcome of an improved inclusive pedagogy. Consequently, aspects of Research Questions 1 and 2 (Section 2.6.1) have been answered.

## ***7.3 Informing planning through assessment and analysis practice***

Teachers developing skills, knowledge and attitudes is identified in the literature as a major factor in the development of inclusive pedagogy (Rouse, 2006). In any change process there are factors that facilitate change and there are others that may inhibit. One of this study's research questions (Research Question 1) was concerned with identifying which aspects of classroom practice could facilitate the development of inclusive practice. Results from the research identified a number of aspects that were found to be both facilitators of, and barriers to, the development of inclusive practice. Because of its importance in student learning, and inclusive pedagogy, teacher assessment, analysis and planning practice is now examined.

### ***7.3.1 How did the teachers assess?***

Classroom observations and interviews revealed that assessment was a daily practice for the teachers. Formal assessment occurred when teachers

administered assessment instruments such as NUMP<sup>6</sup> for mathematics, informal prose tests for reading and comparison of written language samples against exemplars. Less formal assessment, primarily observation and questioning, occurred daily as the teachers observed the children completing tasks e.g. writing a story or oral reading. Some of these formative assessments and linked teaching opportunities, however, were serendipitous for the student in that they occurred if the teacher happened to be interacting with them at the time they were having difficulties. The teacher of the junior class used a small note book in which she recorded skills, knowledge or processes that she had observed, whilst interacting with the children, that needed to be revised either with an individual or a group. However, she also reported that she did not carry out this task consistently for a variety of reasons including forgetting to use it, not taking the time to make entries and the demands of the children on her time. Other assessment occurred when the teacher evaluated the student's efforts, occasionally as the child was producing written output, but generally at a later time when the teacher would review all the students' efforts through 'marking' their books. Analysis of research results revealed that assessment was frequent, primarily formative and, on the whole, individually based.

### ***7.3.2 How did assessment inform planning and teaching?***

However, a further finding of the research was that analysis of this individual assessment did not generally transfer into planning to meet individual learning needs, especially during Cycle 1 of the research study. For instance the teacher of the senior class spent two days, early in the year, individually assessing each child's numeracy skills with the NUMP test. Level of achievement in that test and other formal tests rather than level of learning was then used as the basis for the planning, because this teacher grouped her children for instruction based on scores, and instruction was delivered to the group as a whole with occasional individual teaching within the group. The teacher of the junior class tended to plan her teaching on the same basis. Such planning is predicated on the belief that all children within the group have the same learning needs. While the teachers would probably not agree that this is what they believe, it is their

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<sup>6</sup> See Glossary

practice. A research based characteristic of quality teaching for diverse students was that teachers adjusted their teaching to take account of the results of assessment (Alton-Lee, 2003). Both teachers did do this especially when working on an individual basis with a child (e.g., junior teacher working with children in reading group) but it was not planned for through goal setting, nor followed up and evaluated.

If inclusive pedagogical practice is about providing for participation, contribution and achievement then assessment, analysis and related planning are crucial skills that teachers require. An analysis of data should lead, amongst other things, to the setting of individual outcomes which then determines programme planning and developing teaching strategies. Together with evaluation and reflection, these activities constitute a cycle of skills necessary to enhance and develop a pedagogy that is inclusive (Ainscow, 2007), which are, coincidentally, similar to the action research cycle.

Following the completion of their action research projects both teachers had tentatively begun to use assessment and its analysis to plan for individual learning. For example, Janine, in the senior class, noted from her assessment data that there were a number of children in the class who needed extra support with reading comprehension. Her planning, therefore, proceeded from the learning need of the children. For ease of teaching delivery the children were still grouped but the focus of the teaching had changed. While admitting that she was not entirely comfortable with mixed ability/single need groups, she realised from her assessment analysis that these children had specific learning needs and that in order to meet these learning needs she had to find alternative and innovative methods of instruction. A second example from this teacher was that she modified her expectations for individual children and set differing outcomes for them whilst presenting them with similar tasks to their group peers. For example, in mathematics the group may have all been set subtraction algorithms to solve, but the level of difficulty of the algorithms for each child was individualised. Tina, the teacher in the junior class, also began to focus more on individual learning following her experience in the project. The use of peer tutors to help underachieving peers with specific skill and knowledge needs in writing was an

example of this. Further, she began to encourage the class to set individual goals in some tasks and self-monitor their achievement of them. For children with lesser ability, assistance was given with formulation of the goals, and verbal prompts relating to the goals were given, prior to tasks being undertaken. There is a debate in the literature as to how teachers should cater for the differing learning of students (Guskey, 2003c; Westwood, 2001) but both writers would agree that the purpose of assessment is to inform planning and teaching leading to enhanced student outcomes.

Enhancing inclusive practice is facilitated by assessment in the classroom, especially when the analysis of the data influences the teacher to plan for individual learning. While the grouping of children for instructional purposes may assist in the delivery of teaching, the learning achievement of the individual should be the primary consideration. Where the formation of the group is the primary consideration then student learning is subsumed to teacher instructional practice which, in turn, becomes a barrier to inclusive practice. In this research, teacher practice began with a primary focus on strategies that facilitated instruction, but slowly and tentatively moved to a focus on learning following participation in teacher professional development. This research initially found that whilst collection of data was frequent and comprehensive the analysis of that data had a focus that was not inclusive. Professional development using action research assisted in beginning to change the focus of the analysis. Limited teacher practice in using individual assessment data to inform next step teaching and learning for individual students, is a barrier to inclusive pedagogy which is a major finding of this research.

### ***7.3.3 Linking assessment, analysis and planning practices to the research questions***

Contributions to all four research questions have occurred as a result of the findings presented in this theme, “Informing planning through assessment and analysis”.

Two major findings were discussed in this section of the thesis. The first related to the teachers’ limited use of their assessment and analysis data to plan for next

step learning opportunities for the children. Such practice is seen as a major barrier to the development of an inclusive pedagogy in terms of the definition (Section 2.2.3) and the key principles and characteristics (Section 2.2.5). Consequently, the limited practice became a classroom contextual factor that impacted on the teachers' ability to meet educational needs (Research Question 1).

The second major finding, as discussed, acknowledged that through their action research projects the teachers' practice began to change as tentative steps were taken to use individual assessment information in programme planning. Consequently, aspects of Research Question 3, relating to conducting practitioner research, and Research Question 4, relating to focussing internally and solving classroom challenges, were answered. Practitioner research facilitated the teachers to begin the process of change to their practice towards better providing for individual differences, and so enhancing their inclusive pedagogy.

The teacher practice change that occurred in the area of assessment and planning was partially due to the role of the researcher acting as a critical friend. The tasks that the researcher performed could also be carried out by a service delivery specialist. This finding adds to the information needed to answer Research Question 2.

#### ***7.4 Facilitating collaborative relationships***

Developing a pedagogical environment which facilitates learning and growth in children is the daily task of a teacher. From the classroom observations and teacher interviews a theme emerged that indicated that teachers generally perform this task independently without the in-class support and guidance of other adults. Independent classroom practice was seen as the usual method of practice by the two participating teachers. From enquiries made of them by the researcher they did not believe that their practice was different from their peers. Building a collaborative relationship with a teacher who is not used to having other adults in their class needs careful nurturing and planning, especially if teacher change through professional development is contemplated (Poskitt, 2005). In this section

of the discussion, themes which were found in the research to facilitate collaborative relationships are examined.

#### ***7.4.1 Facilitating a move from independent to collaborative practice***

Because individual classroom teachers do not necessarily have all the skills and knowledge necessary to provide for diverse student learning, there is a growing movement within the literature to facilitate collaborative practice which is also seen as contributing to inclusive pedagogy. Collaboration is recommended not only amongst teachers but also between teachers and others including researchers, visiting specialists and parents (Booth & Ainscow, 2002; Brotherson, Sheriff, Milburn & Schertz, 2001; Burbank & Kauchak, 2003; Poskitt, 2005; Ruthven, 2005). Whilst the nature of the collaboration recommended is varied there is an underlying theme that teachers' practice is enhanced through collaboration.

However, the results from Cycle 1 of this research found that two participating classroom teachers practised independently from each other and from their peers, especially when delivering their teaching in the classroom. Independent practice was manifested in various ways including: little communication between class teachers and those other teachers providing extra support (e.g. remedial reading assistance through Tape Assisted Reading), specialist ORRS teaching being delivered without reference to the class teacher, para-professionals providing assistance without teacher direction, detailed class planning, teaching, and evaluation without support from colleagues, no instances observed or reported of co-teaching or collaborative teaching, no instances observed or reported of teachers visiting other classes to observe lessons, and a belief by the teachers that independent practice was the normal method of providing teaching to their students. From the findings, a conclusion can be drawn that there was no joint stewardship of the teaching and learning in the school. Specific examples of independent practice are reported in Sections 5.3.2, 5.6.1 and 5.8. Instances of joint macro planning by groups of teachers were reported. These were primarily to do with sporting or cultural events or topics that classes intended to participate in at the same time (e.g., a study around the weather). However, even for these macro projects, classroom planning and teaching were independently performed by each teacher.

When discussing what it means to say that a school is doing well, Eisner (2005) argues, “*The deeper problems of schooling have to do with teacher isolation and the fact that teachers don’t often have access to other people who know what they’re doing when they teach and who can help them do it better.*” (Eisner, 2005b, p.186) The results of this study confirm Eisner’s view in that whilst both the teachers in the study did collaborate with their peers in some respects and sought help, at times, when it came to their practice in the classroom they were virtually on their own. Independent practice is viewed by some as being an artisan model where the teacher develops their own skills and knowledge from repeated practice, generally in a haphazardous trial and error form (Huberman, 1988). Whilst Huberman acknowledges that teachers will occasionally reach out to peers, he also says that they tend to interpret any learning from these interactions into their existing schema without examining that schema as a result of the new learning.

The finding of independent practice and absence of collaboration confirms the findings of Fislser & Firestone (2006). Whilst their focus was on social trust and teacher efficacy beliefs, they found that the teachers in their study, “*held tightly to norms of privacy and teacher autonomy in the classroom.*” (Fislser & Firestone, 2006, p.1178) The authors report that the teachers did not share ideas, instructional strategies or interact in meaningful pedagogically focused ways. One of the reasons why the teachers held on to their autonomy was their failure to develop trust within a collaborative group according to the findings of the researchers. They went on to conclude that teachers who collaborate and seek to challenge the norms of teacher isolation and autonomy experienced higher level of success in their classes (Fislser & Firestone, 2006, p.1182). A major difference between the Fislser & Firestone study and this research was the context of the collaborative relationships. Fislser & Firestone had collaborative groups that met and discussed generally away from the classroom. As demonstrated in this thesis, enhancement of inclusive pedagogy occurred when the teachers began to collaborate within a partnership with the researcher in the classroom. The context of the classroom is viewed, in this thesis, as one of the levers for the development of trust in a researcher-teacher relationship.

Cycle 3 of the research had as one of its objectives to develop the cooperation between the researcher and the teachers. The teachers in this study both confirmed that it was because of their collaborative relationship with me, with each other, and the structure of action research, that they were prepared to try out new ideas to solve their classroom challenges. Both teachers reported that they would not have experimented with new ideas and practices on their own account but would have continued to use existing approaches to classroom challenges. Further, by participating in this research the two teachers developed a closer collegial relationship both in school and out of it. Collaboration between teachers is viewed as one of the great enablers of inclusive practice because the collective array of knowledge and skill available will generally meet even the most challenging student needs within the school (Ainscow, 2003; Evans et al., 1999; Prochnow et al., 2000; Vaughn et al., 1997). Further, with collaboration there is an underlying assumption that responsibility for student learning rests with the whole staff. Such an assumption gives the individual teacher a licence to experiment with new ideas and take risks because support is available.

Strategies in the literature which particularly address the independent or autonomous practice of classroom teachers generally involve some form of collaboration. Co-teaching, team teaching and collaborative teaching are all variants of practices that involve two or more practitioners collaborating in a partnership to plan and implement teaching in the classroom (Burstein et al., 2004; Prochnow et al., 2000; Scruggs, Mastropieri & McDuffie, 2007; Sprague & Pennell, 2000). Such practices are considered to contribute to inclusive pedagogy because they enable the teacher to use the skills and knowledge of others to better meet the diversity of learning generally found in classrooms. Whilst generally recognised as children's activities, cooperative learning (Jenkins, Antil, Wayne & Vadasy, 2003) and peer tutoring (Jones, 2005) are also considered to have the potential to increase teacher collaboration particularly with the children in the classrooms and with one another to implement the strategies.

In a review of the literature, Scruggs et al. (2007) found several major benefits for teachers in co-teaching: increased ability to adapt the curriculum, increased

ability to manage classes, and learning to cooperate and collaborate with a colleague. Where the co-teaching was found to be successful the authors report that cooperation between the children also increased and that children with learning difficulties benefited from the increased attention. However, the analyses also found that in many cases the teachers were not equals in the relationships, and that methods of instruction, generally whole class, did not change significantly or were slow to change. One factor that Scruggs et al. did not report on and which appears to be important is facilitation from a person outside of the teaching relationship. Literature promoting inclusion through collaboration suggests that the presence of a 'critical friend' is important especially at the beginning of the relationship (Carrington & Robinson, 2006; Bulman & Schutz, 2004). Ainscow (2003) also promotes increased cooperation in the classroom between teachers and suggests that the cooperation should be extended to teacher aides, parents and pupils. He posits that increased cooperation between children has benefits for all class members including the adults.

The use of partnerships within a class is also seen by Ainscow (2003) as a method of bringing to the surface strategies, ideas and curriculum modifications that often lie unused. Partnership activities and dialogue facilitate these resurrections. Prochnow et al. (2000) echo this when they suggest that teachers need to make better use of existing resources in a school, including teacher aides, peer tutoring and colleagues' strategies. It is interesting to recall that in her first cycle of action research Tina re-cycled existing strategies before collaborative dialogue suggested others.

Teaching within the school in which this research was conducted, were a number of very experienced and professional practitioners whose knowledge and experience could have assisted the two teachers to better increase the participation, contribution and achievement of their children. That this knowledge and experience was not regularly accessed by the teachers in the research study was an important finding. It suggests that a professional community in which cooperation and collaboration was encouraged did not exist. Whilst the research did not address ways to assist the teachers access this

knowledge, it did assist them to cooperate in another way with each other and a researcher, and the results of that cooperation had benefits for teacher learning. In the following paragraphs further factors which were found to contribute to collaborative partnerships and to inclusive pedagogy are explored.

#### ***7.4.2 Building a shared understanding of inclusion***

Researchers working in professional development projects with practitioners need to develop a shared understanding of the nature of the professional development and any assumptions on which it is constructed. In this research on inclusive pedagogy and proceeding from the definition of inclusion in the classroom (Section 2.2.3) there is an underlying assumption that teachers and their practice are critical factors.

In Cycle 1 of this research, the first year, the teachers did not necessarily have this view and operated from a different frame of reference. This was apparent from the classroom observations, teachers' interviews and informal conversations. Although the teachers both expressed a view that attending to the diverse learning needs of all students in their class was important, their pedagogy was not always consistent with that view. Not using the assessment data that was available to plan for next step learning was one major example of this inconsistency (see Section 7.3).

Reflective thinking within a collaborative partnership assisted the teachers to understand that their actions and beliefs were crucial when considering how best to enhance the participation, contribution and achievement of their students particularly those who were struggling with their learning. The reflection journals deliberately focussed the teachers' attention on their pedagogy. Such a focus led the teachers to understand that they themselves were an important element of the learning in the classroom. The action research projects also had a focus on teaching practice but with a particular focus on individual children's learning. That they were required to constantly monitor the individual child and the environment in which they learned was a teacher understanding that was enhanced by the projects. The teacher learning from each of the above projects enabled them to acquire, with the researcher, a shared understanding of an

important aspect of inclusion. This acquisition was achieved through collaboration within a small community of practice, a key principle of action research.

The importance of a shared vision was highlighted in research by Brotherson et al. (2001) who reported on what principals of elementary schools thought important in developing schools that were inclusive. A shared vision is also highlighted in the literature relating to effective schools and effective leadership. The development of a community within the school where all members felt connected and belonged and based on a shared vision and values, was not identified by the principals as important. Brotherson and colleagues commented that the principals appeared to look to others outside of the schools (e.g. visiting specialists, regional administrators) to assist with inclusion rather than to reflect internally (c.f. Ainscow, 2003; Prochnow et al., 2000). The teachers in my research reported that they had, following their action research projects, begun to look internally for solutions and so began to share an understanding about an aspect of inclusive pedagogy.

Having a shared understanding may not be possible at the beginning of a relationship but any professional development needs to proceed towards developing one so that outcomes sought are relevant to both parties and that any change resulting from the professional development is sustainable (Ruthven, 2005). *“The concept of ‘shared vision’ is critical to building a supportive inclusive community. Parents, teachers, community personnel, and supportive agencies all must share and hold to a vision of inclusion ...”* (Brotherson et al., 2001, p.43). Action research and reflective thinking assisted the teachers and the researcher to develop a shared understanding within their small community, but there is another factor which is important, and that is time.

#### ***7.4.3 Relationships need time to develop and mature***

Building relationships within an inclusive pedagogy is important, and time is a crucial factor necessary to allow the relationships to develop and mature, for the teachers to develop trust, to take risks with their teaching and where appropriate, to modify their practice. Time is also an important element when planning for

the sustainability of change, because there needs to be time for the changes to be implemented, indeed embedded (Erickson, Minnes Brandes, Mitchell & Mitchell, 2005; Guskey, 2003c; Poskitt & Taylor, 2007).

This thesis argues that the results obtained in the teacher action research projects and the reflection journals were facilitated in part by the length of time that the researcher and teachers had spent together in developing their professional relationship. Opportunity to observe one another in their respective roles, discussions around solutions to classroom challenges, engagement in wider educational debate around the concepts of inclusion and mainstreaming, exploring factors considered to enhance professional development and collaboratively planning two cycles of teacher action research allowed for a deepening understanding of the issues in inclusive pedagogy and of each other.

It is further argued that the teacher research projects would have been less successful in changing teacher practice with a reduced lead in time developing the partnership. Teachers took risks with their pedagogy during the projects because they were comfortable in the relationship they had with one another and the researcher and were able to share ideas and construct solutions from their discussions, investigations on the internet and professional reading. Lack of time for planning for inclusion is an issue highlighted by research on principals (Brotherson et al., 2001). In their research they highlighted the situation that principals did not provide the time for them or their teachers to plan or develop teaching strategies. In contrast in a research study by Burstein et al. (2004) the teachers identified that having the time to collaboratively plan was one of the factors that assisted them to develop an inclusive pedagogy.

The findings of Poskitt (2005) who considers that a time frame of at least two years is necessary for the teachers to have time to experience all the interrelated phases involved in effective professional development, and to effect change, is supported by the findings from this research.

#### ***7.4.4 Trust: a core component of a relationship***

Ainscow (2003) suggests that a strategy that schools could use to foster inclusion is to create conditions under which risk taking by the teachers is increased. This thesis proposes, with support from the literature and the results of this research, that trust is best facilitated through the development of collaborative relationships between partners (Fisler & Firestone, 2006; Mayer, Davis & Schoorman, 1995; Simpson, 2007). Trust was developed slowly during the first cycle of the research. Being present in the classrooms for an extended period observing the teacher and children and their interactions initially created a climate of acceptance, and this was enhanced by the feedback that was given to the teachers, through providing transcripts of the children's interviews and the classroom observations. An examination of the teachers' responses to the researcher's questions in the teacher interviews demonstrates that they were able to discuss their pedagogy in an open and frank manner (refer Appendices L & M).

Further evidence of the established trust occurred when the teachers took risks with their pedagogy. At the end of Cycle 1 the teachers agreed to extend their involvement into a second year, knowing that their practice was to be further scrutinised by themselves, through critical reflection and collaboratively through action research. Both teachers mentioned that they considered it professional to examine their classroom practices regularly. During her action research project, Tina trusted the advice of the researcher and decided to trial peer tutoring in a new entrant class. This was in spite of her belief that new entrant children were too young to be peer tutors. Janine also took risks with her pedagogy when she trialled planning her teaching based on need rather than achievement. A fuller description is contained in Chapters 5 and 6.

Trust is not visible to the observer or, necessarily, to the partners, rather it is visible through the outcome of the risk taking, which occurs as a result of trust (Mayer et al., 1995, p.369). Mayer and colleagues consider that what assists with the build up of trust are factors of trustworthiness that the trustors (teachers in this research) see in the trustee (researcher). Three factors of trustworthiness that assist with the development of trust include: skills in an area valued by teachers, a

benevolent attitude to the teachers, and operating from a set of principles that the teachers find acceptable. Risk taking by the teachers began to take shape in Cycle 2 when the teachers opened their practice up to critical reflection, and was confirmed in Cycle 3 when they began to change their practice. This risk taking by the teachers around their practice is a further demonstration of the trustworthiness that the teachers saw in the researcher.

A dynamic process also occurs with trust where having observed the outcome behaviours of a partner and benevolence in the behaviour, the other partner is then more likely to develop trust and risk taking themselves in the relationship. A reciprocal trust is then established (Serva, Fuller & Mayer, 2005). However, the benevolence each partner sees in the other, needs to persist for the trusting relationship to continue (Simpson, 2007). Harboursing negative attributions about a partner, for example, could assist in diminishing the trusting relationship and the reciprocity. Therefore, it is important for partners in a collaborative relationship to express their feelings about the behaviour of the other or any proposed collaborative actions. As a consequence partners in a collaborative relationship need to develop a level of trust which allows for critical dialogue.

The benefit of reciprocal trust is that a deeper level of trust is established and it is cyclical in nature. In this research, risk taking by the teachers was encouraged by the researcher because he believed that unless the teachers were willing to take risks they would be unlikely to critically examine or adjust their current practice. The researcher also took a risk in making a decision to allow the teachers to solve classroom challenges with action research rather than ask them to use researcher generated solutions (e.g., co-teaching). That the risk taking in the teacher action research was successful was a demonstration of reciprocal trust. In this research study the development of trust indirectly assisted in the development of inclusive pedagogy because it facilitated risk taking which, in this research, aided the teacher to focus on individual learning. The building of trust within a partnership has a mutual benefit to the partners.

#### ***7.4.5 Parents are partners in student learning***

In her enquiry into special education in New Zealand, Wylie (2000) found that many parents of children with special needs felt left out of the decision making around their child's education. Further, even when opportunities for consultation took place, for example, the formulation of Individual Education Plans, parents considered themselves to be passive participants rather than active contributors. Not to seek the advice and guidance of parents is to narrow the range of knowledge and information available about a child and by implication exclude them from the classroom (Booth & Ainscow, 2002).

The contrasting relationships that the two interviewed parents had with the teacher and school led to an important finding. Both parents had children with significant learning needs. For one parent there was little interaction with the school. She was content that her son was attending school and that he was happy. How her child was behaving or progressing in his learning appeared to be a secondary concern for this mother. In contrast the other mother had been involved with her daughter's education since early childhood education. This mother initiated contact with the teacher or principal on a regular basis when she was concerned about her daughter's progress. That this mother was involved in regular Individual Education Plan meetings, and had been since her daughter attended early childhood, gave her the knowledge and confidence to approach the school. In contrast the other parent did not have the history of interaction and support because her son's difficulties had not been identified at an early age and collaborative planning between the home and school had not occurred. However, in neither case was there regular communication between teacher and parent even though both students had significant learning difficulties. Two findings emerge from this situation: early involvement between home and school results in a higher level of interaction during schooling and teachers need to reach out to parents especially where children are experiencing significant difficulties in their learning. Such a reaching out has reciprocal benefits as teachers learn from families as much as families learn from teachers. Teachers are also able to gain a deeper knowledge and appreciation of children through contact with parents and families (Biddulph, Biddulph & Biddulph, 2003).

Communication between parents and teachers assists with the sharing of information and the lessening of potential conflicts. For example, following the administration and analysis of the sociogram in the senior class, I became aware that a priority for the teacher had been to develop collaboration and friendships between the children in the class. A priority for one of the mothers was that her daughter develops friendships with her classmates. Neither parent nor teacher knew of the other's objectives. Regular and positive communication between parent and teacher might have demonstrated to each that they had similar outcomes for the student, and together they could have worked to achieve them.

Such collaboration and partnership contributes to inclusive pedagogy through increasing the knowledge available about a particular child and creating a collaborative partnership where both parties take an equal share for the ongoing learning and development of the student. In a study with principals, Brotherson et al (2001) found that home/school collaboration was an essential element in fostering inclusive practice. In their Best Evidence Synthesis, Biddulph et al (2003) found that "*genuine home/school collaboration can also lift children's achievement significantly*". (p. vi) However, Biddulph et al. also found that establishing and maintaining home/school relationships was difficult and required time and commitment from the school as a whole. They referred to schools who had hired people specifically to foster this relationship interaction. While the teacher has a role to play in fostering relationships with parents their role must be within a whole school approach. The nature of the relationship between parents and teacher can either be a facilitator or a barrier to inclusive practice. Therefore, facilitating a positive home/school relationship is crucial for a teacher moving to become more inclusive in their practice and raising the achievement of their students, but they must be supported to do so by school policy and practices.

#### ***7.4.6 Facilitating collaborative relationships: a summary with links to the research questions***

The importance of having a shared understanding of issues (in this case inclusive pedagogy), time to develop the relationship, and development of trust within the relationship are proffered as key themes in building collaborative relationships.

Barriers to collaboration, and to inclusive pedagogy, have also been identified with the independent practice of the teachers being a major finding of this research. A second finding that the absence of an effective teacher-parent relationship is also a barrier to collaboration is a confirmation of research existing in the literature. Strategies for overcoming these barriers have also been discussed.

The themes and findings summarised above are all contextual factors that were found to be present in a mainstream classroom. Some, such as the independent practice of the teachers, were found to be barriers to an inclusive pedagogy while others, including the development of trust within a collaborative relationship, were demonstrated to enhance inclusive pedagogy. All the themes impacted on the teachers' abilities to provide an environment that promoted learning and development and as such provide an answer to the first research question relating to contextual factors. Research Question 2 regarding the role of a critical friend was also answered when the findings relating to trust building, relationship building and the promotion of collaboration amongst staff in the school are considered.

Having examined the importance of collaboration and partnership to developing an inclusive pedagogy the discussion now considers another strategy: teacher professional development facilitated by teacher action research. As will become evident, collaboration and partnership, reflective thinking, and assessment and analysis all contribute to the success of teacher action research.

## ***7.5 Facilitating teacher change and student learning through teacher research***

### ***7.5.1 Introduction***

Teacher research in the classroom is viewed as professional development because it facilitates the teachers to delve deeper into their practice and gain insights with which to make changes to both their and the students' learning (McIntyre, 2005; Ruthven, 2005).

Within the literature, and promoted by teaching advisors and specialists, there are twin themes arising around professional development. The first theme concerns teacher change and the role that professional development plays in facilitating that change, especially where the professional development is centred around classrooms and teacher/pedagogical concerns (Beatty, 2000; Flecknoe, 2005; Guskey, 2002). A second theme is related to how professional development can also lead to more inclusive pedagogy (Ainscow, 2007; Burstein et al., 2004; R. Robinson & Carrington, 2002; Roettger, 2006). Both the themes are interrelated and have an improvement in student outcomes as their focus.

Teaching diverse groups of learners within a classroom is a complex and challenging task, but if children are to participate, contribute and achieve then teachers need to understand the intricacies of learning, be able to problem solve, change their teaching as required, and to have appropriate teaching strategies available (Florian, 2007). Within the literature, professional development is viewed as an effective method of initiating, developing and sustaining teacher change (Poskitt, 2005). However, there are a number of complexities around the professional development of teachers including: appropriate methods (Boyle et al., 2005; Clarke & Hollingsworth, 2002; R. Robinson & Carrington, 2002), the importance of context (Castle, 2006), the significance of relevance to the teacher (Ruthven, 2005), motivational difficulties (Guskey, 2002), sustainability of change (Guskey, 2002; Poskitt & Taylor, 2007), and the research into practice dilemma (McIntyre, 2005). (For a fuller discussion of these complexities refer Chapter 2, Sections 2.3.3 to 2.3.6) Having teachers as researchers of their own practice has been forwarded by several writers as a method of dealing with many of the complexities outlined above (Beatty, 2000; Burbank & Kauchak, 2003; Flecknoe, 2005; Guskey, 2002; Wearmouth *et al.*, 2000). Wearmouth et al comment that, “*Practitioner research has a much better record of bringing about change in schools than decontextualised staff training.*” (p. 59) However, having teachers as researchers introduces further complexities of its own including reliability and validity of data generated, training and monitoring of teachers, the dilemma of the dual roles of teacher and researcher, the debate around the need for a critical friend and generalisation and relevance of any

research results to the profession (Burbank & Kauchak, 2003; McIntyre, 2005; Roettger, 2006; Ruthven, 2005). Several of these complexities were encountered in this present research and will be discussed in terms of their effects on the research.

In considering how professional development might also lead to a more inclusive pedagogy there are a number of issues that are similar to facilitating teacher change through professional development, because inclusion, in terms of this research's definition, is a process that inherently requires teachers to modify their practice. However, there are number of added complexities which relate specifically to the nature of, and assumptions underpinning, inclusion. For example, inclusive pedagogy is considered to be collaborative and, therefore, any professional development relating to its development must be collaborative in nature rather than competitive (Ainscow, 2007; Rouse, 2006; Ruthven, 2005). As a further example, it is understood that to develop an inclusive pedagogy a teacher must not only change practice, but there must also be a change in attitude and belief about the nature of learning and the potential of all children to learn (Weiner, 2003). Weiner further cautions that facilitating inclusive pedagogy through teacher change is difficult, because a number of factors have to happen simultaneously with these changes in teacher attitude. These include reforms in the way professional development is undertaken with teachers, that curriculum has to change, and that support services have to be improved. He concludes his recommendations by suggesting that professional development leading to inclusion has to emancipate the teacher to abandon old beliefs, and be assisted to do so. It is a finding of this thesis that practitioner research has the ability to be emancipatory, because it facilitates teachers to examine their current assumptions through taking risks with new methods and strategies. However, it is also a finding that developing inclusive pedagogy is difficult even where the teachers were volunteers in a research designed to facilitate it.

In this research a major professional development for the teachers was their participation in their action research projects which had as their aim the solving of contextual classroom challenges. The following paragraphs discuss some of the themes that arose from an analysis of the results from these projects.

### ***7.5.2 Risk and emancipation in practitioner research***

Classroom research can be emancipatory for teachers. It can provide a supportive environment in which they are able to take risks, experiment with different teaching methods and to suspend their assumptions about student abilities, classroom practice and their own world view. Both the teachers in this research, through their classroom research projects, experimented with new ideas and took risks. Janine experimented with, for her, a novel approach to encouraging reluctant writers to produce a greater quantity of written language. She also decided to trial grouping according to a skill need, reading comprehension, rather than ability. In her final interview she reported that she had wanted to do this for some time but had not the confidence to do so. The emerging success of her classroom research project had provided that confidence and, therefore, was emancipatory in that it freed her to experiment. However, it is noted that Janine reported that she was, at the time of interview, still favouring her preferred method of grouping, achievement, for other teaching activities. This favouring of existing methods is understood in terms of research from Poskitt and Taylor (2007) who note that deep change takes time to embed and that a range of attributes need to be acquired, including attitudes and dispositions. In Janine's situation she experimented with using mixed ability – single focus teaching for three reasons: discussions with the researcher around the idea of teaching to need, her 'awareness' that she should be doing so, as revealed in her interview, and her growing willingness to take risks with her pedagogy. However, the success of the 'experiment' was not yet such that it encouraged her to extend the experiment to other areas of her pedagogy. Continual successful practice in a new strategy is needed for the change to become embedded in practice (Guskey, 2002).

Tina also demonstrated that she was prepared to take a risk by agreeing to experiment with a teaching strategy that she initially believed was too difficult for her class level. Taking risks is as important for teachers as it is for children. Children must take risks and make mistakes in order to learn, grow and develop (Robertson, 2001). Errorless learning results in maintenance of the known rather than exploration of the unknown. Teachers, also, must explore new ideas by attempting to meet the needs of individuals which are different and challenging.

Research reported by Roettger (2006) found that teachers needed to experience failure, disequilibrium, before they were able to make changes. Robinson (2003) reminds teachers that there are no 'silver bullets' in teaching and no guaranteed ways to improve student achievement. Therefore, teachers must continually seek new ideas and methods and develop an evidence base. This is best done by experimenting and risk taking through classroom research (V. Robinson, 2003). Flecknoe (2005) reminds us that reflection, a critical partner element in classroom research, is also considered emancipatory because it helps teachers remove barriers that hinder pedagogical change. Encouraging risks with practice within the 'safe' environment of an action research study, facilitating teachers to purposefully collect data, and assisting them to focus on their practice and the individual student, contributed to their enhanced learning in inclusive practice.

An interesting suggestion from Ainscow (2007) is that there should be practices with teachers which lead to 'interruptions' where the familiar becomes unfamiliar in ways which stimulate self-questioning, creativity and action. As a strategy for risk taking and emancipatory activities this suggestion has merit. However, such practices need the support, guidance and structure of a collaborative partnership in order to guard against failure which, in turn, might reinforce existing theories. For example, Janine's experiment with mixed ability, single focus grouping while successful did not lead to sustained change of existing practice. If her experiment had 'failed', and she was not supported to reflect and evaluate, then such failure may have made it more difficult for her to experiment in the future. While success has a cyclical action, so too does failure. In this research the teachers' action research projects did stimulate an initial questioning of existing ideas and creativity and action became evident.

### ***7.5.3 Data are important***

Purposeful collection of data through assessment and its subsequent analysis is important in research and the classroom research projects gave the teachers a framework and a purpose for doing so. The teachers first had to determine what outcomes they wanted for their target children and then how they would know if they had been successful in achieving those outcomes. The teachers did have some prior knowledge around setting outcomes and success criteria. Whilst these

teachers had always collected data during their daily interactions with the children, as demonstrated by the classroom observations in Cycle 1, the data collected during their projects was much more purposeful and directed towards individual outcomes for students (Section 6.4.1). The collected data and the reflection and evaluation of it led to the beginnings of teacher change which is important in inclusive pedagogy. When discussing the importance of data Ainscow (2007) concludes, *“The challenge is, therefore, to harness the potential of data as a lever for change. In other words we must learn to ‘measure what we value’ rather than is often the case, ‘valuing what we can measure’.”* (p. 156) An example of this from this research was when Tina, with assistance from the researcher, developed a hierarchy of formative written language skills in order to both measure the progress of the children but more importantly to have the ‘next skill area’ identified.

There are many advantages to the collection and analysis of data including the identification of individual performance strengths and next step teaching, which in turn may lead to teacher change and refining of strategies. Another important advantage is that data can be responsible for removing extraneous matter from decision making such as emotion and prejudice (Roettger, 2006). However, the analysis of such data needs to happen in a situation where there is a collaborative relationship so that extraneous elements that occur can be challenged and dealt with.

In their research projects the data collected assisted the teachers to make decisions around individual need and toward needs based outcomes, which in turn enhanced inclusive practice. Collecting the data also suggested changes in teacher practice. For example, during the classroom research it became obvious to Tina that her current methods of teaching written language were not having the planned outcomes, particularly for students at the margins for failure. She then considered alternative methods.

In their research around inclusion in England, Dyson and colleagues (2004) found that better performing schools that were also highly inclusive adopted a model of flexible grouping, modification of the curriculum and individual monitoring

(Dyson, Farrell, Hutcheson, Polat & Gallannaugh, 2004). Such a model was beginning to be adopted by the teachers in the current study and the purposeful collection of data contributed to that model. However, the findings by Dyson et al. were based on school wide data and they found variation within schools which, amongst other factors, they attributed to the different ecologies of the individual classroom. It is an assertion of this thesis that the small community of practice that developed, particularly between the researcher and teacher, built up the ecology of the classroom through the various professional development activities undertaken. Classroom ecologies are crucial to the development of inclusive pedagogy because this is where the intersections of all the communities within the school occur but particularly the intersection of teaching and learning. Regardless of what the government, the community or the school might espouse as acceptable and current, what happens in the classroom is where judgements relating to inclusive pedagogy and pedagogy in general are going to be made.

#### ***Difficulties with data collection***

Classroom ecologies are complex, multi-layered, multi-levelled and open to influence particularly the beliefs and opinions of parents, pupils, administrators and teaching colleagues (Flecknoe, 2005; McIntyre, 2005). Consequently, a classroom teacher has to possess a pedagogy which is capable of teaching their children whilst being able to manage all these factors. Therefore, when research is introduced into a classroom and the teacher is also expected to act as a researcher, there is the potential for difficulties in dealing with the two roles.

Both teachers in this current research reported difficulties with the role of researcher, particularly in rigorously gathering data. Janine found that she was distracted by other children in the class as she sought to observe her target children and record data. Tina mentioned that initially she was regularly recording qualitative data in a note book with which to evaluate and reflect. However, as the action research projects progressed she found that the competing demands of the class interfered with her making regular note book entries. As a consequence the student results obtained by the teachers have to be accepted knowing this information. This situation would not be acceptable in formal

academic research but according to McIntyre (2005) could be acceptable in practitioner research.

McIntyre (2005) posits that there is research-based knowledge and pedagogical knowledge, with the latter being knowledge that helps teachers to manage their classrooms and facilitate their pupils' learning (p. 359). Ruthven (2005) suggests that practitioner research should be seen as a form of professional development "*contributing both to deepening insight and improving practice*" (p. 417). McIntyre (2005) accepts this view and states that if practitioner research contributes to an understanding of one's current practices and the need for change, then it is fulfilling its function. Therefore, if we accept this viewpoint then the fact that the data gathering was less than rigorous may not be a major difficulty. McIntyre (2005) says that there is no real consensus around the importance of rigour in practitioner research but his view point is that there has to be some rigour so that teachers are able to engage with educational research. Both teachers in this research study were able to identify where their research practice may have been less than ideal. This is an important finding because it demonstrates that they had understood the importance of data in research and maintaining the basics of a research design. McIntyre (2005) recommends that all practitioner research should be collaborative so as to enhance the research through the critical contribution of a colleague and the availability of others' (colleagues, pupils and researchers) observations and evidence.

Consequently, through the above lens this practitioner research is viewed as successful but could have been enhanced through a closer monitoring by the critical friend of the implementation of the research design. This could have been achieved through a combination of assisting with observations and data gathering, releasing the teachers to concentrate on observation and data gathering and being aware at an earlier stage of potential dilemmas in the dual roles of researcher and teacher. The difficulties the teachers reported could have been a barrier to successful practitioner research. Discussion of them has identified the dilemma, offered some solutions and raised awareness for future practitioner research.

#### ***7.5.4 Context and classroom climate***

The teachers' action research projects were implemented within their normal classroom programmes. Benefits for both the teachers' learning and the students' learning resulted.

The most important learning for the teachers was that children's learning needs are able to be met within the typical classroom programme and that they do not necessarily have to be removed from the class in order to receive targeted assistance. McIntyre (2005) asserts that pedagogical knowledge needs to be specific in context so that it can address the uniqueness of the setting, the individual, the situation – the ecology of the class. Florian (2007) echoes this assertion when she notes that strategies, an element of pedagogical knowledge, need to be developed in context so that they fully capture the complexities of the class. Both of the teachers, in the first year of this research, had children removed from the class in order to provide remedial assistance. Neither teacher had a significant voice in the planning or the intervention of these remedial lessons. Consequently, learning of the individual child was not monitored and assessed in context. Contrast this with the action research projects where the teachers identified the difficulties, planned for their remediation, carried out the instruction and from evaluation and reflection modified both their programme and to a lesser extent some of their assumptions. Everything the teachers did was in context and they were the drivers of the process.

A second important learning for the teachers was that teaching and modification of the curriculum is more relevant to the child's needs when it is based on a functional and ecological assessment rather than a 'diagnosis'. Ainscow, Booth & Dyson (2004) suggest that the citing of remedial efforts within the classroom programme based on an assessment need, dispels myths that particular types of difficulties need particular types of programmes. For example, there is currently a large industry in educational professional development programmes that pertain to specific difficulties such as Down syndrome or autism. When examined, the strategies suggested, for example, visual task boards, could be equally applicable to any child. For the teachers in their research studies, the focus was on need and

trailing strategies to meet that need, rather than beginning with a diagnosis and proceeding to a strategy associated with that diagnosis. Teachers do need to know about a wide range of strategies but also have the skills to problem solve from the learning need to a matching strategy (Florian, 2007).

Participating and contributing with their peers whilst receiving specific teaching designed to meet a need was of benefit to the children beyond the specific skill that was targeted. Development of self-esteem, empathy, a better understanding of diversity, group participation skills and social skills are cited by Jones (2005) as resulting when children who are experiencing difficulties are taught with their peers. Such benefits are available to all children in the class not just the targets. In Tina's class, for example, the tutors developed skills and understanding of helping a classmate which could then be transferred to other children and other contexts.

A finding from this research is that teachers are more likely to take risks with their pedagogy when in a supportive community. From research it is suggested that such a community also promotes children taking risks with their learning (Stuart et al., 2006). A crucial element in developing a sense of classroom community is children being educated together. Stuart *et al.*, from their research with three teachers, believe that such a community provides an emotional foundation that stimulates students' critical thinking and allows them to take risks with their learning. Taking risks with their written language was a goal for Tina in her research project. My research study would argue that there are other crucial elements involved in such a community, for example, children assisting one another, scaffolding provided to lever learning, children working at their level of understanding, experiencing success and being supported when errors occurred. All of these elements were a part of the teacher action research projects and contributed both to a community of learning and to the enhancement of the students' skills.

Situating their action research projects within the classroom programme has accrued benefits to both the teachers and the children. It is considered to be inclusive pedagogy because the focus was on individual learning and the context

was the classroom community where the ecological complexities were able to be incorporated into programmes. The success of the implementation contributed to answering Research Questions 3 and 4 which focussed on the ability of the teachers to conduct research in the classroom.

### ***7.6 The role of a critical friend***

The importance of the role of a critical friend in practitioner research is supported in the literature (Cardno, 2006; Carrington & Robinson, 2006; Roettger, 2006; Ruthven, 2005). In this research study, I, as the researcher, also acted as a critical friend, as I engaged with the teachers to develop a small community of practice.

Within the literature the role of critical friend is seen as extensive and crucial. Some of the tasks that a critical friend is seen as performing include: helping teachers avoid bias towards self-validation (Ruthven, 2005), encouraging internal solutions to pedagogical difficulties (Salisbury et al., 1997), providing knowledge and skills (e.g., research designs) (Elliott, 1990), providing critical dialogue to encourage deeper reflection and understanding of the links between theory and practice by being analytical, critical and challenging (Cardno, 2006), providing support when teachers experience failure and frustration – disequilibrium (Cardno, 2006), and establishing an environment of intellectual reciprocity in which to challenge exclusionary behaviour (Carrington & Robinson, 2006).

However, one of the most critical tasks and one that is the foundation for all others is that I helped develop a collaborative partnership within which both teachers became trusting and felt safe enough to take risks with their teaching. These actions of the teachers did allow them to experience the interruptions or disequilibrium that subsequently caused them to take stock and look for different solutions. Although the researchers above (Carrington & Robinson, 2006) might have implied it they do not directly refer to this development of trust. This thesis has demonstrated how crucial it is to the process of teacher learning in inclusive pedagogy. The development of the collaborative partnership, the associated development of trust and the risk taking by the teachers, further detailed the role that service delivery staff could adopt within a classroom and, as a result, contributed to the answer of Research Question 2.

### ***7.7 Contribution to the literature***

The foregoing discussion has examined the major themes that have resulted from the research study. This section briefly outlines the contributions that the research makes to the literature.

Teacher learning in inclusive pedagogy is facilitated by a number of interrelated factors centred on the development of a community of practice. In this research the community, small in size, included the children in the two classes, the teachers and their aides and the researcher. The literature suggests that larger schoolwide communities of practice are needed if school re-culturing is to be facilitated (R. Robinson & Carrington, 2002). Despite this suggestion, changes towards inclusive pedagogy can be achieved within a smaller community of practice such as happened in this research. Although the wider school may not have been moving towards inclusive practice, the potential to influence other teaching colleagues in the wider school through teacher dialogue and modelling was always present. Facilitating change with this small community did so from the crucial intersection of teaching and learning in the school – the classroom. From a New Zealand perspective achieving teacher change with a small community of practice was an original contribution to the literature.

Factors found from the results of this thesis, and which facilitate the development of a community, include the development of a collaborative partnership between the teachers and researcher, the development and modification of teacher skills and knowledge including assessment and analysis leading to planning, the use of reflective thinking, and the introduction of professional development through practitioner research. Whilst each of these factors has been demonstrated in overseas literature this research has confirmed that they are also applicable in New Zealand schools. The connections between professional development, action research and inclusion which were found to greatly assist the teachers to enhance their inclusive practice, were highlighted in this research. That these connections assisted the inclusion process is an important contribution to the New Zealand literature on inclusion because, at present, there is a limited New Zealand literature base.

Facilitating sustained change in the classroom towards a more inclusive pedagogy was found to be difficult even where there was a willingness on the part of the teachers to experiment with their pedagogy. In the action research projects two cycles were not enough to embed new strategies and knowledge. Further cycles exploring different aspects of the learning were needed. However, both teachers came to understand that there needed to be a greater focus on the individual child and their own pedagogy including their assumptions. In these respects their pedagogy had become more inclusive.

Two major barriers in New Zealand classroom and school practice to inclusive pedagogy have been identified in this research. The first is the independent classroom practice of the teachers in which there was limited classroom collaboration with colleagues, a school expectation that the classroom teacher is able to provide for all the learning needs of their students and little classroom mentoring and supervision. The second major barrier identified was that although the collection of individual student assessment data was frequent by the teachers, there was limited use of it to inform next step teaching and learning for individual students. Both of these factors are original contributions to the literature.

Assisting teachers to develop inclusive pedagogy is enhanced when the teachers understand both the theory and the practice of inclusion. This understanding is important if the teachers are to make sense of the changes that they are making in their practice. Having a schema of inclusion against which to examine practice change facilitates better integration and sustainability. Risk taking with practice is also encouraged when there is an understanding of the theory because the teachers have a foundation from which to experiment. Although the teachers in the research had a reasonable understanding of inclusion at the start of the study it was enhanced and consolidated as the research progressed. For example, focussing on the individual student was understood in theory by the teachers as revealed through their interviews, their espoused theory, but it took the reflective thinking exercises and action research projects to demonstrate that it could happen

in practice (theory in use). The need for an understanding of both theory and practice, and connecting them was a finding of this research.

This research demonstrated that two teachers, supported by a small community of practice, reflective thinking and critical dialogue, an outside lens, and input of advice can make small changes in practice. Sustaining these changes and facilitating more needed to have either a longer term collaborative partnership or the development of a wider community of practice involving the whole school, so that joint stewardship of teaching and learning could be fostered.

Each of the above research contributions will form elements of the research conclusions which will be outlined in the next chapter.

## Chapter 8

*“When knowledge and practice become internalized and energized by a personal commitment to ensure that all students learn well, teachers may have their greatest influence on student outcomes and school culture” Weiner, 2003 (p.18)*

## **Conclusions**

### ***8.1 Introduction***

This action research study investigated how two classroom teachers were facilitated to enhance their professional learning in inclusion and nurture an inclusive pedagogy. Participation in the project created opportunities for the teachers to: develop skills and knowledge related to inclusion, form a small community of practice, extend and enhance their collaborative and reflective thinking skills, begin to develop reflexivity, and to research a challenging aspect of their classroom learning and teaching through their own action research projects. The thesis, therefore, examines the connections between action research, inclusion and teacher professional development and change in a New Zealand context.

The journey of two New Zealand classroom teachers enhancing their skills and knowledge in inclusive pedagogy to achieve an optimal learning environment, is detailed in this study. That other practitioners might be influenced to begin similar journeys towards an inclusive pedagogy by adopting the successes, avoiding the barriers, adapting to context and enhancing the critical elements is an outcome that would contribute to teaching and learning of teachers and students in this country (McIntyre, 2005; Ruthven, 2005).

Four research questions guided this research study: the significance of contextual factors on the teachers’ ability to develop and enhance student learning, the importance of the role of a researcher / critical friend in classroom research, the practicalities of teachers conducting research in their classrooms, and the role of

action research in facilitating teachers to focus internally and solve classroom learning challenges (Section 2.6.1). Whilst each of the research questions focussed on a specific element of developing an inclusive pedagogy, together they were concerned with gaining an understanding of how the links between the processes of action research, professional development and inclusion could best be levered to assist teachers to become more inclusive in their classroom practice. This research, therefore, argues for exploring and leveraging the connections between these processes as a means for teachers to develop and enhance the learning of all their students in a pedagogy that is inclusive.

Section 8.2 considers what was happening in the classroom during the first cycle of the action research and what contextual factors were found to be present that impacted on the teachers' abilities to develop an inclusive pedagogy. Section 8.3 synthesises the actions that were taken to develop teacher change towards becoming more inclusive, whilst Section 8.4 considers the results of the actions and what contributed to them. Section 8.5 discusses implications for practice for both educators within the school and for outsiders working alongside teachers. The limitations of this study are outlined in Section 8.6 and suggestions for future research occur in Section 8.7.

### ***8.2 What was happening? What were contextual factors initially present in the two classrooms that impacted on the teachers' ability to develop an inclusive pedagogy?***

An objective of this study was to research how current pedagogy impacted on the ability of the teachers to be inclusive. Cycle 1 of this action research study investigated the classroom context through observations, interviews and a questionnaire. The data resulting enabled tentative conclusions to be drawn about the nature of the teachers' pedagogy, their knowledge of inclusion and their willingness to engage in processes to change their practice. Incidentally, during this initial cycle, the development of a collaborative partnership leading towards a small community of practice began to coalesce. Current practice of a routine and comfortable nature were found to be strong determiners of teacher practice, but

also highlighted the areas where change was needed if a more inclusive pedagogy was to be developed.

### ***8.2.1 The importance of teachers knowing about inclusion***

Whilst evidence suggests that content knowledge is insufficient to effect teacher change (Boyle et al., 2005), such knowledge is an important foundation on which to facilitate it (Alton-Lee et al., 2000; Rouse, 2006; Slee, 2007). A major reason for its importance is that ‘content free’ teacher change which concentrates solely on process does not interact with theory and knowledge where the attitudes, beliefs and assumptions are formed and contained. In a Piagetian framework, having knowledge provides a schema against which new learning can be compared and either accommodated or assimilated to form new knowledge. Knowledge, along with other factors such as a collaborative partnership and trust, encourages teachers to take risks with their pedagogy which is necessary in inclusion (Ainscow, 2007). Knowing about teaching strategies, disability, children’s learning, classroom management, assessment and analysis and where to source assistance are all elements in inclusive knowledge (Rouse, 2006). Some or all of this knowledge is held by teachers, but when faced with the complexities of teaching they seldom form connections with it when students struggle to progress (Ainscow, 2003; Florian, 2006). Giving practical effect to inclusion knowledge, and enhancing it, became one of the objectives of this research.

Both Tina and Janine espoused their knowledge on inclusion during their interviews and in discussions with the researcher. Amongst other knowledge they understood that inclusion applied to all children and not just those with disabilities, and they believed that they, as teachers, needed to be planning for the learning of individuals. It was important to discover this because class observations and interviews had demonstrated that there was limited individual student planning by the teachers. That it was in their knowledge assisted when it came to facilitate change in practice. For example, Tina was able to introduce individual goals for a group of children.

However, even when both knowledge and practice became connected in some areas towards the end of the research study (e.g., Janine using reading

comprehension skills to reform a group), routine and comfort still exerted a strong influence to maintain an existing practice (7.3.2 & 7.5.2). Whilst Janine had successfully managed a change in practice, her knowledge had not changed sufficiently to influence her assumptions driving those practices. It is concluded, therefore, that a successful experiment by itself is insufficient for change, even where there is content knowledge available.

### ***8.2.2 Teachers practising independently***

As the series of classroom observations progressed during Cycle 1 of the research study it became apparent that there was limited collaboration between the two teachers and their colleagues. Janine had two teacher aides, a specialist teacher and other teachers interacting with her children but such interactions appeared to be unplanned and not connected with the classroom programme. In Tina's class several of her children left the room at intervals to have extra tuition (e.g., oral language for new migrants) but again the teacher was not involved with the programme. Teacher interviews and discussions confirmed that whilst there was a small degree of collegial planning around macro activities like musicals, when it came to the classroom the teachers were expected to plan for the learning of all their children. Such an expectation had follow on effects; relying on one's own resources to solve teaching challenges, sourcing one's own resources, not witnessing colleagues teaching, not involving parents in the planning of their child's learning and limited seeking of collegial advice. Such independent practice tends to confirm existing strategies and knowledge and impedes the adjustment of the learning environment to meet the diverse learning needs of children (Ainscow, 2007).

Teaching students with diverse needs through the development of an inclusive pedagogy requires the teacher to have an array of skills, knowledge, attitudes and beliefs which need to be continually probed, examined and adjusted (Rouse, 2006). Teachers are best facilitated to do this in a collaborative relationship which not only allows for the development of critical dialogue but also, amongst other matters, encourages joint ownership of the learning of students (Booth & Ainscow, 2002; Burbank & Kauchak, 2003; Carr & Kemmis, 1986; Ruthven, 2005). The discovery of this independent teacher practice influenced the nature

of the collaborative professional development that was later implemented in Cycles 2 and 3 of this action research study. This occurred because it was concluded that teacher independent practice is an important contextual factor influencing the development of inclusive pedagogy.

### ***8.2.3 Connecting assessment data to individual student planning***

The collection of data by both teachers in this research study was ubiquitous. During classroom observations, examples of formative and summative assessment practices were evident with most data collected relating to individuals. In inclusive pedagogy the collection of data is crucial because it has the potential to be a lever for change for both the student and the teacher (Ainscow, 2007; Roettger, 2006).

In order to lever change, data relating to individuals needs to be used to plan for those individuals but that was not the predominant practice of the two teachers. Observations, later confirmed by interview, found that the teachers used the achievement levels reached by the students on various assessment measures as a method of forming groups for instruction rather than using profile data to inform next step teaching. That they should plan for individuals was in the teachers' knowledge, as revealed in interview and discussion, but not practised for a variety of reasons, the most cited being the number of children in the class. Further, teacher independence did not assist in remedying this as evidenced when Janine reported that individual teacher timetables prevented collaborative planning and teaching amongst syndicate colleagues to cater for diverse learning. While there were some minor reformations of groups particularly in the new entrant room, the children largely remained in their groups for the whole year and received the group teaching regardless of individual learning need. Such a practice suggests that the teachers did not recognise that students have diverse learning needs and require differing teaching strategies. The teachers would dispute this assertion but the practical effect of their pedagogy consolidated it as an assumption.

When discussing teacher change Guskey (2002) mentions that student progress is a crucial element in the cycle connecting practice and knowledge. Using assessment data to monitor individual student progress and deliver next step

teaching, therefore, becomes a crucial element of inclusive pedagogy which, in turn, requires teacher change. Facilitating the teachers to focus on individual learning through connecting assessment data and planning became another focal point of the teacher professional development. The limited practice of the teachers to connect assessment data to student learning is a barrier to inclusive pedagogy and is a finding of this research.

#### ***8.2.4 Elements of inclusive pedagogy revealed***

Data collected during the initial action research cycle revealed that several of the practices used by the teachers were inclusive in nature, but not always recognised as such. The use of peers to support the learning of other students, was an example. Both teachers considered peer support to be a scaffold for academic and social learning and contributing to a caring class climate. In conjunction with peer support the teachers promoted friendships within the classes with Janine organising a small class camp to support a friendship development objective.

Reflection and evaluation of children's learning was occurring in both classes with some minor changes in teacher practice. Reflection at this early stage of the research was at a basic level ensuring that lessons proceeded as planned (action) rather than to enquire into interactions, student outcomes or teacher practice (evaluation) (Teekman, 2000). This is understandable in that to reflect at deeper levels teachers need to distance themselves from their practice which in their independent classrooms was difficult. It was also noted that teacher changes that occurred were more related to the behaviours of others (students, researcher, and professional development facilitator) than to their own reflection. However, the beginnings of reflection on teacher practice became evident as the teachers read the research transcripts provided by the researcher and discussed them with him. This was an unexpected finding as the transcripts were initially supplied to demonstrate transparency and to develop a working partnership between colleagues. During this phase of the research both teachers also demonstrated a willingness to receive feedback, to make tentative teacher practice changes, and to become more active in the research process.

### ***8.3 What did we do? Using reflective thinking and action research within a collaborative partnership to develop and enhance inclusive pedagogy.***

A second objective of this research was to discover how teachers could be facilitated to develop an inclusive pedagogy. Cycle 1 identified areas of teacher practice in need of change if the teachers were to become more inclusive in their practice. Implicit in inclusive pedagogy is change especially in the learning environment but also in practice (Ainscow, 2007).

Redesigning the learning environment through teacher change promises much for inclusive pedagogy but it is often difficult to achieve because it requires various factors to occur, such as teacher professional development, changes in teachers' beliefs and structures, modification of the curriculum and attention to individual students (Weiner, 2003). Teacher change that is sustainable, relevant and effective is best achieved in context where there is time available to experiment and modify new skills and where a supportive culture is present (Burbank & Kauchak, 2003; Guskey, 2003c; Ruthven, 2005). Several professional development techniques are advocated in the literature but there is a growing advocacy for practitioner research within a community of practice. This is because it is contextual, involves the teacher in researching their own practice, results are immediately apparent and resulting student learning gains act as a motivator for further experimentation (Elliott, 1990; V. Robinson, 2003; Roettger, 2006).

Practitioner research, therefore, was considered an important means of facilitating teacher change but other associated factors: the development of a collaborative partnership, the facilitation skills of a critical friend, and the ability of the teachers to think reflectively were also considered significant. How each of the above was used and their contribution to the research is the subject of Section 8.3.

#### ***8.3.1 Assisting teacher change through action research***

Action research was chosen as the research design for both the researcher study and the teacher projects because of its responsiveness to particular situations

which teachers encounter in their classrooms. The flexible design allows for improvements during implementation as teachers, and researchers, observe and reflect. Such flexibility is necessary in the complex classroom environment. Action research's foundation in critical theory with its four elements of cooperative action, reflection, emancipation and participation (Cohen et al., 2000; Crotty, 1998) is particularly suitable for research into inclusion because these elements are mirrored in inclusive practice. Finally, the Deakin model of action research with its cyclical phases of planning, acting, observing and reflecting (Carr & Kemmis, 1986) parallels the processes that most teachers use in the classroom to grow their student learning.

In this research study the teachers' action research projects were nested within my second order action research study investigating how to facilitate change towards inclusive pedagogy. Such first order / second order studies have been reported in the literature (Cardno, 2006; Salisbury et al., 1997) but where this study differed was in the extended planning phase. Both the first and second cycles of the researcher action research effectively became a part of the teachers' planning phase of their first cycle. This was considered necessary to: gather classroom data in relation to teacher skills and knowledge around inclusion, facilitate the development of pre-requisite research skills (e.g., reflective thinking), facilitate a collaborative partnership to support the research, and to allow time for the teachers to become comfortable with the idea of having their practice held up to scrutiny through research.

While there is acknowledgement in the literature that time is important in professional development particularly to allow teachers to practise and consolidate new learning (Poskitt & Taylor, 2007; Ruthven, 2005; Timperley et al., 2007) this research found that having extended time available to plan enabled successful implementation of both the first and second order research projects. In a classroom the primary role of a teacher is concerned with the learning of students, not research, and hence, for successful practitioner research the environment needs to be collaboratively structured.

### ***8.3.2 Building a community of practice through a collaborative relationship***

Inclusive pedagogy and teacher autonomy cannot co-exist in classrooms because inclusion as a concept involves collaboration at all layers of the classroom environment. Learning, teaching, resource use and relationships all need to be collaborative in nature if inclusive pedagogy is to develop and be sustained (Booth & Ainscow, 2002; CSIE, 2002b). Inclusive pedagogy also requires teachers to continually examine their practice in order to seek a better understanding of how children are facilitated to learn. Better understandings require teacher change as an outcome. When seeking to solve learning challenges individual teachers do not necessarily have all the answers. Teacher change in inclusion, therefore, is best facilitated in a collaborative environment because it is difficult and teachers need support and guidance (Booth & Ainscow, 2002; Burbank & Kauchak, 2003; Ruthven, 2005; Weiner, 2003).

The collaborative relationship between the teachers and researcher deepened as the research progressed. Initially the teachers were passive but cooperative participants. Cycle 1 data identified that these teachers were largely autonomous in their classroom practice but they gradually became collaborative as they discussed the research and their classroom practice with me and with each other. Prior to the beginning of the reflective thinking exercises the teachers had developed enough trust in the relationship that they were prepared to enter into research that would expose their practice to critical analysis. Further, my trust had extended to modifying my original research plans and inviting them to nominate an area of classroom practice that they would like to research, rather than researching a topic proposed by me.

In this research it is argued that collaboration was developed through a connection of various pedagogical elements including: ecological assessment of the classroom and the time taken to do it (Cycle 1), transparency demonstrated by the researcher, dialogue that took place between the partners, willingness of the teachers to open their classrooms to the researcher, frequency and regularity of the

researcher visits, and a growing teacher interest in the research and being a part of it.

### ***8.3.3 Researcher as a critical friend***

Critical friends are viewed in the literature as important in facilitating teacher change towards an inclusive pedagogy. Freed from the intimacy of the pedagogy the critical friend is able to build up a collaborative relationship in which they can engage in critical dialogue with the teacher in order to: encourage deeper reflection, be analytical, critical and challenging, promote knowledge and skills, and challenge exclusionary behaviour (Cardno, 2006; Castle, 2006; Elliott, 1990). Ainscow (2004) considers that ‘outsiders’ working in collaboration with teachers and students can learn to understand learning contexts and “*explore ways of overcoming barriers to participation and learning in schools.*” (Ainscow et al., 2004, p.128)

Within this research I acted as a critical friend, but my role evolved as the research progressed. During Cycle 1 I had a dominant role as a researcher. The research purpose, questions and design had been primarily my concern and I had also constructed the questionnaires and the interview questions as well as carried out the observations in the class. The teachers, initially hesitant, gradually became more active in the research. For example, they helped to distribute and collate the questionnaires, chose the children for the interviews and began to seek information about classroom matters. They were also reading the transcripts of the observations and interviews. Although I had made it clear that I was not in the classrooms as a professional, nevertheless the teachers asked professional questions, and so the role of the critical friend began as I challenged them to look for alternate and internal solutions. I was beginning to encourage the teachers to ‘reach back’ into their knowledge and connect it with their practice.

As Cycles 2 and 3 proceeded, my role as critical friend expanded and consolidated as I sought to facilitate the development of inclusive practice. Dialogue with the teachers became more critically focussed particularly as the teacher action research projects were implemented. Planning and evaluative sessions were held between the three of us, visits were made to the classrooms during the

implementation phases and assistance was given both with implementation and designing the projects.

Both teachers reported in interview that they experimented with new strategies and ideas because they had the support to do so. Inclusive pedagogy requires teacher change which is facilitated by professional development within a collaborative relationship. Having a trusted outsider to assist with such matters as identification of problem, data collecting, reflection and action planning enriches the outcomes for the teachers as they move towards an enhanced inclusive pedagogy.

#### ***8.3.4 Teachers thinking reflectively***

Thinking reflectively is a skill and process that assists teachers to develop inclusive pedagogy because it has the potential to reveal to the teacher those attitudes, beliefs and assumptions that unconsciously frame their practice. As well as enhanced pedagogy, there is also the potential for improved student outcomes (Abernathy & Cheney, 2005; Carrington & Robinson, 2004; Mansvelder-Longayroux et al., 2007; Orland-Barak & Yinon, 2007). The contextual assessment of the classroom had revealed that the teachers were thinking reflectively, but primarily around curriculum matters. Because reflective thinking is an important facet of action research and because the teachers had expressed a wish to extend their reflective skills, Cycle 2 of the research enabled the teachers to reflect on self-chosen lessons.

Before beginning the reflective thinking exercises I discussed reflective thinking with the teachers and introduced them to a reflective cycle (Gibbs, 1988, in Bulman & Schutz, 2004). The various stages in the cycle were discussed and teachers' questions were answered. At this stage of the research an objective was to encourage the teachers to move from considering curriculum and child reaction features to a consideration of their feelings, actions and beliefs. A second objective was to raise their self-awareness of their practice (Ruthven, 2005), and for teachers to notice dissonances between what they espoused and what they did (Carrington & Robinson, 2006).

Although Bulman & Schutz (2004) consider that frameworks in reflective thinking do not promote deeper thinking it was my belief that before deeper thinking could be attempted teachers needed to reflect more widely (e.g., thoughts, feelings, sense making), and that the template used would scaffold the teachers to achieve this. Ensuring dialogue further extended their reflective capacities, and created a readiness for involvement in their own action research projects.

#### ***8.4 What teacher knowledge, skills and behaviour developed, changed or were enhanced as a result of collaborative professional development involving reflective thinking and action research?***

*“Teaching involves groups of learners, so it necessarily requires the balancing of learning together (valuing inclusion) and meeting individual needs (valuing the individual).”* (Lewis & Norwich, 2003, p.15) This research is arguing that this balance can be achieved by classroom teachers through connecting inclusion, professional development and action research within a small community of practice. Such connections can result in changes to teachers’ knowledge, skills and behaviour towards an inclusive pedagogy.

A primary focus on the development of inclusive practice was a distinguishing feature of this research. While literature (R. Robinson & Carrington, 2002) recommends that whole school re-culturing is necessary for inclusive pedagogy to develop, this thesis argues that with reflective thinking, a small community of practice, an outside lens, and input of advice, development of skills, knowledge and behaviour through professional development, two teachers can make some changes in their practice towards a more inclusive pedagogy. The thesis acknowledges that changing teachers’ attitudes and practice is difficult, even where the teachers were aware of the nature of the project and had volunteered to take part.

##### ***8.4.1 How action research assisted teacher change***

A key finding of the research was that two teachers with no previous experience of formal research were able to integrate an action research project into their daily classroom teaching programme and experiment with their practice. Several

factors facilitated the implementation of the projects. The teacher research studies related to specific concerns, teacher chosen, and so the projects only took up part of the day. Improved learning outcomes for the children were the teachers' primary goal and the progress towards the achievement of these motivated the teachers to maintain the momentum of the research. The research was well planned and conducted in a supportive environment with the researcher acting as a critical friend available for consultation and aid.

As with most research studies there were difficulties to overcome. The major difficulty that the teachers reported was their inability, at times, to collect all the data they wanted. This particularly related to observational data. Both teachers recognised that they were not maintaining the collection of data and each took steps to overcome the problem. Balancing the dual roles of teacher and researcher is difficult in a busy classroom particularly when the research requires data collection whilst the teacher is teaching. Other children's learning needs have to be addressed. However, the important finding in this situation is that the teachers recognised that they were not maintaining good research skills; both shared with their critical friend and took steps to mitigate its effects.

#### ***8.4.2 Changes in focus from curriculum to pedagogy***

In their study considering how to include children with Down syndrome, Alton-Lee et al (2000) argued that teachers had to change their focus from a personal tragedy model where difficulties in learning were seen as residing in the child to a social construction model where learning difficulties are viewed as constructs of the social environment – an inclusive pedagogical approach.

However, one of the changes sought in this research and which occurred was that the teachers began to focus on individual learning. Previously both teachers had assessed individuals but not used that information to inform next step teaching. Changing of this practice began to occur both during and following the projects. While they did not achieve the deeper reflective levels that develop reflexivity, teachers did begin to notice that how they taught and their attitudes about teaching and children were as important as the modification of the curriculum. Their view

of the classroom also began to broaden. Understanding that barriers to learning do not necessarily lie with the child, began to enter the teachers' pedagogy.

#### ***8.4.3 Taking risks with practice through experimentation***

Developing inclusive pedagogy is explicated by teacher change from seeking solutions to learning difficulties. Ainscow (2007) reminds us that the learning environment has to be continually restructured in order to encourage participation, contribution and achievement. Teacher change involves risk taking because without it practice remains constant. Convery (1998) also reminds us that teachers seldom take risks with reflective thinking because they do not ask themselves hard questions relating to why they continue to persist with routine practices.

Janine and Tina each experimented with their practice. Janine reported that she had experimented with needs based grouping and Tina reported, in post-research dialogue, that she was consolidating new skills in peer tutoring with a different group of children. By these small behaviour changes, the teachers were confirming that the projects had empowered them to risk take in other areas of practice. However, Janine also reported that she had a preference for her original achievement based grouping which suggests that she needed further support to continue experimenting and innovating.

An innovation that Janine reported, following the reflective thinking exercises, was that she began to involve the children in reflecting on their learning. Her reported rationale for doing this was to enrich the data available to her through a different perspective. In doing this Janine demonstrated that she was reflecting more deeply by looking at the learning environment from a wider lens (Teekman, 2000) and extending the collaborative nature of the classroom community – a subset of the research community. Although an unexpected finding, it demonstrates that through professional development in context teachers can think laterally and enrich their pedagogy.

Having data available to monitor progress assisted the teachers to risk take. Before beginning their action research projects each teacher had baseline data

available. As the interventions proceeded, the formative data collected enabled the teachers to monitor the children's progress and make modifications to their interventions. This was important to the teachers because it mirrored their normal teaching practice of making modifications during teaching. Aligning research design to classroom practice provides a foundation from which the teachers can experiment and innovate with confidence.

This thesis argues that teacher change is facilitated by having a structure that supports risk taking with new ideas, a collaborative partnership in which risk taking can occur that is critically supportive and a context that is relevant to the teacher and in which new learning is viewed as being necessary.

### ***8.5 Implications for practice***

The impetus for this study was to research how teachers could be assisted to facilitate the learning of all their students within a mainstream environment. The classroom pedagogy was the focus of the study because that is the fulcrum of interactions between teachers, children, parents and educational agencies. If inclusive pedagogy is to be a feature of education it must happen in the interactions in a classroom. Therefore, having researched in the classroom what implications are there for practice?

There are implications for educators within a school and implications for outsiders seeking to work within school settings.

#### ***8.5.1 Implications for educators within a school***

In his book "Reimagining Schools", Eisner (2005) discusses the isolation of teachers and the fact that they do not have access to colleagues and others who can assist them in their classrooms. This research study confirms this assertion but suggests that for the teachers in this study there was an expectation that they were to be independent and autonomous practitioners. If this expectation amongst teachers is widespread, and my professional role suggests that it is, then changing this expectation is a major implication for educators moving towards inclusive pedagogy. Inclusion and autonomy are incompatible constructs within schools and classrooms. Those teacher changes that occurred in this research

were facilitated by a collaborative partnership which was supportive, critical and encouraged risk taking with practice. Therefore, a major implication arising from this study is that schools need to develop strategies and processes that move their teachers from practising in isolated cells, to teaching in communities of practice that encourage: joint ownership of the learning environment, critical dialogue between colleagues, innovative, experimental and contextual professional development, the forming of a joint understanding of inclusion, assessment practices that lead to next step individual planning, and the development of teacher problem skills that cater for individual learning while maintaining a group, class and school strategic focus.

When interviewed toward the end of the research, both teachers reported that their experimentation with their teaching was, in part, facilitated by the knowledge that I was available to guide and support them. This belief confirmed literature around the importance of the role of a critical friend in teacher change towards inclusion (Carrington & Robinson, 2006; Convery, 1998). An implication for educators, then, is that a critical friend may be necessary. However, there are two dilemmas present in this implication; can the critical friend be an insider or do they need to be an outsider and at what point does the critical friend role end and the community self-manages? Neither of these questions was answered by this research but they could be critical questions to solve within the school.

Within the literature there are a number of long term professional development methods offered in order to facilitate pedagogical change (Boyle et al., 2005; Clarke & Hollingsworth, 2002; Thiessen, 1992). This research demonstrated that action research in context, and practitioner driven, did result in changes to pedagogy and to student outcomes. The implication arising from this is that having knowledge and skills of action research would facilitate teachers to research within their own classrooms as well as looking to others to solve instructional challenges. Most importantly, action research facilitated the teachers to consider their own practice and move beyond narrow evaluation of curriculum. Schools wishing to ensure that all of the students participate, contribute and achieve to their maximum extent, need to facilitate and support practitioner research through action research.

Inclusive pedagogy requires mind shifts by schools and staff specifically related to the nature of inclusion, professional development and teaching. Failure to facilitate these mind shifts leaves children to the risk of exclusion. The lens has to change from viewing individual difficulties in learning as characteristics of the student, to understanding that learning difficulties are a facet of pedagogy and it is through changes in pedagogy that solutions will become available. The lens change is difficult and complex but not insurmountable. Educators can achieve this focus change through working together and implementing ideas and strategies from evidence including this research study.

### ***8.5.2 Implications for outsiders seeking to work within school settings***

Typically teachers interact with outsiders in two ways: they attend a course (on or off site) where the presenter offers information around a topic, strategy, or process, or they have an outsider in their classroom to assist with learning challenges. Regardless of the purpose for the interactions between the class teacher and the outsider, a collaborative relationship needs to be formed and this is especially so if inclusive pedagogy development is contemplated. Consequently, there follows a series of steps for the outsider to implement: allocating sufficient time to allow the relationship to develop, building trust through reciprocity, bringing skills, knowledge and behaviour to the relationship that the teachers view as relevant and helpful, possessing facilitative skills to encourage teacher experimentation and innovation, and encouraging teachers to reflect on their pedagogical knowledge and make explicit strategies, skills and behaviours that underscore their practice.

Outsiders working towards inclusive pedagogy need comprehensive knowledge and understanding of inclusion so that they are able to share that knowledge with teachers and work towards developing a common understanding. Brotherson et al. (2001) suggests that such understandings should not only be shared between teachers and outsiders, but also with the extended community that is the school, including parents and community shareholders. However, within the classroom recognising barriers to inclusive pedagogy, and challenging them, is the role of first the outsider and gradually that of the teacher as they begin to develop

reflexivity. Knowledge of action research and reflective thinking are also important. Both were responsible, in this research study, for assisting teachers to change their pedagogy.

Effecting teacher change towards a more inclusive pedagogy is difficult and time consuming as demonstrated in this research. There are many factors which need to happen, roles to be aligned, behaviours to be changed and assumptions to be challenged. Understanding this, and being able to deal with it in context is an important skill for the outsider. One of the most difficult behaviours to change was facilitating the teachers to utilize knowledge and skills of their colleagues, in order to bring a collective mind to classroom challenges. Consequently, outsiders need to foster within the school a belief in the joint ownership of teaching and learning, to the benefit of all students.

***Working collaboratively towards developing an inclusive pedagogy: A model***

To assist outsiders to facilitate the many tasks that are constituents of developing inclusive pedagogy in classrooms and schools, a model of a collaborating partnership has been constructed from both the results of this research and the literature. The model is set up to be implemented both sequentially and concurrently. For example, it is possible to begin an ecological assessment of the classroom as the relationship is building, but it is cautioned against beginning research or critical reflection until the partners have built up trust, and data from the ecological assessment is available.

The model is constructed around three outcomes that assisted the teachers in this research to begin the process of enhancing their inclusive pedagogy: having a collaborative relationship, developing a strong knowledge of the ecology of their class, and undertaking contextual professional development.

**1. Build a collaborative relationship with the teacher**

- 1.1. Engage with the teacher on a long term time frame of at least a year
- 1.2. Build up trust within the relationship

- 1.3. Teacher needs to be assisted during the relationship engagement period e.g., advice on how to modify the curriculum (this helps with building trust)
- 1.4. Encourage the teacher to risk take in their practice by seeking alternative solutions to those typically used
- 1.5. With an agreement on data sources and method of reporting, provide feedback to the teacher on their pedagogy.
- 1.6. Emphasise the mutual benefits of a collaborative partnership
- 1.7. Encourage the teacher to build up collaborative relationships with other staff members, towards the goal of a community of practice

**2. Collaboratively engage in an ecological assessment of the classroom**

- 2.1. Identify barriers to and promoters of inclusive classroom practice
- 2.2. Identify barriers to and promoters of collaborative practice amongst staff
- 2.3. Assess teachers' views as to where the problem lies when children are challenged by their learning
- 2.4. Assess children's views as to how they are encouraged to learn and grow and identify common and individual preferences
- 2.5. Promote the benefits of having a positive relationship between the home and school

**3. Facilitate professional development with the teacher**

- 3.1. In discussion with the teacher assist them to identify facets of practice that would benefit from development and, consequently, assist the teacher to access professional development. Promote the benefits of longer term professional development and having it contextually based.
- 3.2. Develop critical reflection skills to enable teachers to examine their pedagogy including their 'theory of practice'.
- 3.3. Develop the teachers' ability to purposefully collect data and analyse them in terms of need rather than achievement
- 3.4. Facilitate the teachers' development of a range of teaching and problem solving skills to use in their interactions with their children

- 3.5. Facilitate the teachers to conduct classroom based action research.  
Emphasise the benefits of action research for future growth and development as well as providing a structure for innovative practice
- 3.6. Collaboratively define inclusion to guide professional development

The model needs further development and refinement through being implemented by service delivery people in collaboration with a variety of teachers in multiple settings.

### ***8.6 Limitations of the study***

In this research study the two participating teachers were volunteers who had received both written and verbal information on the purpose, nature and methodology of the research before they consented to become involved. Whilst this is in the nature of informed consent it also means that the teachers were generally sympathetic to the research direction and underlying philosophy.

That there was only one school and two teachers involved in this research is also a limitation in that it is not possible to suggest that the results achieved might be generalised to other schools and teachers. However, single case studies such as this research can be informative when they are joined with other case studies and commonalities and differences are explored. *“What we have learned is that we can treat the lessons learned from case studies as anticipatory schemata that facilitate our search processes, for a case is not only about itself but an example of things like it.”*(Eisner, 2005a, p.199)

New Zealand is a country which has a multi-ethnic mix. Where possible, therefore, it is important to include ethnic information in the research study so that the various ethnic groupings, particularly Māori, can make informed decisions as to whether the findings have application to their culture. Whilst this study reports on the ethnic composition of the classes, and the teachers, who were New Zealand European, it does not consider the findings in terms of ethnic or cultural appropriateness because the design of the study and the small number of students did not allow for it. Schools and classes based on Māori kaupapa or other cultural mores would, therefore, need to consider the context and findings.

Assumptions, philosophical beliefs and culture of the researcher exert an influence on research. Inclusion is a belief that currently causes debate both in the literature and in schools. In this research my belief in an inclusive pedagogy has been declared and such a declaration enables the reader to know which lens to use to consider its findings.

### ***8.7 Future research***

In research undertaken for a qualification there is a time when the field work concludes and the relationship between the researcher and practitioner ceases. However, there is also a realisation that the research could have continued as questions arise that lend themselves to investigation. With this topic of inclusive practice future research could investigate how more cycles of action research might consolidate the sustainability of teacher change, how critical reflection around practice might be enhanced with planned ongoing dialogue between researcher and practitioner and what effects gradually withdrawing the support of the researcher might have. Other areas for research could include fostering inclusive pedagogy through teacher-teacher relationships, encouraging the development of communities of practice within schools, and inviting a cluster of schools to create a professional development environment that could involve teachers and principals working in other schools.

Researcher-practitioner partnerships are offered in this thesis as one way of involving teachers in a collaborative relationship in order to transform their independent practice. However, this form of relationship does not, in itself, promote collaboration between staff in a school. Such staff relationships are promoted in the literature as being important methods of facilitating inclusive practice because the supportive community they develop then allows teachers to take risks with their practice. A future research study could explore how these communities of practice are facilitated to develop within a school and how they might add to the collaborative model between a researcher and teacher constructed from this research. Might a self-directed community of practice reduce the need for researcher-practitioner partnerships or would they complement such a model?

Whilst there is evidential support for the use of a critical friend to facilitate the development and enhancement of inclusive pedagogy there is not agreement whether the person performing the role should be an ‘insider’, for example, a colleague, or an ‘outsider’, for example, a researcher. Certainly having a colleague to perform the role would assist the development of a self-managing community of practice but would a colleague have the emotional, psychological and pedagogical skills and knowledge to become a disinterested facilitator of critical dialogue? Researching that question would add to the evidence around inclusive pedagogy especially as the critical friend is an important connection between inclusion, professional development and practitioner research.

Recently the number of children entering special schools in New Zealand has been rising although the number of schools has remained static. Special schools remain as an option for a variety of reasons, with anecdotal evidence suggesting that parents view them as pastoral and welcoming in nature and having teachers who are trained to teach disabled children. Inclusion as an educational construct is not going to succeed unless it is demonstrated that mainstream schools can also provide what parents express as wanting for their children. A future research study could research how a cluster of schools were facilitated to develop an inclusive pedagogy, and having done so integrate the children from the local special school into their learning environment.

### ***8.8 Concluding comment***

Inclusion is a journey of continual improvement. This thesis, whilst acknowledging the barriers and complexity, demonstrates that teachers can, with support, effect inclusive practices in their classrooms, regardless of the levels of inclusiveness schoolwide.

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**Appendices**

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## Appendix A

### *Adult Information Sheet*

<b>Researcher Introduction</b>	
Researcher Name & Contact Details	Ron Hutton [address and phone numbers]
Supervisor Name & Contact Details	Dr Jenny Poskitt [address]
Type and purpose of the Project	<p>Initially the purpose of the research is to examine how children, especially those with special education needs, are included within their mainstream class and within their community school. The information will be gathered using an ethnographic approach, which delivers qualitative data. The data is collected on what is happening in the classroom through observations, interviews, conversation capture and questionnaires. An instrument called the Index for Inclusion will also be used. This instrument guides the participants to consider for themselves the nature of the classroom and school inclusion policies and practices. It also encourages participants to reflect on their perceptions of inclusion. Participants will be involved in the analysis of the data collected through this ethnographic study.</p> <p>A second purpose is to determine whether using the action research method results in any change in the policies, procedures and practices of inclusion that were considered in need of change by an analysis of the data collected above. Staff of the school (the participants) will be taught the method and then, with the researcher as a facilitator, use it to answer questions resulting from the analysis.</p> <p>Whereas the researcher will largely conduct the initial research, it is expected that the participants will mainly drive the second phase of the research with the researcher acting as a consultant and facilitator.</p>
Employment Status of the Researcher	[Information given]
<b>Participant Recruitment</b>	
Recruitment Method	A flyer will be developed briefly outlining the proposed research. This will be mailed to all schools within the [named] urban area that contain a child or children who are verified under the Ongoing and Reviewable Resourcing Scheme (ORRS). The flyer will invite those schools who wish to know more about the research to contact the researcher. The researcher will visit the school and discuss the proposed research in greater detail. The information sheet will be left with the school. Schools will then be invited to consider participation and if interested to contact the researcher. From these expressions of interest a selection will be made and final agreements reached.

Method of obtaining participant names	<p>The initial approach to schools will be conducted by providing sealed and stamped envelopes containing the initial flyer to Group Special Education who will be asked to mail them to schools in the [named] urban areas who have children in the ORRS scheme.</p> <p>Once schools have identified themselves to the researcher by expressing an interest in the project all further contacts will be directly with the schools.</p> <p>Participants will self select for taking part in the research after researcher presentations to interested schools. There may need to be a culling of the numbers if more than two schools fulfill the criteria.</p>
Selection Criteria	<ul style="list-style-type: none"> <li>▪ The school chooses to participate having read the information sheet and having had a meeting with the researcher</li> <li>▪ At least one ORRS student is a pupil of the school (preferably two students)</li> <li>▪ The teacher of this student(s) is prepared to take part in both phases.</li> <li>▪ The ORRS child and their parent have given permission.</li> <li>▪ The majority of the other students, and their parents, in the class have given their permission.</li> <li>▪ Any other adults working in the class (e.g. teacher aide, specialist teacher) have given their permission</li> <li>▪ Senior staff who have a direct relationship with the class teacher have agreed to participate (e.g. Syndicate Leader, SENCO, Principal)</li> <li>▪ If all the above criteria have been met and there is still a need to narrow the selection the researcher will choose a school(s) that he has <u>not</u> had a previous professional relationship with.</li> </ul>
Exclusion Criteria	<ul style="list-style-type: none"> <li>▪ Schools which have Special School satellites placed on their grounds</li> <li>▪ Secondary Schools</li> </ul>
Number of participants to be involved and the reason for this number	<p>Two classes within one school each with an ORRS student would be ideal. Two schools close together and each with one ORRS student would be an acceptable alternative. The actual number of participants would vary with class numbers and staff numbers. It would be expected that staff numbers would not exceed 10 and class numbers not exceed 60 if two classes were involved.</p>
Number of participants in control group	<p>No control group</p>
Details of compensation, reimbursement, etc.	<p>Nil</p>
Description of discomforts or risks to participants as a result of participation	<p>Participants may feel discomfort following the analysis of the data collected during the ethnography phase of the project, as the analysis will encourage the participants to reflect on their current practices, policies and perceptions.</p> <p>The reflection may reveal prejudices the participants didn't know they had</p> <p>Current practices may be seen to be discriminatory, as may current policies</p> <p>Current practices may be seen as being upheld by habit rather than pedagogy</p>
<b>Project Procedures</b>	
Use of data	<p>The data collected in the study will be used by the researcher to answer the research questions posed in the project</p>
What will happen to the data when it is obtained	<p>All data collected in the ethnographic phase will be transcribed by the researcher into a computer located in the researcher's home.</p> <p>In the action research phases it is expected that the data will be used by the teacher participants to answer the research questions that they have constructed following the</p>

	ethnographic phase.
Storage and disposal of data	All data held by the researcher will be stored until the conclusion of the project. Raw data will then be offered to the school(s) for them to either destroy or archive. Transcribed data will be retained by the researcher until no longer needed and again offered to the school(s) for archiving or destroying.
Method for accessing a summary of the project findings	A summary of the thesis will be sent to the participating schools once it has been accepted by the university. However because the participants will have a major part in the analysis they will already be aware of the majority of the findings.
Method for preserving confidentiality and anonymity	A table will be drawn up with the correct names of the participants on the left and fictitious names on the right. This is so that the transcription can be accurate. Once the transcription process is completed the table will be destroyed. This will preserve anonymity for the participants. Schools will be given fictitious names.  Confidentiality will be maintained by only discussing raw data with the participants and supervisors.
<b>Participant Involvement</b>	
Procedures in which participants will be involved	<ul style="list-style-type: none"> <li>▪ Observations</li> <li>▪ Questionnaires</li> <li>▪ Interviews</li> <li>▪ Audio Recordings</li> <li>▪ Analysis of data</li> <li>▪ Forming research questions</li> <li>▪ Action research methods</li> </ul>
Time involved	It is expected that on average that the school would be involved, outside of class time, for one hour per week. This would be for consultation and follow up with the researcher. There would be a greater need for consultation during the second phase of the research when the action research was being conducted.
<b>Participant's Rights</b>	
You have the right to	<ul style="list-style-type: none"> <li>▪ Decline to participate</li> <li>▪ Decline to answer any particular question</li> <li>▪ Withdraw from the study after the ethnography phase</li> <li>▪ Ask any questions about the study at any time during participation</li> <li>▪ Provide information on the understanding that your name will not be used unless you give permission to the researcher</li> <li>▪ Be given access to a summary of the project findings when it is concluded</li> <li>▪ Be given access to any data involving you at any time</li> <li>▪ Ask that any of your interactions as captured by the tape recorder not be transcribed</li> </ul>
<b>Project Contacts</b>	Participants should contact either the researcher or his supervisor if they have any questions about the project. Contact details are at the top of this Information Sheet
<b>Ethics Committee Approval Statement</b>	This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol No 03/71. If you have any concerns about the conduct of this research, please contact [Name, address and phone number]

## **Appendix B**

### ***Information Sheet for Children***

My name is Ron Hutton. I would like to do some research in your class. I am interested in finding out how everyone in the class, including the teachers and children, work together to help each other to learn.

I would like to do this research by visiting your class every week for about two terms. At first I will just sit and watch what you do and say. I will write down what I see in my note pad. Then I will take home my note pad and type out my notes on to my computer. Later I would like to tape what you say as you are working in the class, on to a tape recorder. I would also like to talk to some of you and ask you questions about what you are doing and how you do it. All of this I will also type on to my computer.

As well as the things I will do in your class, I will also be talking to your principal, some other teachers and to some of your parents.

When I take notes in the class I will not use your real names. I will give each of you a new name that only I will know. That way no one else will know what you did or said. I will also keep the audiotapes until I am finished my project and then I will destroy them.

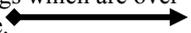
Attached to this sheet is some information about my research project and me. If you do not understand any of it you can ask your teacher, your parent or me. We will try to answer your questions. When you have read everything, or had it explained to you, you will be asked to sign a form to say that it is OK for me to write down what you say and what you do when you are in the class or out in the playground.

Thank you for reading this Information Sheet for Children.

Ron Hutton

## About My Project and Me

My name and how to contact me	Ron Hutton [address given]
The person who makes sure I do things right. She is called a supervisor	Dr Jenny Poskitt [address given]
What kind of research project am I going to do?	<p>Here are some of the things that I am interested in finding out:</p> <ol style="list-style-type: none"> <li>1. Because you all have different skills and are at different stages of learning I am interested in how your teacher and the other staff try to make sure that you continue to learn and develop. How do the teachers plan what they are going to teach you? What does the staff do if some of you don't understand something? What does the staff do when some children are good at something and others are not so good? If someone needs a special programme what does the teacher do? If you have other adults in the class how do they know what to do with you?</li> <li>2. In every class children are very friendly with some children and not with others - What do you like about some people that makes them your special friend? How did you choose your special friends? Are there children in the class that you play with but they are not your special friends? Why do you do this?</li> <li>3. In every class children talk while they are doing their work. I would like to know what you talk about because I am interested in knowing if you talk about your work or other things. I am also interested in knowing who you talk to.</li> <li>4. I am also interested in finding out whether some ideas that I have might make your learning easier? If your teacher and the principal agree we might try these new ideas out in your class and see what happens.</li> </ol> <p>I will watch, tape, ask questions in class and talk to some of you by yourselves if your teacher, your parents and you agree.</p>
Where do I work?	I work at the [work place given]. I am in charge of a team of people who work with children who have special learning needs.
How did I choose your school and your class?	<ol style="list-style-type: none"> <li>1. I sent a letter to many schools in [area] telling them what I wanted to do in my research. I asked any schools that were interested in helping to get in touch with me.</li> <li>2. Those schools that contacted me I visited and explained further. Schools were then asked to decide whether they wanted to be a part of my research.</li> <li>3. From those schools that decided that they wanted to be a part of the research I chose your school.</li> <li>4. I then gave an Information Sheet to your parents and asked them if you could be part of the research. Your parents said Yes. Now I am telling you about the research and I will ask you if you want to be in my research.</li> </ol>
Am I paying anyone any money or giving them any presents for taking part in my study?	No

Might there be any problems for you in taking part in my study? Might you be embarrassed?	<ol style="list-style-type: none"> <li>1. You could be embarrassed about something you said in class that I heard or you said while the tape was on. You can ask me not to write it down in my computer. Remember your real name won't be used.</li> <li>2. You might find the new teaching ideas difficult. Tell your teacher or me and we will either change them to suit you or not use them with you.</li> </ol>
What happens to all my notes that I take?	I will take them home and put them into my computer. When I have collected lots of notes I will then look at them very carefully with your teachers. Looking at them very carefully is called analyzing the data.
Where will I keep all the notes that I take	<ul style="list-style-type: none"> <li>▪ All the notes that I take will be kept in a safe place</li> <li>▪ When I no longer need them I will destroy them.</li> </ul>
What happens at the end of the project?	When I have finished the project I have to write a long essay called a thesis. I have to send it to Massey University. When they have marked it I will let your school know.
How do I stop people from knowing who are in my study?	When I write up my notes on my computer I will give each of you a 'made up' name. Only I will know your real name. You will not know it and neither will your teachers or your parents.
What things will I do with you in my study?	<ul style="list-style-type: none"> <li>▪ I will watch what you do in the class and in the playground</li> <li>▪ I will ask most of you questions about what you are doing in class. Some of you I will want to ask the same questions and write down your answers so that I can compare what you said with another person. This is called a questionnaire. You can choose whether you want to do this.</li> <li>▪ I will tape some of your conversations with my tape recorder.</li> <li>▪ Some of you might try out some new ways of learning things</li> </ul>
How long will I be around your class?	You will probably see me around your classroom for about two terms or longer, depending on what happens after I have finished writing down everything in my computer.
Before I ask you to agree to take part in my project I have to tell you these things which are over here. 	<p>As a student in the class you can</p> <ul style="list-style-type: none"> <li>▪ Decide not to take part in my project</li> <li>▪ Decide not to answer any questions I ask you</li> <li>▪ Change your mind about taking part – you must tell the teacher or Ron</li> <li>▪ Ask any questions about the study at any time</li> <li>▪ Tell things to Ron because you know he will not use your real name.</li> <li>▪ Look at what I write about you at any time.</li> <li>▪ You cannot look at what I write about other people.</li> <li>▪ Ask that something you said not be written down.</li> </ul>
Project Contacts	If you want to know anything more about the project please ask your teacher, your parent, Ron or his supervisor. Ron and his supervisor's addresses are at the top of this Information Sheet.
<b>Ethics Committee Approval Statement</b> (This is a group of people from the university who have looked at what I want to do and have said that it is OK.)	This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol No 03/71. If you have any concerns about the conduct of this research, please contact Professor Sylvia V Rumball, Chair, Massey University Campus Human Ethics Committee: Palmerston North.

## **Appendix C**

### ***Adult Consent Form***

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS

I have read the Adult Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I note that data that is no longer required by the researcher will be destroyed at the end of the project.

I agree / do not agree to any interview with the researcher being audio taped.

I agree / do not agree to a tape recorder being used by the researcher during his data gathering sessions in the classroom.

I agree to participate in this study under the conditions set out in the Adult Information Sheet

Signature:

Date:

Full Name (printed):



## **Appendix D**

### ***Parent Consent Form***

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS

I have read the Adult Information Sheet and the Child Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree / do not agree to my child being interviewed by the researcher should he wish to do so. I understand that prior notice will be given. I also understand that I have the right to be present at the interview or to nominate another adult to be present at the interview.

I agree / do not agree to any interview that my child might have with the researcher being audio taped. I understand that I have the right to listen to that tape.

I agree / do not agree to a tape recorder being used by the researcher during his data gathering sessions in the classroom. I understand that my child's voice may be captured by the use of this tape recorder.

I agree to allow my child to participate in this study under the conditions set out in the Adult & Child Information Sheets.

**Signature:**

**Date:**

**Full Name (printed):**

**Full Name of Child (printed):**



## Appendix E

### *Child Consent Form*

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS

I have been told by the teacher and by my parent that Ron is going to come to visit our classroom to do a project about how we do things here. He will watch what we do and he will write that down. He will use a tape recorder to tape our talking with each other and with the teacher. He might look at our books and ask us questions about what we are doing.

Some of us will talk to Ron by ourselves and answer questions that he asks. He will probably tape what we say. I know that I can have someone to be with me if Ron wants to talk to me by myself. He will also tell my parent before he talks to me by myself.

My teacher and my parent have talked to me about what Ron is doing and he has given me an Information Sheet. I have read this or someone has read it to me. Ron has answered any questions that I asked about what he is doing.

I know that I do not have to answer any of Ron's questions if I don't want to. I know that I can listen to the tapes if I want to. I know that Ron will not use my real name when he is writing things down.

I also know that I can ask Ron not to write down anything I do or say.

When Ron is finished with all the information that he has collected about us he will destroy it

If I am worried about anything I will ask my teacher or my parent.

**I want to be in Ron's project.**

**I do not want to be in Ron's project.**

**My full name is**

**The date today is**

**This is me signing my name**



## Appendix F

# An Invitation

Providing for the special education needs of children is a challenge; not only for the classroom teacher but also for all the staff in a school be they management, specialist or para-professional staff. To this point of time very little research has been carried out in New Zealand schools to find out how schools manage the many tasks needed to cater for all their pupils' education needs.

As a Doctorate in Education student I would like to research how schools carry out the various teaching, organizational and social tasks necessary to ensure that all children learn and develop. As well, I would like to involve the school staff in a small-scale joint research project using the research method known as action research.

As planned, the doctoral research would involve two phases. The first phase would involve the researcher (me) in an ethnographic study of one or two classrooms in a school (or one classroom in each of two schools). The ethnographic study would be to observe what happens in the classroom; audio tape some of the classroom conversations; interview the teacher, any other adults in the class, some of the children and some of their parents. Finally, I would invite the school staff to complete a questionnaire. The school staff would be then be invited to help analyse the data that had been collected.

Phase Two of the project would involve the teachers and other staff joining me in implementing an action research attempting to answer some of the questions that may arise from the analysis of the data from Phase One.

If you are interested in becoming participants and partners in this research and would like to know more then please contact me. I will make an appointment to come and talk and explain further.

<p><u>Contact Details:</u></p> <p>Ron Hutton [address and contact details given]</p>	<p><u>Please Note:</u></p> <ol style="list-style-type: none"><li>1. Your school is being sent this invitation because at least one child who has been verified under the ORRS scheme is a pupil at your school.</li><li>2. Ron works for the Ministry of Education. They have agreed to him conducting this research but it is not an official Ministry Research Contract.</li></ol>
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*This research is being undertaken in partial fulfillment of the requirements for the Doctor of Education Degree at Massey University.*

Possible benefits to the school through participation:

- ◆ A non-threatening analysis of current perceptions, policies and practices relating to providing for students' needs
- ◆ Staff Professional Development – teaching techniques, research techniques, self-reflective practice and curriculum implementation initiatives
- ◆ Improved learning outcomes for children through an analysis of current practice and possible implementation of research

## **Appendix G**

### *Parent and Staff Questionnaires*

#### *Parent Questionnaire*

October 2004

Dear Parent / Guardian / Caregiver

As part of my research project at [named] School I am interested in what parents think about the school, and their child's class. Therefore, I would like to invite you to complete the questionnaire that is attached to this letter and return it to the school.

Please feel free to contact me if there are any aspects of the questionnaire that you would like further information on.

The information that you provide will be put together with other parents' thoughts and will be shared with the school. However because the information is being collated no individual parents thoughts will be identified. Please do not put your name on the questionnaire.

Because I would like as many replies as possible, and because the children are going to be the couriers, I am providing a small prize. From the names of all the children who bring back a completed questionnaire a name will be drawn out. That child will win the prize. This will happen in both classes.

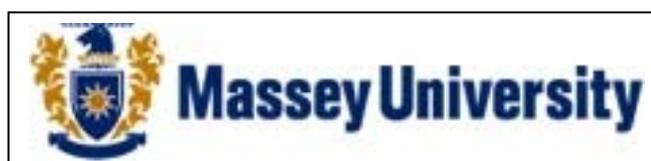
This questionnaire is only being sent to parents of children in the classes of [named teacher] and [named teacher].

If both parents in a family would like to complete a separate questionnaire then please let the teacher know and another one will be sent home.

This research project has the approval of the Massey University Doctoral Research Committee, and has also been given ethics approval.

Yours sincerely,

Ron Hutton



**Instructions:** Please place a cross (X) in one of the columns to the right of the questions. If you are not sure about your answer please put a cross in the “Need more information” column.

<b>Statements about [named school]</b>	<i>Definitely Agree</i>	<i>Agree to some extent</i>	<i>Disagree</i>	<i>Need more information</i>
1. Everyone is made to feel welcome at [named school]				
2. [named school] makes information about the school available in the language we speak in our home				
3. [named school] celebrates our culture and our community				
4. My child wants to go to school				
5. Children are encouraged to help each other at our school				
6. My child, and I, know where to go to for help if we have a problem at school				
7. Staff at [named school] help each other in many ways				
8. Teachers at the school see themselves as a team working together to help our children learn				
9. Staff and children treat each other with respect at our school				
10. I feel that as a parent my views are listened to by the staff at [named school]				
11. [named school] welcomes opportunities for parents to contribute to school activities				
12. I am happy with the job that the Board of Trustees is doing				
13. School facilities and equipment are available for community use when requested				
14. There is a positive view of [named school] within our community				
15. It is good to have pupils from different backgrounds and cultures at [named school]				
16. School policies and procedures are available for parents to read				
17. At [named school] homework has a clear purpose and design				
18. Teacher aides support the learning and participation of all students at our school				

Statements about My Child's classroom	Definitely Agree	Agree to some extent	Disagree	Need more information
1. My child enjoys being in his class				
2. My child's learning needs are recognized by the class teacher				
3. I know what the discipline system is in my child's class				
4. My child has friends in their classroom or at the school				
5. My child's teacher likes him/her				
6. My child thinks the learning programme in the class is interesting and exciting				
7. I believe that the teacher is able to cater for different needs within the class programme				
8. If my child has a problem I know that the teacher will talk to me about it and listen to my opinion				
9. My child's cultural background is acknowledged				
10. This teacher has high expectations for my child				
11. There are strategies for dealing with unacceptable behaviour in this classroom which my child knows about				
12. I know how my child is progressing with their learning because of regular communications from the teacher e.g. reports, discussions, books sent home				
13. There is a variety of activities used to help children learn e.g. group work, peer tutoring, collaborative learning.				
14. A variety of forms exist for my child to display their learning e.g. oral presentations, art, music, audio/visual, writing, drawing, etc.				
15. My child reports no bullying in his class				
16. My child is involved in monitoring and assessing their own learning and progress				
17. The class teacher has extra help to meet the needs of the children in her class e.g. teacher aides, specialist teachers, senior staff				
18. My child's homework helps them to improve their learning, skills and knowledge				

## ***Staff Questionnaire***

November 2004

Dear [named school] Staff Member,

As part of my research project at [named school] I am interested in what you, as a staff member, think about what goes on in your school. Therefore, I would like to invite you to complete the questionnaire that is attached to this letter and return it to the box in the front office.

Please feel free to contact me if there are any aspects of the questionnaire that you would like further information on. An information sheet on my research is also available from me if you would like a copy of it.

The information that you provide will be put together with other staff members' thoughts and will be shared with you. However because the information is being collated no individual thoughts will be identified. Please do not put your name on the questionnaire. However I would like to identify the following categories for comparison purposes: teacher, teacher aide, support staff (staff who do not work in classrooms), senior staff (senior teachers and above).

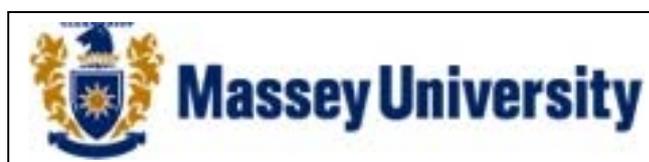
The results of this survey will be shared with you, as a staff, and will form part of my research. The school will not be named in any published material.

This research project has the approval of the Massey University Doctoral Research Committee, and has also been given ethics approval.

It is your decision as to whether you complete this questionnaire.

Yours sincerely,

Ron Hutton



**Please identify your role within the school by circling the appropriate function you perform:**

TEACHER      TEACHER AIDE      SUPPORT STAFF MEMBER

SENIOR TEACHER / STAFF MEMBER

Please place in the box the approximate number of years that you have been in your profession –

There are two sections in this questionnaire. Please attempt to answer all questions.

**Section One: School Policies**

Instructions: Please place a cross (X) in one of the columns to the right of the questions. If you are not sure about your answer please put a cross in the “Need more information” column.

School Policies and Practices	<i>Definitely Agree</i>	<i>Agree to some extent</i>	<i>Disagree</i>	<i>Need more information</i>
1.[named school] has a policy that supports diversity				
2.All children are welcome at our school				
3.This school has a bullying policy				
4.This school has a discipline policy				
5.Disabled access is a problem in the buildings in this school				
6.Children are encouraged to help each other at our school				
7.Parents, and children, know where to go to for help if they have a problem at school				
8.Staff at [named school] help each other in many ways				
9.Teachers at the school see themselves as a team working together to help children learn				
10. Staff and children treat each other with respect at our school				
11. Parents’ views are listened to at this school				
12. [named school] welcomes opportunities for parents to contribute to school activities				
13. I am happy with the job that the Board of Trustees is doing				
14. There are clear guidelines for staff regarding homework				

School Policies and Practices	<i>Definitely Agree</i>	<i>Agree to some extent</i>	<i>Disagree</i>	<i>Need more information</i>
15. There is a positive view of [named school] within our community				
16. It is good to have pupils from different backgrounds and cultures at [named school]				
17. School policies and procedures are available for parents to read				
18. At [named school] homework has a clear purpose and design				
19. Teacher aides support the learning and participation of all students at our school				
20. Support for students who experience barriers to learning and participation is the responsibility of all teachers				
21. Staff Development supports staff in responding to student diversity				
22. Staff Development activities support staff in working together in classrooms				
23. Staff are encouraged to develop their professional knowledge and skills				
24. High achievement is valued in this school				
25. A new member of staff is assigned a mentor whose role is to support him or her settle into the school				

What aspect of policy or practice, in relation to school culture, do you consider might need modification?

*Enhancing teacher learning in inclusion*

<b>Classroom Practices</b>	<i>Definitely Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Need More Information</i>
1. Students who are at risk are regularly monitored				
2. Teachers work in collaboration and partnership				
3. Methods are used by teachers to monitor their practice in order to support student learning e.g. video, tape, colleague observations				
4. Teachers use co-teaching in this school				
5. The practice of reflective thinking is used by teacher to enhance their teaching				
6. Students are offered a choice of alternative for completing their homework				
7. Learning objectives are modified in light of student competencies				
8. Cooperative Learning is used in classrooms				
9. Peer Tutoring is used in classrooms				
10. Student interests are used to inform curriculum				
11. Students are involved in formulating classroom rules				
12. Students are involved in assessing and monitoring their own learning				
13. There are alternative assessments used to determine student competence				
14. Teachers are involved in collaborative curriculum planning				
15. Class teachers have extra help to meet the diverse needs of the children in her class e.g. teacher aides, specialist teachers, senior staff				
16. There are strategies for dealing with unacceptable behaviour in classrooms				
17. Class teachers acknowledge students' cultural backgrounds				
18. Classroom teachers listen to children's concerns				
19. Positive reinforcement is a feature of classrooms in this school				
20. Within policy guidelines teachers are encouraged to develop their own teaching styles and methods				

What aspect of policy or practice, in relation to teacher – student interaction, do you consider might need modification or changing?

## Appendix H

### *Student Questionnaire*

I would like to know how you feel about your school and your class. This is not a test, and there is no right or wrong answers. What I want is your opinion.

I would like you to read the sentence on the left and then colour in the face that tells us what you think.

The first sentence asks you whether you like coming to school. If you think you do then you would colour in the smiley face in the first column. If you do not like coming to school then you would colour in the sad face in the last column. If you are not sure then you would colour in the middle column.

<b>Our School</b>	<b>Yes</b>	<b>Not Sure</b>	<b>No</b>
1. Our school is a place that I like to go to each day			
2. At our school teachers think all students are important			
3. Our school makes activities available to all students			
4. Our school has rules about bullying			
5. Our school has rules about behaviour			
6. Some students are picked on in this school			
7. High achievement is important to teachers in this school			
8. New students are helped to settle-in in this school			
9. New things often happen at this school			
10. Students are asked to think of ways to stop bullying			
11. Students who are in a wheelchair, or on crutches, would find it difficult to get into or around in the buildings in this school			

<b>Our Class</b>	<b>Yes</b>	<b>Not Sure</b>	<b>No</b>
12. I am given a choice about how I complete my school work			
13. Students in my class are given a choice of learning activities			
14. I am given a choice about how I do my homework			
15. I am involved in deciding what I will learn			
16. I am involved in group and partner activities in my class			
17. Teachers teach together in some of our class lessons			
18. Teacher Aides work with everyone in the class			
19. Peer Tutoring is used in my class			
20. Student interests are used to decide about learning			
21. Students help in deciding class rules			
22. Students are asked what they think about the learning activities			
23. I am involved in assessing my own learning			
24. High achievement is important to the teacher in this class			
25. New students are helped to settle-in in this class			
26. Some students in this class are more important to the teacher			
27. New things often happen in this class			
28. There are people other than the teacher who help in this class			
29. This class is a good place for all kinds of students			

Thank you for completing this questionnaire.

## Appendix I

*People in my class that I play with*



My name is \_\_\_\_\_

Here are the names of some people in my class that I play a lot with at school.

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Here is the name of a person in my class that has been to my house or I have been to their house

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## Appendix J

### Reflective Journal Template

Teacher Name	
Date	
Briefly describe the lesson or activity that you are going to reflect on ...	
What factors guided your choice of this activity to reflect on?	
Briefly describe where the lesson or activity fits within your classroom planning (e.g. essential learning skill in social studies)	
When you planned this activity/lesson what outcomes, objectives or goals did you have in mind	
Was there any aspect of the preparation that you were very pleased about?	
Was there any aspect of the preparation that you would change if you were doing this activity again?	
Identify the positive aspects of your delivery of the activity and also those aspects that, on reflection, you might change at a future occasion.	
Describe any evaluation of the activity/lesson that you undertook including formative evaluation that occurred as the activity/lesson progressed. (The evaluation need not have been written down.)	
From the evaluation list (a) any behaviours that the evaluation suggested that you should consolidate and repeat (b) any behaviours that the evaluation suggested that you should modify or completely change	
Describe any feature of the activity/lesson that you felt may have enhanced the children's' participation and/or contribution	
How might you use this feature in a future activity?	
Describe any feature of the activity that, on reflection, you might consider was a barrier to the children successfully participating and contributing.	
What action do you think you might do in future to overcome the barrier described above?	
Please describe any feelings, emotions or opinions of yours that were present during the activity/lesson?	
When you planned the lesson/activity that you have just reflected on there may have been assumptions that guided your choice of activity. Please describe any of these assumptions that you are able to recall.	
Having now reflected on aspects of an activity/lesson and listed some of the assumptions that underlay your choice of activity, are there any assumptions that you might now question, and if so, why?	
Finally, is there anything else not mentioned above, that you would like to reflect on in this journal?	

*Thanks for completing the Reflective Journal. Please email it to Ron.*

## Appendix K

### *Interview Schedule for Parents*

#### Introduction

**Thank you for agreeing to take part in this interview. It is being taped to ensure accuracy. When transcribed a copy of the interview will be sent to you for editing.**

*My research is focused on how schools meet the learning needs of all of their children. Amongst the areas of interest are curriculum planning, skill development, adult and child interactions in both the classroom and playground, and resource provision, both professional and para-professional.*

*Your contribution to the research is important because it adds an extra perspective. When the data is analyzed your interview will become anonymous because I will not use your name..*

*Please feel free to decline to answer any question. You may stop the interview at any time.*

<b>Name of Parent:</b>	
<b>Date of Interview:</b>	

<b>Number</b>	<b>Question</b>
1.	Can we please begin by you telling me about your child and how you feel they are progressing at school at present?
2.	Do you believe that your child is encouraged to contribute and participate in all aspects of school activities?  Are you able to give me some examples that would demonstrate your belief?
3.	How do you believe your child's educational needs are identified by the school staff? What do they do?  Would you like to be asked to contribute to this assessment?
4.	How well do you think your child's learning needs are being met?
5.	Have you viewed any school documents that explain how the school attempts to <i>meet all</i> its children's needs?  Can you tell me about these documents?

<b>Number</b>	<b>Question</b>
6.	<p>How often do you discuss your child's progress with a member of the school staff?</p> <p>Which staff members, and what do you talk about?</p> <p>How satisfied are you with the school's communication and reporting regarding your child's progress?</p>
7.	<p>Some researchers have demonstrated that having children cooperate in their lessons leads to improved learning.</p> <p>Has your child ever been involved in any cooperative activities, and, if so, what were they?</p>
8.	<p>Friendships are an important aspect of life at school.</p> <p>What activities have you seen at school that demonstrate to you that making and keeping friends is encouraged by the staff?</p>
9.	<p>Inclusion and mainstreaming are terms currently heard and used in education.</p> <p>What do you understand by these terms?</p> <p>Do you think they mean the same thing?</p> <p>I would be interested in your opinion about inclusion / mainstreaming. Would you please share that opinion with me?</p>
10.	<p>Would you consider that your school encourages inclusion / mainstreaming?</p> <p>Can you give me some examples?</p>
11.	<p>Have you ever been invited as a parent member of the school community to contribute to forming policies relating to meeting children's learning needs?</p> <p>How did you contribute?</p> <p>(or) Would you like to be given the opportunity to contribute?</p>
12.	<p>What resources have you noted that the school uses to help the teachers meet their children's learning needs? (Prompt if only text books &amp; equipment are mentioned)</p>
13.	<p>Parents help teachers in many ways.</p> <p>Are you able to share with me some ways in which you help your child's teacher?</p>
14.	<p>Are there any other comments that you would like to make regarding the teaching and learning at your child's school?</p>

## Appendix L

### Completed Teacher Interview – Janine - 2004

No	Question
1	<p>We start the interview with you telling me a little bit about your training and your teaching career so far.</p> <p><i>This is my third year teaching. I trained in Palmerston North for three years and this is my first year registered. I was a beginning teacher for the first two years. I've had a special needs child every year that I have been teaching. The first special needs child in my first year of teaching four months into it. That's me so far.</i></p> <p>So you've had two years plus three years or two years plus one year?</p> <p><i>Two years plus one year.</i></p> <p>And did you do the degree as part of your training?</p> <p><i>I did the Bachelor of Education in the primary option.</i></p>
2	<p>How do you think your class has gone this year?</p> <p><i>Well. This is the first year I've had such a diverse group of individuals. [named principal] and I were actually discussing at my appraisal how I started with 32 individuals who wouldn't play with each other they wouldn't even eat lunch together we went away on camp and they started to bond there. But you know it has gone, yeah a diverse group this year. Not what I'm used to.</i></p>
3	<p>I would like to ask you some specific questions about your teaching. You do have a diverse group and I know a little bit through observing you and what you do in the class but how do you plan for the needs of all your kids?</p> <p>I don't mean that physically you sit down on Sunday night you write it out I mean ..</p> <p><i>I use my assessment, diagnostic testing that sort of thing. The children are grouped.</i></p> <p>What sort of things do you ..</p> <p><i>Children for Maths are grouped by their test outcome, their results from the Nump tests that we do. Children are grouped for reading by or because their running records and also through their level of comprehension when I test them with those handy prose. So it's sort of, my planning for the needs of the kids is sort of done as a group, overall of the group and then you modify each activity and help each kid as you go along.</i></p>
4	<p>What assistance do you receive from other staff in the school with your planning?</p> <p><i>My day to day class planning – no assistance.</i></p>
5	<p>Is there anything you do with other teachers, plan with other teachers, any activity you plan?</p> <p><i>Our integrated units are sort of the general overview of it is discussed as a team. Like tabloid sports, one off activities like that we do as a team. But as I say day to day classroom learning is done individually.</i></p>

No	Question
6	<p>Where did you learn to plan for meeting children's needs?</p> <p><i>Teachers College and then professional development as I've gone along. [Named person] has been absolutely incredible for feeding forward ideas, being able to feed forward. So she does formative assessments</i></p> <p>And what sorts of things did they do at teachers college that sort of helped you? Was it specific?</p> <p><i>No there wasn't a one off thing, it was, it's so different for everyone also depending on what major they took, which area of focus they took. I did a lot of special needs and special ability papers with a science focus but there was sort of. There was PIP professional inquiry and practice paper, where looking at planning and assessment methods. But it certainly didn't prepare you for the real world of teaching. It gave you a basis but you had to learn as you go.</i></p>
7	<p>You mentioned that you've had some in service training since you came, is there any, and you talk about [named person]. What is it about that course that has helped you?</p> <p><i>The fact that she's the first person and I'm meaning this in the sense of teachers college who has actually given the professional development in a meaningful context. At teachers college we were trained but it didn't mean anything to us. We'd never taught before and so it was a real gross generalisation and an overview of everything, whereas Ann has come into [named school] and got to know [named school]. Got to know the classes and she's worked with the teachers, not quite one on one but very specialised for the children we've got. It's such a big difference. Everyone raves about how wonderful it's been and it's because it has she knows what she's talking about because she's also been a teacher and a principal so she's realistic about what is achievable and I think that's what also it is it's not the lip service. She's been honest and she's given it to us as appropriately as possible.</i></p>
8	<p>Is there one main thing that helps you with your planning?</p> <p><i>Just ongoing assessment. Assessing where the kids are constantly. Knowing my kids. Working with them in group situations. With our class sizes it is impossible to work individually with each child each day so it is just through working with them in groups and group discussion.</i></p>

No	Question
9	<p>Do you use any particular learning techniques in your class to make it easier?</p> <p><i>One of our biggest learning techniques that I use is Bricks think hat for the children. It's one that I really push and (pmi) plus minuses and interesting. Because it actually makes them look at things from all angles. It's not just always talking about the good things. Talking about making changes and thinking about thinking. You know making something better for them.</i></p> <p>You also use goals don't you?</p> <p><i>Yeah the learning intentions – sorry that is just such a part of life now that I don't even think about it. We discuss what we are going to learn and how we know that we've learnt it or are learning it through steps.</i></p> <p>So by having a learning intention, it's a form of the children monitoring their progress isn't it?</p> <p><i>Well this is so like we've been doing fractions in class and they had the learning intention that we are learning to find fractions of numbers and objects and we will know that we have achieved this because we can, and the kids are actually constantly monitoring what they need to be working towards. They go oh yeah I can do that not a problem but I can't do this, and this is work that I need to focus on. That game or that activity that develops that skill.</i></p> <p>So has it taken time for the kids to come to that point?</p> <p><i>It did last year but they sort of came to me this year with a bit of an understanding already of what learning intentions and success criteria were.</i></p> <p>So that's a school wide thing?</p> <p><i>Yes. This is what [named person] brought into our school. But now you integrate it all the time and start off small steps and it becomes so routine that the kids sort of say well what our success criteria is, how we know we've achieved this. They are very ...</i></p>
10	<p>I know you use group for your class, do you use any other way?</p> <p><i>Grouping and whole class.</i></p> <p>Is there anything else you do to make your teaching easier?</p> <p><i>No.</i></p> <p>For instance do you use peer tutoring?</p> <p><i>Once in a blue moon but not as a planned thing. No. If a child can do, like [named child] is often one of the kids who will say "oh I'll help so and so" because he finishes quickly and I'm like "yeah, that would me good please" but it's never planned into a classroom situation.</i></p>
11	<p>You've got two teachers aides who come in, essentially for the one child, how do they know what those kids are to do?</p> <p><i>Through discussions with me. Last year's teacher aide and I have a really good system going where I give her the weeks plan and she was full-time in my class. This year I haven't found that successful having two teacher aides and such varied times. So it is just through oral communication with the teacher aide. A time when they don't come or if something else is happening so they're off with that so I don't have a structured format this year.</i></p>

No	Question
12	<p>How does the specialist teacher that you've got assigned to one of your children help in the class? The specialist teacher, like one of your children is ORRS so they bring specialist teacher time with them, so you don't get to see any of that?</p> <p><i>No. [Specialist Teacher] takes her, [named child] out of the room.</i></p> <p>What she does with her is what she decides not what you decide?</p> <p><i>No. She'll tell me what she's doing or she'll let me know how it's going but I have asked that she come in and take my class so I can then work with [named child] but it hasn't happened.</i></p>
13	<p>Have you heard of the term co-teaching or co-operative teaching?</p> <p><i>No</i></p> <p>So that doesn't happen in your class does it?</p> <p><i>No.</i></p>
14	<p>Having children with disabilities in the class can be both stressful and rewarding, what things do you find stressful about their disabilities and you do have quite a range?</p> <p><i>I think, this is really hard for me because it's verbalised but it's the fact that my special needs child is nowhere near as remedial as my most remedial child yet he doesn't get assistance and it's all well and good to say well you know group him with my special needs child but a lot of her teacher aide time is health things so why disturb his learning while [named child]'s going in and out of the standing frame or going to the toilet or whatever. I find it really frustrating in the sense that it's stressful in the sense that our class sizes don't allow us to make the gains that I would like to see happening for the children. I either have to leave the able kids to their own devices to work one on one with my vary remedial children or I have to just hope that they're going to keep up, it's a no win situation at either end of the spectrum.</i></p>
15	<p>Taking I assume it's the boy that your talking about here?</p> <p><i>Two of them.</i></p> <p>Do you think they've made any progress this year?</p> <p><i>Well at the beginning of the year I would have said there were five of them. So yes I've seen huge gains in JT, B and J. But T and D who I feel could have, well D's had a lot, T hasn't and I feel that maybe if T had had a bit more one on one time with the things that are holding him back he might not be so severe or drastic or at such a level that they are.</i></p> <p>Has your assessment shown that D's made any small gains?</p> <p><i>He has, he's made small gains, yes.</i></p> <p>He's further along than he was when he came to you?</p> <p><i>Yeah. You just like to be able to work miracles with all of them. [Named principal] says that one of my down points is I get frustrated that what I am achieving is not enough. But it's never enough is it if you've got someone who is really struggling.</i></p>

No	Question
16	<p>What things do you find rewarding about having children with a disability?</p> <p><i>The fact that you see interactions happening between children that you probably wouldn't normally see. Seeing D interacting with B and conversing about things that interest them yet they aren't even on the same wave length as such. It's those sorts of social gains that are a buzz for me.</i></p> <p>That was one of the things that was surprising in my research in the classroom. Was that there were no isolates in your class, when they did the little social graph. Whereas the other class did have one or two.</p> <p><i>But that is because they are such individuals that they were talking about interacting, not as free, as classmates. Whereas a group that is, like if you came into my class last year, probably would have but you probably wouldn't have noticed it so much, it was the fact that they were quite clicky, I don't have a clicky class I have a whole lot of kids who are very independent, not leave anyone out but you know it's not the purpose in their lives.</i></p> <p>Even [named child] had children chose her as their friend.</p> <p><i>Yes.</i></p>
17	<p>Are there any documents that are available to you that help you with your planning?</p> <p><i>I've got a number of documents for example the exemplars, I still use a couple of the old curriculum documents but there is a book called effective literacy in classrooms, learner as a reader, I use a real range of material when it comes to, because I am still learning as a teacher I am still trying to find things that work for me or suit me so I am still reading a lot text that's being put out there. Whether it's Ministry of Education or it's me going looking for stuff.</i></p>
18	<p>Is there any planning that you do at all that involves more than one teacher or more than one class?</p> <p><i>For me yes, because I am one of those teachers that I'm always sharing things with people. I'll trial something, give it around, but it's not. No, I would have to say no because when I'm planning something I'm not actually thinking of will it suit room 16 or will it suit room 14. But if it works I'll quite quickly share it with a teacher.</i></p> <p>But the three of you don't sit down and say ...</p> <p><i>Not for my class work no. But for a unit we may.</i></p> <p>But for instance you haven't done something like sat down the three of you and said "right we've got the three classes, the variability in maths is huge, let's pick all the kids up and?"</p> <p><i>No it's been discussed but it's something that has always been put in the too hard basket because of timetabling.</i></p> <p>So you don't always have Maths at the same time?</p> <p><i>No. We're all very individualised in our time-tables.</i></p> <p>Is that the same with all the teams, or is that just the team you have?</p> <p><i>I don't know. I think its right through but I'm not 100% sure.</i></p>

No	Question
19	<p>I'm very interested in how you evaluate your teaching, can you tell me something about this. What is it that makes you change your teaching strategies?</p> <p><i>Children's reactions. I usually get them to do an evaluation of the term, what they liked, what they didn't like. For me though it's all the feed back I get from kids. "Oh this is boring" or "Oh this is too hard" and they are my target audience so I have to listen to their comments and criticisms and that. Maybe I don't know it will change in thirty years time if I'm still teaching. But I am very influenced by what the kids say.</i></p>
20	<p>When you are stuck for ideas, where do you go for help?</p> <p><i>TKI.</i></p> <p>And you're lucky in your school that you've got a computer that can get access to it.</p> <p><i>I do a lot of it at home not at school. I'd hate to come to school in my nightie. That would be my biggest fear Ron. It would be seriously like sitting in front of an audience naked to do a speech, I just hate, if I'm not prepared I feel very scared.</i></p> <p>So you haven't learned to wing it yet?</p> <p><i>No. I'm very scared that it will go collapsing down. I'm quick to alter things if it's not working on the spot but I like to use my playtimes and lunchtimes as well to get organised.</i></p>
21	<p>Some teachers use the technique of self reflection to evaluate their practice, by that I mean that they consciously sit down and they may do it in writing or they may just do it in their head, but they think about what went right or what .....?</p> <p><i>I've done that this year for my language and reading program for next year. I've already planned next year language and reading.</i></p> <p>Is that deliberate or was that your own choice?</p> <p><i>It was kind of deliberate because we did an activity the other week on the reading task force and it didn't work and I thought to myself but this is an activity that I feel deserves class time, needs class time, how can I bring it in next year and that was why, it was trying to make something that is to me very important. Language features and word study sort of thing into my class and it working. I didn't want it to go collapsing down around me.</i></p> <p>So you've got that in writing somewhere?</p> <p><i>Yes I write it, collect it in my own book and my planning for next year.</i></p>
22	<p>Children at this age have a diversity of social competence, from your very able, can you give me any examples of how this might effect your planning?</p> <p><i>Group work.</i></p> <p>So do you group on social competence ever?</p> <p><i>Yes I do because I have a group of boys who you only need one or two of them in a group and the group just, the whole group will collapse. So in that sense I do. And I often, there are a couple of kids in my class who I often have to think about who I'm going to pair them with to be able to actually interact in the group. They are too much of a back seat. I think that it is more they aren't confident so and I think the class often know that they can't well they don't have the ideas to share so I'll make sure that I put them in pairs.</i></p>

No	Question
23	<p>How does the diversity of social competence allow for creative ideas in the class?</p> <p><i>Well the students in my class are the one's who actually do direct my class. They are a big part of where, which direction the class is going in and so they will be the one's who will decide what we are going to look at and how they want to do it. Do they want to do it as a project you know that sort of creativity. And do we just discuss it rather than having to put it into our books. How do we as a class feel it is best learnt?</i></p>
24	<p>As you know the research I am doing is around the idea of inclusion, what do you understand what that means?</p> <p><i>That no matter what children's ability is that they are a functional part of the class as much as anyone else.</i></p> <p>Do you think that it's wider than just the class?</p> <p><i>Yes I do, but in saying that I can only concern myself with my own class and I hope that the children that I had last year carry on with what I have taught them about inclusion this year so it is actually targeting a wider audience.</i></p>
25	<p>Do you think the term mainstreaming has a different meaning from inclusion?</p> <p><i>No, they are the same to me.</i></p>
26	<p>Currently there is debate around the practice of the inclusion of children in their local community school, what are your views around that.</p> <p><i>Well my class motto is treat other people how you want to be treated so I don't see them as any different.</i></p> <p>So if for instance the children you've got here who are ORRS are not completely and utterly incapable of doing anything but there are children like that around, now if Mrs Brown down the road wanted her child, who up until now has just been lying in the beanbag to come here to [named school] School and you happen to be the year teacher how would you cope with that.</p> <p><i>The child would be treated like every other child in my room. And I truly believe if a child is, if I treat a child like that as I would treat any other child in the class room and they cannot cope then, or if it's not working then I have to assess how, or if it's the best thing for that particular child. [named child from previous year] is the example that I keep coming back to over and over again, it was my first experience ever with a special needs child and for my first time it being so severe and I've only had wonderful comments from her parents about how well I include, you know inclusion and that for their child. I do not believe that there is a child out there that does not deserve to be mainstreamed.</i></p>
27	<p>Some educators suggest and we get this a lot as part of a wider research project that's saying that they shouldn't have special needs kids because they didn't have the extra training.</p> <p><i>I don't believe that. Because that to me is like saying I shouldn't have a child whose going through chemotherapy because I'm not a nurse. You have to, life is about adapting to the situations you're given. When there are schools out there that cater for special needs children then I, that's, I still don't think that a child shouldn't be included in a mainstream school but I do feel that the parents need to be spoken to honestly by the school and by the teacher that if the child, if it's not working for the child then the child needs, they then need to reassess themselves what is best for their child.</i></p>

No	Question
28	<p>How do you think research might affect practice in the classroom?</p> <p><i>For the best. You know it's hard sometimes Ron because I'm me and I've come into teaching with a lot of personal experiences that I think shaped who I am and how I teach and I often clash with a lot of teachers because they are quite staunch in the opposite sense. But I truly believe that everything happens for a reason and everything is only to make things better so research can definitely suggest other ways, methods and by all means we should be trying them if they work that's wonderful if they don't well that's cool as well, back to the drawing board.</i></p>
29	<p>Is there anything that I've said, done or you've received back in feedback like what I've sent you back that made you think that oh I need to change something?</p> <p><i>Yeah it has in a sense that I sort of, I do things in class and I don't say to the kids right well we're going to do this because blah blah blah. It was actually in Connors interview, it was, I can't even remember what the question was and you asked him do you do something at [named school] school and he said no and I thought we do that every day but it was because consciously I didn't say, it might have been does the teacher tell you what your learning and why your doing it?. I thought that well we do that every day with our learning intentions and that and I thought to myself it's because we integrate it so early and it has, it has effected me in the sense that I'm conscious that I do things because I'm so used to doing it and I forget to tell the kids – that's how it's affected me.</i></p>

## Appendix M

### Completed Teacher Interview – Tina - 2004

No.	Question
1	<p>Can we start the interview with you telling me a little about your training and about your teaching career so far?</p> <p><i>I did the three years teacher training course in Palmerston North and I didn't complete my degree I just went straight out teaching. I returned to my former country school, O Primary School, where I'd been a kid. So that was a bit funny but that was in the days where you got your first year position and then after that I got a limited tenure position in Op Primary School, and then moved onto W to get to the Hawke's Bay where my future husband was working. Was only there a short time and then ended up having a family so kind of in that time frame with children around kept my foot in the door and did some work with Special Needs children. Point one and two type positions, lots of Principal's release positions in country schools and shared teaching jobs. Kind of just keeping my foot in the door, I never went back to full-time but did bits and pieces. When I was in T I trained as a STAR tutor which is a reading program they had in the Waikato, which is sort of working with children from standard 2 upwards sort of slightly based on reading recovery. But it was really good, and then I came to [named town] and got a part-time job taking the children that arrived in the fourth Term, the new entrants, a couple of years ago and then that lead to long-term relieving. Then won a position at the end of last year so actually last year and this year have been my first full years back in the classroom for probably about eleven years. So I feel like I'm starting over again.</i></p>
2	<p>How do you think your class is going this year?</p> <p><i>Really good, I think probably I've had a model class. I've had a class where I've been able to teach because I haven't got any main behavioural problems, all the children seem to be quite motivated and have fitted in well with each other, I don't have a lot of social issues to deal with the children and I think too and I look at it, I've got very supportive parents. The children have come from families where they value their education and in the home readers are getting read and you just feel like you've got that support from them. For me this year has been just lovely.</i></p>
3	<p>And yet you've got children in the class who do have Special needs haven't you?</p> <p><i>Yeah I have but they don't. I probably you look at ones like [named child] who has some physical needs but he's sort of that borderline case where we seem to get by and he's fitted in to the classroom situation really well and I think too we've taken those steps at a time not bombarded him and just worked on an area and accomplished that and then moved onto the next one so that he's not, you're not pushing him too much.</i></p>
4	<p>You've got a couple of boys who are?</p> <p><i>Yes they've got a bit of life in them, but I think too, I'm quite lucky in the respect that they're still at that age where I can use that sort of "oh gosh I like the way someone it's doing it nicely" and they still react to those sorts of things or get in first, if I see D is getting a little toey on the mat, I will, "Oh gosh I love the way E is sitting up" or even get to him before it escalates into something but I think too he's been a really good role model for children like [named children]</i></p> <p><i>J and D in this room in that there is no-one to ripple off them. J came to me last year and I mean had been quite a problem in the last class and even in the playground but he just has come into a room where nobody's interested or you know, nobody's rippling his pins, he's got no-one to feed off him so he just, he's learned to be a normal sort of kid in a class, he doesn't have to impress anyone there or whatever.</i></p>

No.	Question
5	<p>I've observed some of this but I would still like you to tell me. How do you plan for the needs of all your kids?</p> <p><i>I suppose initially because they come in straight of the street. You know they haven't been in another class. The most have come in as new entrants. Observation, initially at first because some come in confident other don't have that confidence. Just being aware of where they're at. Like as far as being able to hold a pencil use it, all those sorts of things so observation probably is a huge thing initially. And then we have a few standardized test like your six year net when you are six or the C testing when they first come in. And just alphabet checks all those basic things, your academic areas. So I probably, the observation is probably the big thing. To get a feel.</i></p> <p>And what do you do when you've got an idea of what they can do? <i>I suppose you have to start at a starting point and I use the learning intention and success criteria, quite a lot with most subject areas now, so for a lot of them its just sort of, you know we are learning too, and then we'll know we can achieve this when, so I mean looking even at draw a picture plan, I mean just sort of starting at that first point and letting them take those steps in their learning, so I suppose I'm looking at where they're coming in. You know there's no point in me doing something with someone if they can already do it. So it's sort of looking at, I group for writing, I group for reading, maths and it's kind of slotting them in where they fit and working from there. Not altogether we start here because there's no point in me doing that with some kids if they already have those things. Initially it's just talking to the children, I think that they, even at five, they can talk about that self assessment, you know formative assessment, where are we, where do we need to go next. And they've proved to me that a five year old can, they can say well I can do this now and now I'm going to work on this.</i></p> <p>So what you're really doing there is you're encouraging them to take some kind of monitoring of there own work?</p> <p><i>Yes I think that even a five year old can take some sort of responsibility for their own learning and I mean I think to do that they are having to think about what they can do but also that big thing of where to next, which is really important. It's a very one to one oral thing initially, sitting down and just looking at their books, and "oh gosh I love the way you do that" and "now what do you think you did well on that page?" and "now where do you think we need to go next?" or even in their reading sort of using the terminology you know "you self corrected there.", "Let's go back and re-read that sentence". So I kind of think not babying them and just getting stuck in straight away.</i></p>
6	<p>What assistance do you receive from other staff in the school?</p> <p><i>Probably we're pretty much on our own, we work as a team, the juniors, we have team A, team B. I have a team leader Pam and I've just learned it's a big school [named school]. Ask questions, you've got to use your initiative. So I suppose, if I ever felt like I needed assistance or needed help in any area, I've asked. We do an integrated unit each term, a whole term focus which is a whole school focus and then within our teams we get together and put a few ideas through. But then at the end of the day it's where we take it. So we do our integrated unit as a whole school really but then you take that step down into your team and look at perhaps things that your going to be doing, like the mini gym festival that we sort of had a sort of a show that came so we use that as a pivot point for that.</i></p>

No.	Question
7	<p>Where did you learn to plan for meeting children's needs, was it before you came into teaching, by that I mean at teachers college, or was it through observation of other teachers or how?</p> <p><i>I think probably I came out of teachers college and made some terrible mistakes in my first year teaching because I really didn't have a lot of, a really good idea of the planning and stuff like that, so I think probably it has come from watching other people, talking to other people, "Oh gosh how do you do your oral language?", or "Oh that was a really good idea or why do you do that". So I think probably it has been observation and because I've worked a lot of those years when I wasn't full-time I had Principal release positions and shared teaching and so I was having to work with other teachers a lot and so having to see how they do things and sometimes it meant you had to slot into how they do it but it was also seeing another way and when you have such a range what you do one year can be quite different.</i></p> <p>Have you ever done a course on modifying the curriculum?</p> <p><i>Not that I'm aware of, no I don't think so.</i></p> <p>Have you ever done a course where the focus was on if you need help these are your options?</p> <p><i>I've done this year, teaching deaf children, is that what you mean?</i></p> <p>Specifically to one?</p> <p><i>No, our professional development for the last two years here at [named school] has been looking at formative assessment, with [named person] from [named university], so that's probably more what you are talking about isn't it. And that's using the likes of your learning intentions and success criteria feed forward comments and those sorts of things. So for me that's been a huge and made a huge impact in my teaching I think, probably because [name] came last year and I was back in the classroom again and it was just the perfect timing for me cause it gave me something to work with and I think I found too that it does work.</i></p> <p>So what it's done is it's worked for you so you've adopted this?</p> <p><i>Yes and I've adapted and adopted it too because working with five year olds is quite different to working with eight year olds and even the sort of class I've got this year is very different to the one I had last year. So what I've done is adapt to how I teach and how I want it to work. I haven't taken everything onboard but I've used it as a skeleton and added my little bits and stuff like that. And so I think that's been probably one of the best professional development blocks I've ever had and it's ongoing with Ann. We have her again next year.</i></p>

No.	Question
8	<p>What is the main thing that helps you with your planning?</p> <p><i>When I'm looking at my reading especially writing is actually the learning intentions I think, where we are up to and where we need to go next and so I suppose because the children are grouped you look at them within that group. I have learning intentions for my reading groups and within that guided reading session we are obviously doing the thing the need that also, I mean I might just notice these children are self correcting very well so maybe for the next two weeks we talk about it and what we do to self correct and what it means. Sort of use the observations sometimes, sometimes you'll just do something in the class and you'll think oh.</i></p> <p>Do you run away and write something down or do you try and ?</p> <p><i>I think it's often in here and I often have a little notebook that I jot things down. Because sometimes it is those times isn't it, you know you take some things for granted and suddenly you realise they don't actually realise, you know they don't understand or they don't realise so it's a good time for next week to maybe review it and especially I think oral language at times, they all come in so differently just because some of them are shy and others are not. And kind of thinking of ways we've got beyond the actual speaking to the class now and it's like what I've focused on this term is use of questioning. How can we use questioning to help us, what's a good question and how do we ask questions and how you can gain information from asking the person who is speaking about something, a question. So I saw there was a need for that after the first term I found that most children are quite comfortable in front of an audience talking and I didn't think we needed to go there anymore, they're doing it so let's take that step further and look at different ways we speak to audiences or use of questioning to improve that, so I suppose that's that observation thing, sensing where they are and what there needs are.</i></p> <p>What you're saying is that what you see in the classroom guides your future planning.</p> <p><i>Yeah I think it does, I do do a lot of assessment. But I think sometimes probably the observations over-run the assessment because sometimes on paper kids might have really good alphabet recognition but they're not using it. So its sort of like they might look good ohh yes they know all those basic sight words but when it comes to strategies they don't know how to attack the unknown words. A lot of it's assessment because we have to but I think a lot of it especially at this level is observation based and seeing what their needs are.</i></p>
9	<p>Do you use any particular learning techniques in the class to help your children?</p> <p><i>Would you call learning intentions a learning technique? Yeah that's really quite a big thing because we use that in all subject areas and then we use it for our overall integrated unit. At the start of the year I use it as a basis of that classroom routine thing. We are learning to be a good room team member and brainstorm, what do we need to do? Well we need to learn to put our hand up, we need to speak to each other nicely. That's a big learning technique that I've utilised.</i></p>
10	<p>You structure your class in groups?</p> <p><i>I do use groups, there are a few individual things at times but probably for ease of management because you know twenty five to twenty seven Year One new entrants is quite big and just for ease of management grouping is probably the easiest was to go about it.</i></p>
11	<p>Do you have a teacher aide in your class? <i>No.</i></p>
12	<p>You don't have a specialist teacher? <i>No</i></p>
13	<p>Have you heard of the term co-teaching or co-operative teaching?</p> <p><i>No, I don't think I really understand what it is?</i></p>

No.	Question
14	<p>Have children with mixed abilities in a class can be both stressful and rewarding, what do you find stressful?</p> <p><i>For me it's that I don't get any support. The likes of N who is sort of that borderline case where he comes now under the hospital umbrella so therefore within the school situation he isn't covered. So it's having, for me it's like having had to source things for him myself. A pair of scissors that he can use easily, the thing on his desk so his book doesn't slide. And so things that from observation I noticed he needed and having to actually sort it myself and not really having the knowledge or wondering whether I am going about it the right way. I don't really have anyone in the room M is really catered for I don't have to deal with her changing and things like that so we have a thing set in place for her so she doesn't really seem to affect her or me in the running of the class. And we haven't really got anyone else</i></p>
15	<p>What things do you find rewarding about having mixed?</p> <p><i>I think probably that sense of achievement that those children often get from those small steps and seeing them succeeding. You know N's had major problems with his formation of letters because of his difficulty with his hands and just getting to the end of the year and seeing that he is actually not doing great big enormous letters anymore and they've got smaller and you can read it and he knows he can read and you'd put something up on the wall and initially because they'd publish you could see his mum come in and see the comparison with the others. But now it's all looking good and you know getting the positive comments from the parents when the kids are moving and achieving and all those sorts of things.</i></p>
16	<p>Are there any documents that guide you in your planning, like are there policies?</p> <p><i>I suppose we have, well probably don't use them. When we look at integrated unit I think we try and make sure that we get a spread of social studies and the living earth and all those sorts of things within those documents but I'm probably quite ignorant of a lot of the documentation the ministry sent things and stuff.</i></p> <p>No I'm meaning school documentation? Like a, do you have a folder in your class that's got the school policy?</p> <p><i>Yeah we have school policies and all that, I can't say I've read them very well. I think you sort of know some things anyway and I suppose every once in a while [named principal] will go over specific policies and stuff or we'll look at them as a team but probably they are there but a lot it, often a lot of policies to me are common sense kind of things anyway so you would assume that you are going along those lines.</i></p>
17	<p>Is there any planning you do that involves more than one teacher or one class?</p> <p><i>Yeah that would be our integrated unit.</i></p>

No.	Question
18	<p>I'm interested in hearing about how you evaluate your teaching, can you tell me how you do that?</p> <p><i>I suppose the proof is in the pudding so they say. For me it's that reflective thing of really just looking "are kids moving?", "Are they happy?", "Are they taking risks?" What have I written down, it's just kind of looking at what the kids are doing?</i></p> <p>Do you look at yourself?</p> <p><i>Yeah I suppose I do and there are times when you do things and it hasn't worked and you know why. You have to think in your head, "I thought that would be a good little unit I was going to do and it didn't work out". And thinking about well ok we didn't really approach it in the right way or the kids just didn't have the interest level in that particular thing so I think you are probably forever reflecting on what you do as a teacher and your planning and often you do some pretty good planning and then that impromptu lesson that comes out of the blue because someone brought something along, that you didn't actually even plan for, is a better lesson. So sometimes planning for me probably a skeleton type base of all the things that happen and every once in a while I be sitting on my chair and this little brainwaves pops into my head, and I think we should do that tomorrow with such and such and it hasn't actually, it wasn't something I'd written down but it was just something triggered that thought in your head.</i></p> <p>We used to call it teachable moments.</p> <p><i>Yes a teachable moment.</i></p>
19	<p>What is it that makes you change you teaching strategies?</p> <p><i>If you see that what you're doing is not working and if children aren't confident and they are not taking risks is quite important. And if they're too comfortable. They got to learn to take that next step and so therefore the indications are with the kids and with the class you can have a very productive working little room but if they're not engaged thats sort of telling you isn't it that you're keeping them occupied but they're not actually doing much.</i></p>
20	<p>When you are stuck for ideas where do you go for help?</p> <p><i>My first port of call would be my team leader. Not just because she is my team leader but because I feel like we have similar ideas. We sort of come from the same direction at times. She's very approachable too and being new on a staff sometimes you have little questions that you want to ask. And I feel comfortable to ask her.</i></p>
21	<p>Is there any other sort of help you have in the class?</p> <p><i>Only with M with her toileting and that there is a teachers aide and the nurse that deals with that but apart from that no.</i></p> <p>So you don't as a right have a teacher aide come into your class, they don't have that?</p> <p><i>No. We do have in the First and Second Term, we do have teachers aides that work in the junior school but what they do is take literacy groups, so I might say I've got a couple of kids who could do with a little bit more help perhaps with alphabet or whatever and so they take them out and work with them, so I've had that sort of support but as of having anyone in the class physically there to help there's been none of that this year.</i></p>

No.	Question
22	<p>Children at this age have a diversity of social competence, does that come into your planning?</p> <p><i>Yeah I think it has to because especially when they are five it's that huge step and it's that confidence thing, you don't want them to loose that confidence because you've put them into situations or into things that they just aren't ready for or like K in here, it's really only this term that she probably felt comfortable to share things with the class or so I sort of brought her in to things in a gentle way and I think tried not to. And D is a good example too, he'll do things to draw attention to himself but he hates that limelight thing, you know when it thrust upon him as in the other day he was leader of the day and he got really, really, really flustered because he couldn't work out what day will tomorrow be. I kind of took the onus off him and we did it as a class because I could see he was just not coping and he didn't like it and everyone was waiting and so yeah I think that social thing and those others that come in and are very full of themselves and you know others, that's kind of what you mean aye like social. I think you've got to take all those into consideration because you don't want to kill it for some kids do you in that first year of school.</i></p>
23	<p>Have you ever used this diversity as a creative thing, you know used it to, for instance perhaps set up peer tutoring or something like that?</p> <p><i>We have one thing that we do have that has worked really well with my class is we have a buddy class. Which we use.</i></p> <p>No I mean within the class?</p> <p><i>I probably do it but in a round about way, like I might just say oh so and so will you go and do this together and knowing that the two that I'm putting together G whose the strong one with the weak one, without the kid even realising that there's a reason why I've put those two together. So there are situation especially when I initially started to introduce group type activities and discussions and things like that I in my own mind would say oh you, you, you but I was actually making sure that there was someone who was a leader type person, someone who was a and kind of mixing them around and now I've got to the point where I can put a bundle in together and knowing that some kids if they had too many that were overpowering wouldn't do anything but then initially some of them just need to be drawn out and I think often the children themselves do a better job cause they kind of fence because kids are quite perceptive aren't they of each others needs even just watching them sometimes they just know the one that might need a bit more help and I know Mt is a great one with J he's so, just takes a long time to do things, well Mt sits there now and he goes "oh J, man you've got that". You know so it's sort of been popping Mt next to J seems to motivate J to get a bit quicker which I don't need to do and be forever on his back, come on now J have you got that sorted. So I suppose you do it in a round about way without actually realising but also just from knowing what kids are like, who works best with who or doesn't or whatever. Not putting D and JN together on the mat together.</i></p>
24	<p>What do you understand by the term inclusion?</p> <p><i>I think in my mind inclusion is looking at everybody whether they have any sort of specific need or not it's that everyone sort of thing. So within a normal class even if there are no special needs children as such there are still children who have there own little needs so for me that inclusion is really just saying everybody.</i></p>
25	<p>Do you think the term mainstreaming has a different meaning?</p> <p><i>In my mind I think of mainstreaming as children with specific needs being included. But inclusion is that everyone thing. But mainstreaming because I suppose you tended to say that we are now mainstreaming children it's the children who didn't use to be included now being included.</i></p>

No.	Question
26	<p>In New Zealand there is currently debate around the practice of including all children regardless of their ability in their local community school, I would be interested in you view and any reasons you have for that?</p> <p><i>Ok I suppose as a classroom teacher for me you would have to take into consideration things like the severity of the problem, I mean if you've got someone whose basically vegetable state sitting in a wheelchair in your classroom they are going to, you can look at the aspect that they are going to be good for the other children in a class because they are going to have to deal with a person like that and communicate with them and learn how to communicate with them but also you've got to wonder what you as a teacher are going to be able to achieve with them as in progression. And I suppose too I comes down to what sort of support, if you've got somebody in your room whose quite severely mentally or physically disable but there is somebody there who is a good support person for them I have no problems or issues with that. I think it's probably if you get sort of somebody who is that severe but they don't have, with less and less funding, your not really getting a support person to help you with them. Because often it's a time factor with some of those children isn't it.</i></p>
27	<p>Some educators suggest that planning for children requires special training while others say that no extra training is needed, what would you think?</p> <p><i>I think you would probably need to have</i></p>

## Appendix N

### Completed Teacher Interview – Janine - 2005

Name of Teacher:	Janine
Date of Interview:	5.12.05

Number	Question
1.	<p>How do you think your class is going this year?  <i>It is a really different class this year to last year. They were quite jelled at the beginning of the year without my input.</i></p> <p>Why do you think that was?  <i>I have a lot more Year fives than I do Year sixes, when last year it was the other around and the year sixes tend to be the ones who are starting that whole real close knit pairing, whereas year fives are still friends with everybody and anyone and you don't have to be in the same class as each other to play with each other, whereas year sixes get quite clicky.</i></p>
2.	<p>This year have you made any changes to the way in which you plan to meet the differing needs of the kids in the class?  <i>Before your reflective journal, but the reflective journal's done a huge turnaround for me there. Because I tend to, started to focus on those children weren't the learning, had the learning difficulties more after the reflective journal whereas before it was a whole class practice. I think this year though my planning is different in the sense that I do a lot more ability based grouping things now. But actually feel comfortable with mixed ability. Last year I didn't have the confidence to do mixed ability where this year I feel there is a bit more mixed ability happening whereas I still tend to favour the same ability grouping in the class.</i></p> <p>So this year do you think you are paying more attention to differing needs than you did last year?  <i>Yes. I've tried to incorporate mixed ability groupings but I still haven't found that comfort zone yet with that really, but the same ability groupings I'm actually dealing more with their needs than as a whole class need or their focus.</i></p> <p>What you are say is that within a group you are getting the confidence to have more than one ability sort of strand in group. So your grouping not according to ability but for other reasons.  <i>Yeah. So like reading isn't so much what year level they are reading at it's whether or not they are comprehending text. Or it's just the visual queues whether it be breaking up sat with Saturday, you know like, yeah.</i></p>
3.	<p>This year have you received any assistance from other staff members around your planning?  <i>Yes. A new team leader. That's the only change as such.</i></p> <p>What's your team leader done this year that ...?  <i>She just showed me how her method of assessment, how recording assessment, and I've actually found that it's improved my planning way as well. It's all one there, it's all digital. So it relates – you can link it all together.</i></p>

Number	Question
4.	<p>Have you attended, this year, any courses, workshops, conferences, in-school meetings, etc that helped you to plan to meet diverse needs?  <i>We went to an expressive reading conference course over at [named] Sailing Club with was absolutely fantastic as to how to use different media for different abilities. And just highlighting to me the fact that a lot of books that we have now days have sub pictures and little information boxes all over the page and we are expecting a child to be able to read that straight away and how a lot of children who are experiencing difficulty with their comprehension it's because they actually don't know how to read the book. Where once upon a time there was a picture at the top and then the text underneath or the text and the picture whereas now they all tend to overlap each other. Just the fact that the visual layout of books you know .... And just highlighted new things like that that I wouldn't normally think of as to inhibiting a child's, you know slowing down a child's ability to make gains.</i></p> <p>Who took that?  <i>I can't remember his name – an Australian.</i></p> <p>And who ran it?  <i>Heinmann the book people and Michael Pole with thinking tools and mindmaps – that was just incredible, I brought that straight into my reading program that next week and doing a PMI with my top reading group and then a PMI with my bottom reading group and the huge difference between the two's amount of content but how it worked really well in the sense that both groups even if they are not strong readers were still able think about the book in the own and how they felt about it. You know kids, whether they are good readers or not still form opinions don't they. Just changing my way of assessment to rather than answering questions about the text and more about how they feel about the text because that way I am getting an idea of whether they've understood what they have read because of their personal feelings on it.</i></p> <p>So PMI being plus, minus and interesting?  <i>Yeah. And it's thinking hats.</i></p>
5.	<p>Apart from grouping according to ability, have you used any other techniques this year to structure your class?  <i>For our topic areas this year we had the sky is the limit which was mainly a whole class focus. The whole class was doing the same thing but then the children actually got to go into sub groups of their interests as to what we were looking at was what was effecting earth in our environment and they got to go and pick whether they wanted to be in pollution or you know they got to pick the interest that suited them. Same with Term 2s art, they picked a topic, went to a workshop which interests them as such.</i></p> <p>Was this within class or across classes?  <i>The sky is the limit the environment one was in class. The arts was across class – across senior school. 3<sup>rd</sup> Term was interdependence where the children picked in class an area about the New Zealand Post that they wanted to, in groups, work on. And this Term has been a whole class approach so they've sort of been working in pairs or in small groups but they are just getting into their own little groups for that.</i></p>
6.	<p>What did you do to assist your teacher aide to know how to help you in the class?  <i>[named teacher aide] was brilliant in the sense that she helped a lot, cause she came in for reading time and maths time, and she quite quickly herself picked up on which three students were in serious need of help. One of the students needed just a scribe in the sense that his motor skills, he couldn't keep up with the writing so he was struggling to keep up with work, so she just used her own initiative there. But I made sure she had the weekly plan on the Monday morning and the learning intention for, the goal, for each session. So she knew what I was hoping the children would get out of it.</i></p>
7.	<p>Your school has a job description for a teacher aide. Have you read this?  <i>No. There is a mention in my job description that I am responsible for teacher aides but no I've never seen the job description.</i></p>

Number	Question
8.	<p>Having children with mixed abilities in a class can be both stressful and rewarding. What things do you find stressful?  <i>Getting the range of resources organized. Our resources here at [named] School are not well housed, not well organized so that's really frustrating. I've actually tended to move away from the resources we have at school here and using the web and finding my own resources really cause otherwise it's a hassle to try and find them. And just the speed that they work at, you know, nothing more frustrating than the majority of the class finished and ready to move onto the next activity or the next part and you've got the kids who are still procrastinating often but I realize that a lot of the time the off-task behaviour is because they either don't understand or just don't know how to do it or whatever, but I find it frustrating here with just the class sizes and trying to cope with getting around to all of them that are struggling or needing help and not actually having that classroom assistance to do so.</i></p> <p>What things do you find rewarding?  <i>The fact that some of my more able children actually get a real buzz out of helping at the table. You know like a couple of kids in my class you can see them light up when they're actually able to help another child.</i></p> <p>Do they do that independently or do you direct them or have they got a license to do it anyway?  <i>Oh at the beginning of the year I suppose I said a few times "can you help so and so?" But I've actually found that they just do it naturally now and it was a real buzz the other day because probably my least able child had an idea of how to set something out so he went to his mate and showed him how to do this and he got real buzz out of feeling like he'd given back finally, when he was the one receiving the whole time. So it actually works as pro in the sense that it's giving my less able children a bit of a buzz as well. It's not the same children gaining from it so yeah I suppose that's probably the only reward I can see about mixed abilities.</i></p>
9.	<p>Thinking about the kids in the class that have special needs can you tell me how you go about planning for them?  <i>I've found myself because my learning special needs this year are not the same as last year, are not physical and I've found myself cutting out questions, you know removing snippets of work that aren't the extension work. I've got them to do the bare basics.</i></p> <p>So you're modifying the work?  <i>Yeah, a lot of activities. Am I able to use names of kids. With S if I had questions about what happened in the box or comprehension for example, if I had placed seven or eight questions about the book for his reading group I would asterisk the ones that were extension questions and that would be his goal to at least reach them but if he didn't complete them there was no, he didn't have to stay and do detention. So they're still there for him as a goal or an aim but I'm not putting the same pressure on him to do it. So I suppose that's the only modification. I've also found myself this year, last year I was saying right when you're finished hand it in, and I've actually found myself saying this year – hand it in tomorrow, because I have the five slower workers and a majority hand their work in then and there but it still gives those kids the opportunity to finish it even though it drives me nuts that I can't mark it then and there, but I'm always marking a few books the next day, it's slowed down my marking but yeah ...</i></p>

Number	Question
10.	<p>What do you do to encourage your kids, especially your needy kids, to take risks with their learning?  <i>Using mind maps and thinking tools, giving their opinion and their thoughts. I mean that's a real hard thing for children to do at the beginning, am I right?, am I wrong? That kind of questioning coming from them all the time. And saying to them is it what you think? Yes, well then it's got to be right. I really tried to move away in the last couple of years from yes, no answers. Just to get the children to form opinions rather than you know, repeat something. That whole explicit idea and that we've been sort of focusing on here. Assess to learn. Oh I've left something out we have walk and gawk in class that's where the kids leave their books open on the work that they're doing, they stand and they move around the classroom and share ideas and go oh I like that, can I borrow that and actually ask the child how did do that, did you use a lettering book, or where did you get the idea from sort of thing so I suppose it's that sharing of their own work.</i></p> <p>Where did you get that idea from?  <i>Walk and gawk I got that from [named teacher] who was my team leader last year.</i></p> <p>It's one I've never heard of.  <i>I quite like it.</i></p> <p>Kids do it anyway don't they?  <i>Yes. But I just like that title, I say right walk and qawk and they all know to stand and push their chairs in and I've got it so that they even know which desks to move around to. Something that's set up well.</i></p> <p>It's interesting because sometimes one of the things I liked to do as a teacher was to walk and qawk around the classrooms but some teachers don't like you doing that, they don't like you going into their classrooms.  <i>It's the only way to share ideas.</i></p> <p>They didn't want to do that either.  <i>In those days you were competitive in that you were graded and what your grading was depended on what job you got.</i></p>
11.	<p>Last year you told me about how you evaluate your teaching. Have you made any changes this year in your evaluation techniques?  <i>Of course I have there's that reflective journal. That was really, I suppose Ron on some level not to that extent but often I'd go in my plan I'd write a note like next time try ... or but never done it quite to the extent that I did it with the journal for Term 2 but it's really changed the way I, I actually do it a lot more mentally now, I bought in feeling circle when we started keeping ourselves safe this Term and every time I did it I said to the class now is there anything we need to change? I was actually putting it back onto them because you can evaluate something on your own but its quite nice to hear it from, and I wish I could have done reflection like that in my reflective journal for you, it was just sort of getting a couple of kids and different kids each time, snippets of how they felt. Because what I think about the learning could be quite different to them. I've asked them to give me an evaluation tomorrow on our maths games that we've played this year and when I said to them something and one of the kids, we were listing all the games that we've played this year in Maths and I said one of the kids said one of them, I said oh do you want to put that one down because we only played it one or twice and they went yeah it was so cool Miss and we didn't even play it again and cause I thought the game was really stink and had bummed out completely and I thought ohh, sometimes it would be nice to get more of their feedback like that.</i></p>

Number	Question
12.	<p>Over the last few months I have been talking about scaffolding techniques to help children learn. What scaffolding techniques would you generally use in your class?  <i>I suppose with maths a like question, like today the kids had to, we played a new game called dipping which was a subtraction game and I showed them how to use a technique to do subtraction without actually using those numbers but making them relatively close, or another way I scaffold is saying remember when we did, you know linking back to other or past ideas.</i></p> <p>Do you give cues?  <i>Yes but not like I would if I had younger children.</i></p> <p>Whys that?  <i>Because I feel that at the age that the kids are at now, they should be able to draw on memory. So I may give them a hint that I would like, I wouldn't say maybe if Malcolm was in the room I'd give them a cue to sort of get it right, but I mean it's that whole thing that they don't actually have to get it right.</i></p> <p>No but what I mean by cues is sort of give them a subtle cues as to the direction you want them to go in.  <i>Yeah I suppose I do do that. But in a very generalized way</i></p> <p>You see your learning techniques, your learning intentions are cues aren't they and they're scaffolds because that's what you, there's the outcome you want.  <i>They're very, well the success criteria is very tailored. But I supposed I'm thinking of actual general, particular questions. I don't like prompt, is the word I'm thinking of when I think of cues. But if a child is struggling I would definitely hint.</i></p>
13.	<p>Do you teach your children to problem solve?  <i>Yes.</i></p> <p>What way do you do this?  <i>Mindmaps and thinking tools have been a big thing this year for us. And in my class they are on the wall constantly and hopefully they can generally tell you what they are used for anyway and if the child is struggling with something I might suggest trying a couple of them to help work out the problem. Bubble map, double bubble map the bridge one is always good. But also to share, verbalizing with someone.</i></p> <p>Have you got sort of a try this and then if not successful try this or have you got that up on the wall?  <i>No I've just got the thinking map up there. I mean six thinking hats is used a lot in my classroom, in the sense of what's a good thing, what's a bad thing, what other questions have you got, how do you feel. Because once you actually break it down to how a child feels about something then you can, I find sometimes a child's emotions or their feelings can alter something so if you discuss that and talk about that then you can generally make sure that they see both sides of the coin with the yellow and black hat.</i></p>

Number	Question
14.	<p>I have now been associated with you and your classes for two years. During that time I have fed back to you interviews, observations and ideas. From that feedback was there anything that caused you to modify what you were doing in the class or the way that you teach?</p> <p>You've already told me about the reflective journal is there anything else?</p> <p><i>Yeah the interviews of the children. A couple of the kids last year and a couple again this year when you asked about how do you, you asked the kids a couple of questions about who helps you? Making things more clearer for children rather than just expecting them to know. The one about Jeanette in the computer room. What other teachers are there to help you learn and J wasn't mentioned the computer teacher and her job there is to facilitate computer education. So I've made a real point of pushing that idea with the kids.</i></p> <p>What I found in that was quite interesting. That the children remembered the exceptions not what generally happens. So because that teacher was there all the time that they, it wasn't in their.</p> <p><i>One of the kids mentioning a relieving teacher, and I was like, oh, that really blew me away, that actually sometimes they really do need everything spelt out for them.</i></p> <p>I think also it means that they that just sometimes you've got to remind them.</p> <p><i>And that's what I mean, I think that's what's changed my teaching practice in the sense that I don't take anything for granted. And I've brought in the questions, any questions any comments any queries. Because often you will say to the kids right are there any questions, excellent get on with it. So I do the any questions, what about any comments and by the time I get to any queries someone's got something. Its giving them that time to think, it's quite funny they're just oblivious to some things.</i></p>

Number	Question
15.	<p>You have been taking part in your own action research over the last two terms. This has had to fit in with your teaching practice. How have you found the idea of doing a small research in your classroom?</p> <p><i>Brilliant in the sense that to me it was like, well for example TARS, Tape assisted reading, for my action research was keeping a group of kids on task for a sustained amount of time. Now to me that's a real learning problem and we are quite happy to quickly send kids off to TARS and things like that and it's been good to make myself focus on that when someone else can come around and say well that's an absolute waste of class time. If they're not going to do their work then that's cool. But my argument would then be well you worry about them not reading or you worry about them not being able to add and this actually, this problem actually affects them right across the board. So I think making, having a reason to do the action research has been good. But also too Ron it was reminding me of it, I learned about it at teachers college but I'd never actually tried it or had to put in to practice like I have this time round which has been really good and to have the support to do it as well you know I've really enjoyed that side of it.</i></p> <p>One of the aims of my research which was sort of over the top of your research was that I wanted to use a method that would be able to be used in the classroom so that my question is do you think this is a method of helping a teacher to do research in the classroom? Do you think it may be a valid method of introducing new ideas into classroom practice?</p> <p><i>Yes I do, I do, as I say it's given me a focus and it's given me an opportunity to experiment with it. As I say there's such a overcrowded, busy curriculum anyway it would be something that I probably wouldn't have taken on board or thought about doing on my own and wouldn't miss it now for the world.</i></p> <p>What barriers do you see to a teacher doing their own research in their classroom?</p> <p><i>Oh yeah, time, numbers. All the usual things. But more than anything the children's unwillingness, not being willing to change. I've had that this year with one and the others have been great and they've written in their reports in the weekend about how at the beginning of the year they were noted for their off-task behaviour and how they've personally turned it around with some encouragement and it's really quite exciting to know that it can be done in such a short period and later on in the year to. You know [principal] talks about how if you want something you have to set it in place at the beginning of the year otherwise it takes too long to get there. Its good.</i></p> <p>What advantages do you see?</p> <p><i>Well I think it would really make them reflect on their practice. It made me sort of stop and think in my encourage, is it the tasks aren't meaningful enough to keep them on track. So I mean it makes you not just look at the children and what's influencing them it's also looking at you and how you are affecting them, what you need to do as a teacher to ensure that it is, it's a two way thing.</i></p>
16.	<p>Are there any other comments you would like to make?</p> <p><i>I've actually really really enjoyed the opportunity Ron to explore my teaching even more, I've done things in the last two years that I wouldn't have done independently and I really appreciate that opportunity because I just feel better for it. And I'm stealing the reflective journal idea for next year. I mean [new school] may prescribe exactly how I have to set it out but even if I use the one that I've been using this year as a planning tool and then so be it. But I'm definitely a different teacher from before I started and I think about everything now not just the reading and the maths abilities it's the fine motor skills is that what's slowing them down or has she got things going on at home and you know mixed abilities, is it just about actual academic ability, it's social things as well. So it's opened my mind up. Yeah no thank you.</i></p>

## Appendix O

### Completed Teacher Interview – Tina - 2005

Name of Teacher:	Tina
Date of Interview:	5.12.05

No	Question
1.	<p>How do you think your class is going this year?</p> <p><i>Yeah no I think they're going alright. They seem to be a little bit, sort of slower, I think than the year before. Just on self assessment and kicking off and being risk takers. Though I've had to look at different ways of introducing and trialing things just to get them sort of a bit more in that risk taking mode.</i></p>
2.	<p>This year have you made any changes to the way in which you plan to meet the differing needs of the kids in the class?</p> <p><i>Yeah I've still focused on the learning intentions and success criteria but sort of looked at the children more in an individual way but looking at why some of them aren't achieving or moving the way I wanted them to and introducing or trialing things to see if they make a difference to how we do it.</i></p> <p>When you trial something how do you know whether it's been successful or not? Do you measure it or do you do it from your perceptions?</p> <p><i>Probably perception and observation and sometimes its concrete evidence. You know especially with things like reading, or just what the output or quality of things are with what they produce. So Mathematics and those sort of subjects you sort of get a result as in what's on paper but a lot of it's you get to know the children so its probably not so much what they've produced at times but the way they are going about it or what the skills of what they're doing rather than what you are getting. Cause some of them just, with that risk taking or just not thinking for yourself and so therefore, to get them to be able to get them to move they needed to acquire those skills first, just an observation.</i></p> <p>So this year do you think you are paying more attention to differing needs than you did last year?</p>

No	Question
3.	<p>This year have you received any assistance from other staff members around your planning?  <i>As a junior syndicate or team we do an integrated unit each term and that's done as a collective group and then what we do is sort of, we have the main learning intention and the success criteria but then we can take those success criteria back and sort of use them and break them down yet again according to how we want to do it within our class. Its probably really just integrated unit we did a creative dance art sort of a theme in third term and that was probably a little bit of working together stuff but probably on the whole it's my own.</i></p> <p>For your core stuff, like your reading, writing and maths it tends to be your work?</p> <p><i>I have this year; I've worked with [named person] the RT Literacy. Just purely what we did with him was I had to choose a group of children that he would work with and with me and what I did was I got children who are sort of often at the start of the year sitting on that top of the emergent reading level but your just not sure whether they are ready to move up so it was just to move them a bit quicker. So that was good we worked together on that and he introduced different ways to introduce the book and looking at different sort of .. pumping the meaning strategy probably too often we rely more on visual and the children do too so it was just getting them to think a little bit more about whats going to make sense then does it look right rather than ... So yeah I sort of got help from him which was good.</i></p>
4.	<p>Have you attended, this year, any courses, workshops, conferences, in-school meetings, etc that helped you to plan to meet diverse needs?</p> <p><i>[Named Person] we had her for a staff teachers only day and she was really good cause she started at the five year old level and worked her way through and that was purely looking at reading. But it just gave me, well one it sort of gave me some new ideas but also it made me see that some of the things that I was doing are a good part of your reading programme too.</i></p> <p>So it confirmed some of your own views.  <i>Yeah, but I just couldn't think of the word.</i></p> <p><i>And Michael Pole which was on thinking and looking at different thinking styles and learning styles. That was really good cause it kind of put in my, I kind of struggle a little bit with all those different De Bono and habits of the mind and where you fit it into your class and how you work with it, but that just clarified for me what they were about and that you sort of use at the level that you are what's going to work best with those kids and not bombard them with too many different kinds and that was a good learning thing.</i></p>
5.	<p>Apart from grouping according to ability, have you used any other techniques this year to structure your class?</p> <p><i>I suppose it mostly is grouping, there's a lot of individual</i></p> <p>Can you give me an example of an individual?</p> <p><i>Within my reading programme when I have my task board activities I have word family, ... and spelling I have blend, I have alphabets. So depending on where they are it's in there.</i></p> <p>So within that you give them individual?</p> <p><i>Some, yeah probably only a few because it's got to the point where I've only got a few left at the alphabet stage so you don't want to rehash what they've already had so I'm targeting what letters and sounds and that they don't know and then working on that. It's probably for the ones who are dragging the lead a little bit that I'm doing that.</i></p> <p>So your really special needs ones?</p> <p><i>Yeah the ones that haven't picked up on things. It's being more specific rather finding exactly what things they don't know and then working on that.</i></p>

No	Question
6.	<p>What did you do to assist your teacher aide to know how to help you in the class?</p> <p><i>What I did initially was just that first week or so got her to observe especially how I do interact with the children when it comes to written language or in a reading group, you know the task board activities just so that she knew my expectation of what I do and I think sometimes that risk taking that I like the children to take. You know I don't give them the answer it's them working it out for them. So she needed to know that you don't sit there and spell the word, this is what I do and then just talked to her, I mean sometimes we'd touch base before school cause she'd come in a bit earlier and I'd show her my planning and talk about what my expectation is with them and a couple of times I did have to stop her and just say look you know I prefer it or, not in a horrible way but you know because as soon as they sort of start to do it deviate a little bit out, the kids pick up on it and sort of putting their hand up wanting her because she's going to tell them. But I was lucky she picked it up really quite quickly.</i></p>
7.	<p>Your school has a job description for a teacher aide. Have you read this?</p> <p><i>No.</i></p>
8.	<p>Having children with mixed abilities in a class can be both stressful and rewarding. What things do you find stressful?</p> <p><i>I supposed it's when you're having to cater for that broad range of needs and especially probably not so much within the core subject areas but even when you do integrated unit type things when they don't have the oral language or that sort of thing to bring or just a general knowledge of things. You feel like you can move some on but others are still learning the basics of things so they don't have a lot to bring to discussion or things like that that's probably the ones that I, within your reading and your story writing and your Maths and those areas you sort of because you're grouping you've usually got a good core little group so you've got your role models and you know the ones that can support those children within that group. I suppose it's just that some children come in at this level with really poor social and probably oral language skills and it's just they need to get on top of those before you can try and teach them to read or write or any of those things.</i></p> <p>You talk about role models within a group, do you specifically target those role models and show them what to do or have they already got the skills?</p> <p><i>I think it is often the children who already have the skills and I think that they are perhaps just not up with the next lot so they, I often will use them, if we are down on the mat doing a Maths activity I know to get them to perhaps demonstrate first, one it boosts their confidence and it makes them feel quite good but it also the one who sits back and isn't quite sure is getting that chance to see their peer do it. It's kind of like a boosting of the confidence of one and the other just getting that second or third look at what's happening and not just the teacher doing it.</i></p> <p>What things do you find rewarding?</p> <p><i>I suppose because most, I mean they always move at some stage, so kind of seeing the progress they make and with your extension type children I mean I think for me this year is being able to use some of those children in more a peer tutoring type role and giving them a little bit of responsibility too to help others.</i></p> <p>So you found the peer tutoring to be good?</p> <p><i>Yeah it's worked well and I think that with those ones that are struggling a little bit you can target them a little bit more in individual steps. So you do see it might not be huge steps or progress that they've made but there is some because you're probably taking a smaller step with them anyway. They're going to make a movement but it might not be that huge movement that some of the others do.</i></p>

No	Question
9.	<p>Thinking about the kids in the class that have special needs can you tell me how you go about planning for them?</p> <p><i>This year I haven't got a big group of special needs children, I haven't got anyone with physical needs or anything like that. But probably one who academically is developmentally delayed I think with him it's just my planning, I'm specifically looking at more his individual needs not as a whole so when it is reading or Maths I'm knowing that there's that littlest thing that we have to do first. You know we've got to get numbers to five and not be bombarding him with all the others. But within that ten minute time I do at the start of maths he's getting, he's hearing and seeing what the others are doing but when it comes to him at maths time we're targeting his specific needs so I'm having to look a little bit more at what I do with him rather than with the group, so he's within a group but within that group he's actually an individual but I place him with the group purely for management purposes but also too because I don't want him seen as an individual but also he's got them, he's seeing and hearing them too so he's getting that extra little bit with them.</i></p> <p>So you're modifying the work? <i>Yes</i></p>
10.	<p>What do you do to encourage your kids, especially your needy kids, to take risks with their learning?</p> <p><i>Using the assessment that I'm doing that they, it's making them think about where to next so with that risk taking it's not like I'm bombarding them with do do do do do.. You've got to remember today at story writing you've got to do this and this, so it's giving them that scaffolding to do that one thing at a time and do it properly and do it well and then move on to the next thing.</i></p> <p>OK so you're going from the known to unknown?</p> <p><i>Yeah. I think to just putting them in situations where what do you think? The sort of prompts and questioning that I use isn't, it's more sort of what would you do? What do you think or what do think it would be? So placing that little question in their head not getting them, you know getting them to actually think well what will I do, what do I need, what will help.</i></p>
11.	<p>Last year you told me about how you evaluate your teaching. Have you made any changes this year in your evaluation techniques?</p> <p><i>Yeah I probably do quite similar, yeah pretty much the same.</i></p>
12.	<p>Earlier this year I asked you to do some reflection around your teaching. Is this a technique that you could incorporate into your practice and if so, how?</p> <p><i>Yeah I actually found really quite valuable. I've just put that in my appraisal thing with [principal] because it made me really look at the things that went well and why they did. The things that didn't go well and made me look at why they didn't go well and I think too for when I plan the next activity that would be similar it's thinking well last time I did that I don't think I introduced it well enough and the kids got a little bit side tracked or I needed to use more support material next time. Yeah so that was really quite valuable for me, I actually quite enjoyed doing it.</i></p>
13.	<p>Over the last few months I have been talking about scaffolding techniques to help children learn. What scaffolding techniques would you generally use in your class?</p> <p><i>Just using that success criteria type thing of we can do this now, now where are we going to go to, lets have a look at, well probably within every area you can do that, reading the maths. It's just giving them an outline of where you are heading and them knowing that to achieve that they need to go bom, bom bom.</i></p>

No	Question
14.	<p>Do you teach your children to problem solve?</p> <p><i>Not all the time but I think I possibly do it without actually meaning, without realizing I'm doing it sometimes and that probably comes into the risk taking because they have to work out how rather than the what at times, so I don't know if I consciously do it but it's a part of what happens in the classroom. I think it is an important thing that children need really quite quickly because they need to know with their learning how to learn I suppose is the way ..</i></p> <p>Have you ever sat down with the kids and said look your going to solve a problem these are the steps you have to go through.</p> <p><i>No, I don't think I have. Maybe when I've done maths or things like that some of those type subjects, like I did multiplication and division, I suppose I more give them, you know use concrete stuff and then get them to analyses what's happening and then go backwards in the way that we do it that way so they're saying to me well if that happens this will happen. I suppose in a way that's problem solving but not a set specific activity it kind of is just involved in some areas.</i></p>
15.	<p>I have now been associated with you and your classes for two years. During that time I have fed back to you interviews, observations and ideas. From that feedback was there anything that caused you to modify what you were doing in the class or the way that you teach?</p> <p><i>Initially the first big thing I noticed was how much I talked. You know you took transcripts of those first few mornings and I realized that I really needed to condense my instructions or just the way I interacted with the kids because I was spending a lot of time just giving a lot of talk and I think a lot of kids probably had switched off within part of that time so that was one of the things. And I think too you've given me some different ideas on how to perhaps look at the children especially who weren't taking risks and how we could go about trialing different things. And also that thing that you don't often sticking to the same old isn't the best way because there is other ways and every child is an individual and they don't all learn the same way so you've got to have in place different things happening for those different learning styles. Probably initially I was quite staid in how I did things but I'm getting more flexible and I think to that self reflection thing was good cause that showed me that not everything you do in the class is successful and you have to look at why and what you could do better next time or how it could change.</i></p> <p>Do you think you yourself are becoming better at risk taking?</p> <p><i>Yeah probably I am because you have this little preconceived ideas too and it probably ties in with professional development that we've had and assessment that they are five year olds and you think they couldn't do that but I've learnt that you don't take anything for granted and that they can become risk takers and they can learn to think for themselves and self assess and learn to work with scaffolding type prompts. Its been a combination of those two things has been good for me and I've learnt to give them more leeway rather than have that expectation that will be too much for them because they surprise me.</i></p>

No	Question
16.	<p>You have been taking part in your own action research over the last two terms. This has had to fit in with your teaching practice. How have you found the idea of doing a small research in your classroom?</p> <p><i>It was of great benefit because you've always got that little problem in your room and mine this year was those few children who still after a few terms weren't taking those risks especially within their written language. So it made me look at the way I was doing it and what they perhaps their needs and just trialing a few little things to see what could make a difference and with some of them taking that fitness between the maths and the story writing just gave them a bit of fresh air and bit of a boost of energy and that helped. So it showed me that sometimes little changes can benefit or even the placement of children in your room and who they work with and sit by.</i></p> <p>Do you think that action research might be a valid method of introducing new ideas into your practice in the classroom?</p> <p><i>Yeah I think it probably would because there is always, they all have their own different needs and they are not all wanting the same so there is going to be situations where you've got to trial little things to see.</i></p> <p>What barriers do you see to a teacher doing their own research in their classroom?</p> <p><i>It would be based on need sometimes it might be that their may be only one or two that you feel .. so it's a time thing. It didn't seem to, I didn't feel that it took over a big part of anything, it slotted in and all it was was just trialing a few little things for a little while and seeing if it made a difference. I think that's a way of teaching now, your forever having to change and move.</i></p>
17.	<p>Are there any other comments you would like to make?</p> <p><i>I've found it a valuable experience because I've had to look at myself. Even though the focus was on the children and the class, it actually at the end of the day came back to me and I had to really look at was I catering for all needs and I've had two very different classrooms from last year to this year so and that's what teaching is like. Next year I could have a completely different room.</i></p> <p>Well you see the focus had to change because I didn't finish it completely last year I had to focus back on the teacher because although the teacher was always in focus I couldn't compare the two classes the only constant I had was you.</p> <p><i>But at the end of the day we as the class teacher are the ones that need to be the one that reflecting because the children come and go but it's learning how to work with those different children. Even behaviour wise you have your extremes of what you have so it's learning that you can't do with one child with another. So it's always looking at them as individuals really.</i></p>

## Appendix P

### *Stages in developing writing behaviour<sup>7</sup>*

Learning Intention	Stage	Writing Behaviour	Description
<b>Becoming a writer</b>	1	Picture plan	Able to draw a picture that depicts what they will write about – help guide them
	2	Write some letters by myself	Know that writing involves words – association letters
	3	Write the first letter of a word	Be able to hear what the initial letter in a word begins with and record it
	4	Try some letter sounds by myself	Record sound in words beyond the initial letter
	5	Write some words by myself	Build up a bank of known basic words
	6	Leave spaces	Know that we leave gaps between words – demonstrates understanding of difference between letters and words
	7	Find words on my tent card	Tent card has alphabet / blends & word associated pictures – use as help
	8	Find words around the room	Have lots of basic words displayed around the room to be seen often
	9	Learning to use a capital letter and full stop	Basic punctuation – reinforced in modelling and shared book
<b>Make writing more interesting</b>	10	Adding more after a prompt	Put teacher scaffolding prompt for child to expand on idea
	11	Use interesting words	Think of a better word to use for impact
	12	Plan in different ways	Use of key words, flow maps, etc.
	13	Proof read to make changes	Be able to read back work and make and recognise where changes need to be made i.e. structure, interest words, expanding or refining of ideas

<sup>7</sup> Developed by Tina

## Appendix Q

### *An example of data 'tagged' with descriptors using N'Vivo*

<p>angles. It's not just always talking about the good things. Talking about making changes and thinking about thinking. You know making something better for themselves.</p>	Learning Techniques, Metacognition,
<p>You also use goals don't you?</p>	Teacher Goal Setting, Child Goal Setting,
<p>Yeah the learning intentions sorry that is just such a part of life now that I don't even think about it. We discuss what we are going to learn and how we know that we've learnt it or are learning it through steps.</p>	
<p>So by having a learning intention, it's a form of the children monitoring their progress isn't it.</p>	Child Goal Setting, Self-evaluation,
<p>Well this is so like we've been doing fractions in class and they had the learning intention that we are learning to find fractions of numbers and objects and we will know that we have achieved this because we can, and the kids are actually constantly monitoring what they need to be working towards. They go oh yeah I can do that not a problem but I can't do this, and this is work that I need to focus on. That game or that activity that develops that skill.</p>	
<p>So has it taken time for the kids to come to that point?</p>	
<p>It did last year but they sort of came to me this year with a bit of an understanding already of what learning intentions and success criteria were.</p>	
<p>So that's a school wide thing?</p>	Within School PD
<p>Yes. This is what <del>you</del> brought into our school. But now you integrate it all the time and start off small steps and it becomes so routine that the kids sort of say well what's our success criteria, how do we know we've achieved this. They are very ...</p>	
<p>I know you use group for your class, do you use any other way?</p>	Structures for learning
<p>Grouping and whole class.</p>	
<p>Is there anything else you do to make your teaching easier?</p>	Peer Interactions
<p>No.</p>	
<p>For instance do you use peer tutoring?</p>	Teacher Aide Support
<p>Once in a blue moon but not as a planned thing. No. If a child can do, like Brookes is often one of the kids who will say "oh I'll help so and so" because he finishes quickly and I'm like "yeah, that would me good please" but it's never planned into a classroom situation.</p>	
<p>You've got two teachers aides who come in, essentially for the one child, how do they know what those kids are to do?</p>	
<p>Through discussions with me. Last years teacher aide and I have a really good system going where I give her the weeks plan and she was full-time in my class. This year I haven't found that successful having two teacher aides and such varied times. So it is just through oral</p>	

## Appendix R

### *An example of a node list (descriptors).*

It has been taken from an analysis of the Teacher Interviews (2005) using N<sup>o</sup>Vivo. Note how the descriptors can be grouped into superior and inferior nodes.

NVivo revision 2.0.163

Licensee: Build Version 1.03

Project: - Teacher - 2005

User: Administrator

Date: 2/02/2006 - 2:53:02 p.m.

### NODE LISTING

#### **Nodes in Set: All Tree Nodes**

**Created:** 30/01/2006 - 8:51:51 p.m.

**Modified:** 30/01/2006 - 8:51:51 p.m.

**Number of Nodes:** 35

- 1 (1) /Professional Development
- 2 (1 1) /Professional Development/Within School PD
- 3 (1 2) /Professional Development/Out of School PD
- 4 (1 2 1) /Professional Development/Out of School PD/Pre-service
- 5 (2) /Collegial Support
- 6 (2 1) /Collegial Support/Peer Teacher Support
- 7 (2 2) /Collegial Support/Specialist Teacher Support
- 8 (2 3) /Collegial Support/Teacher Aide Support
- 9 (3) /Reflection
- 10 (3 1) /Reflection/Reflection-in-action
- 11 (3 2) /Reflection/Reflection-on-action
- 12 (3 3) /Reflection/Reflection-on-feedback
- 13 (3 4) /Reflection/Assumptions
- 14 (3 5) /Reflection/Teaching Stressors
- 15 (3 6) /Reflection/Teaching Rewards
- 16 (4) /Planning
- 17 (4 1) /Planning/Resources use
- 18 (4 2) /Planning/Assessment
- 19 (4 3) /Planning/Evaluation
- 20 (4 4) /Planning/Exemplars
- 21 (4 5) /Planning/Teacher Goal Setting
- 22 (4 6) /Planning/Structures for learning
- 23 (4 7) /Planning/Curriculum Modification
- 24 (4 8) /Planning/Basis of planning
- 25 (5) /Scaffolding
- 26 (5 1) /Scaffolding/Child Goal Setting
- 27 (5 3) /Scaffolding/Metacognition
- 28 (5 4) /Scaffolding/Self-evaluation
- 29 (5 4 2) /Scaffolding/Self-evaluation/Learning Techniques
- 30 (5 5) /Scaffolding/Peer Interactions
- 31 (5 6) /Scaffolding/Modelling
- 32 (5 7) /Scaffolding/Techniques
- 33 (6) /Action Research
- 34 (6 1) /Action Research/Advantages
- 35 (6 2) /Action Research/Barriers

## Appendix S

### *An example of data classified under a single node using N'Vivo.*

In this example the node (descriptor) is 'Teacher Reflection'.

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**Document 'Class Teacher - 2005 - 3 passages, 910 characters.**

*Section 0, Paragraph 57, 332 characters.*

*Getting the range of resources organized. Our resources here at School are not well housed, not well organized so that's really frustrating. I've actually tended to move away from the resources we have at school here and using the web and finding my own resources really cause otherwise it's a hassle to try and find them.*

*Section 0, Paragraph 57, 374 characters.*

*And just the speed that they work at, you know, nothing more frustrating than the majority of the class finished and ready to move onto the next activity or the next part and you've got the kids who are still procrastinating often but I realize that a lot of the time the off task behaviour is because they either don't understand or just don't know how to do it or whatever*

*Section 0, Paragraph 57, 204 characters.*

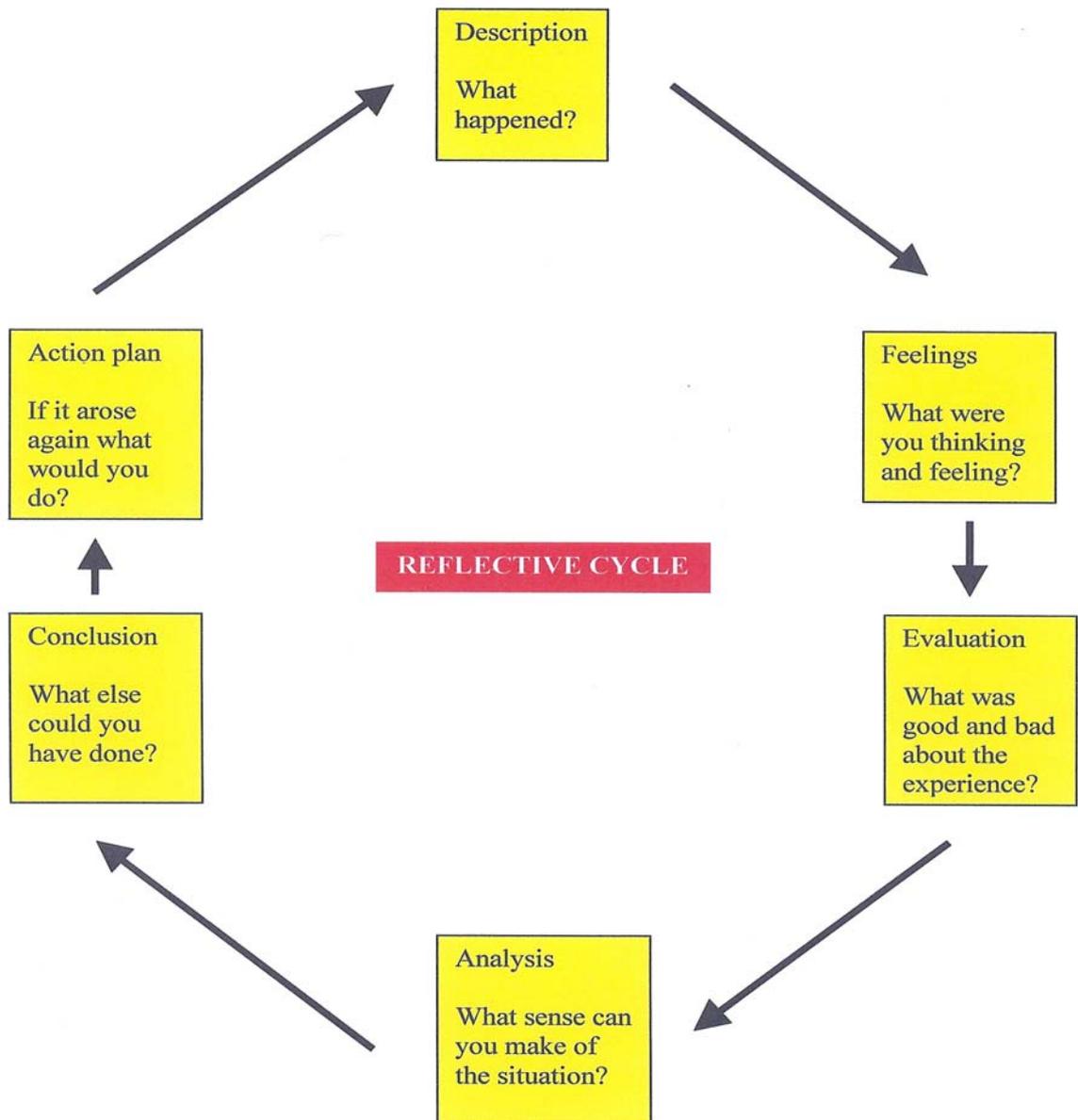
*I find it frustrating here with just the class sizes and trying to cope with getting around to all of them that are struggling or needing help and not actually having that classroom assistance to do so.*

**Document 'Class Teacher - 2005 - 1 passages, 985 characters.**

*Section 0, Paragraph 59, 985 characters.*

*I supposed it's when you're having to cater for that broad range of needs and especially probably not so much within the core subject areas but even when you do integrated unit type things when they don't have the oral language or that sort of thing to bring or just a general knowledge of things. You feel like you can move some on but others are still learning the basics of things so they don't have a lot to bring to discussion or things like that that's probably the ones that I, within your reading and your story writing and your Maths and those*

## Appendix T



The reflective cycle (Gibbs 1988 in Bulman & Schutz, 2004)

## Appendix U

### *Completed action research Plan*

<b>Teacher:</b>	Tina
<b>What is it that you want to do?</b>	
I would like to find out why some children are not comfortable taking risks in the learning environment especially in the area of written language.	
<b>What is the purpose of your research?</b>	
I would like to see why these children seem to be more reliant on teacher support and less willing to give things a go themselves. The ways that I as the class teacher can improve their risk taking and make them more comfortable to begin and complete their written language without being so reliant on me. Is the current system I am using of Learning Intentions with success criteria working for them.	
<b>What is your rationale for choosing this particular topic?</b>	
I think this research is important because children need to learn to take risks in all areas of the curriculum. They need to sometimes make mistakes to learn and work out for themselves where to next. They need to be aware that we all learn by doing and this will lead into better self-assessment as a learner. They need to be aware that the teacher is there to guide and support but not to do it for them. They need to experience a sense of pride in having tried their best. I will need to look at myself as the class teacher and see if I can find the obstacles that stop these children from being risk takers and look at different ways that I may have to cater for their individual needs. I will need to be come more aware of the processes children go through to become a confident writer and the needs they have to feel comfortable to take those risks. I will be interested to see whether the modelling that plays an important part of my programme for written language is effective for these children. Do these children have sufficient alphabet and word and book knowledge to begin to write for themselves? Are they good at asking questions and seeking advice and support when needed?	
<b>What question(s) is your research trying to answer?</b>	
Why do some children find it difficult to take risks with their written language i.e., story writing.	
<b>What is the sample or population that your research is aimed at?</b>	
I am interested in a group of children who have now had two terms at school and have a reasonably sound knowledge of alphabet and print. They have been exposed to lots of modelling and can produce a reasonable piece of work when they have one to one support and guidance yet are unable to take the risk of trying it themselves when that support of one to one is not there. My target group are: J C, F P, A L, M H, K N	
<b>Is there any previous literature to guide your research?</b>	
‘Assist Learners Who Are Strategy-Inefficient.’ Harvetta M. Robertson, Billie Priest, and Harry L. Fullwood.	
<b>What is your methodology?</b>	
Action research using four steps: Plan, action, observe, reflect (Carr and Kemmis,	

1986)
<b>What is the intervention/programme that you are going to use?</b>
<p>I would first like to have Ron observe these children in the normal classroom environment during a few sessions of written language where they are being given teacher guidance and also times when they are having to take risks to begin, complete and stay on task.</p> <p>I would like to analysis data on their alphabet, phonic and concepts about print knowledge to confirm where they are at and what skills and knowledge they bring to their writing.</p> <p>I would like to look at other factors i.e., The time that written language is done in the class</p> <p>Programme:</p> <p>The use of brain food and exercise before written language.</p> <p>The use of my modelling - is it effective and catering for all the children's needs.</p> <p>The placement of where the children are seated i.e., use of better role models.</p> <p>Is the learner involved enough in their learning?</p> <p>Do these children have good time management skills?</p> <p>Am I as the class teacher catering for their individual needs?</p> <p>Do the children have good questioning skills and know how to seek advice when needed?</p> <p>Most of these ideas will involve observations, collecting of data and trial and error.</p>
<b>How are you going to measure the children's progress?</b>
<p>I will take work samples at the start of the project that show what the children have done without too much teacher support in a set time frame. I will have Ron take observations of their behaviours during the written language time in the early stages and then at the end. During and at the end of the project I will continue to take samples and observations. It may also be useful to question the children about how they feel about writing before and after. A self assessment of their work output and interest level may also be interesting before and after.</p>
<b>How are you going to measure or record any changes in your thinking during the research?</b>
<p>Keeping ongoing observations and records of what happens when different things are trialled. Reflect on how I feel I am going as the facilitator of their learning.</p>
<b>How is your "critical friend" going to help you with this research?</b>
<p>I would like My Critical friend to do observations at the start and when I introduce new concepts. Maybe interview the children about how they feel about written language and how they see themselves in relation to others. Discuss progress and help to re-shape intervention type concepts. Provide on going literature on the subject.</p>
<b>How do you think this research might assist children with special educational needs or help you meet the diverse needs of your class?</b>
<p>It should benefit those children who often become too reliant on support and guidance and also make me more aware as a classroom teacher of the different ways you can approach or help in the learning environment.</p>

**What to include in the sections:**

Purpose

- o Goals and objectives of the research
- o Learning intentions

#### Rationale

- Why is this research important – reasons which justify your doing it
- Speculate on how it might change your practice or that of the children
- How might it add to the knowledge around the topic

#### Research questions

- Turn the purposes into questions

#### Sample

- Who are the children you are most interested in and why (you can use real names as I will falsify them in my thesis)

#### Literature

- Do you know of any literature around the subject? Don't worry if you don't as I will look up some for you

#### Methodology

I have filled this in for you. You can add to it if you want

#### Intervention

- What are you going to do
- How are you going to do it
- What are you going to use in the way of resources

#### Progress for the children

- Think of something quantitative (using numbers e.g. minutes taken, words used, etc)
- Think of something qualitative (e.g. always, mostly, occasionally, seldom, never – something along those lines)

#### Measuring yourself

- Keep a research diary and write your impressions in it (a suggestion)

#### Critical Friend

- How would you like me to help? It might be to do observations or measurements, discuss progress with you, help with re-shaping the intervention, etc.

## Appendix V

### Completed Review of First Cycle of action research – Tina

AR – First Cycle Review - Tina					
Research:	Developing students risk taking in written language.				
Students to focus on:	J.C., F.P., A.L., M.H., K.N.				
Pre and Post Assessment Results:	Pre tested children's alphabet/basic sight word skills to see what they brought to their writing.				
	Pre: alphabet    Basic word    Post: alphabet    Basic word				
	J.C.	54/54	21/36	54/54	36/36
	F.P	40/54	2/36	48/54	2/36
	A.L	48/54	7/36	54/54	30/36
	M.H	54/54	7/36	54/54	13/36
	K.N	29/54	5/36	47/54	4/36
Observations of writing skills related to Learning Intentions and success criteria	<b>Pre</b> J.C- Picture plan, can go beyond initial letter, writes some words. F.P-Draws picture plan, writes some letters. A.L-Draws picture plan, initial letter.  M.H-Picture plan, some initial letters and letter sounds. K.N-Picture plan, some initial.			<b>Post</b> J.C-working on leaving spaces and finding words on tent card. F.P-Working on writing first letter of word and some letter sounds. A.L-Gaps, writes some words, going beyond initial letter. M.H-working on leaving consistent gaps, going beyond initial letter. K.N-Going beyond initial letter more, gaps use of tent card.	
Changes introduced and observations noted.	Introducing fitness time before written language as it-followed maths.   Changing seating of children.			J.C more motivated and quicker to task. Attempting to begin without teacher support. A.L more motivated to begin. K.N more motivated to begin.  All benefited from being placed beside less social and more motivated children.	
Other Comments	I considered, but didn't introduce the use of Brain food as I found that the fitness session benefited the whole class. During the modelling session at the beginning of each writing session I introduced the use of key words and some simple thinking maps. These seemed to benefit A.L, M.H, K.N and J.C. All the children are aware of the Learning Intention and are aware of areas that that they need to work on next. Questioning skills improved with most but were not something that came naturally with some of them. Overall I feel the fitness, use of key words and the introduction of mind maps helped most of the children to grow in confidence, gain better time management skills and begin to take more risks to begin and progress through their written language.				
Where to next?	This term I would like to introduce the use of Peer Tutoring to my class. I will set up role-model type scenarios so that the children get a better picture of what a peer tutor does to support rather than do it for them.				

## Appendix W

### Completed Child Interview

Name of Child:	[named student]
Date of Interview:	5 August 2004

Number	Question
1.	<p>Let us begin the interview by you telling me something about yourself. (If necessary use a prompt question e.g. Do you have any pets at home?)</p> <p><i>Well, I have a passion for the piano. I've done heaps at the school being involved with stuff like competitions and doing road patrolling, special projects.</i></p>
2.	<p>In school what are you good at?</p> <p><i>I'm good at Maths, reading, ICT and music mainly, Information Communication Technology. We use computers and i-book. We use computers called Apple IMACs and we use IBooks for doing projects and things from the schools apple education reference site.</i></p>
3.	<p>In school what things do you find hard?</p> <p><i>Well I find achieving my personal best hard.</i></p> <p>Is that because you set your personal best very high?</p> <p><i>Yes</i></p>
4.	<p>In the class is there someone who is better at something than you are?</p> <p><i>Yes.</i></p> <p>Does that person ever help you?</p> <p><i>Ah yes.</i></p> <p>How do they help you?</p> <p><i>They help me in like I ask them something like What's animal has the highest blood pressure and questions like that and they just give me the answer.</i></p>
5.	<p>How do you help other children who are not as good at things as you are?</p> <p><i>Well I um, if they have a problem like what's 0.5 as a fraction I just help them by if five tenths is a fraction and you are trying to put it into decimal then all you do is just remove the one and the one between the five and the zero and put a decimal point between the zero and the five.</i></p> <p><i>I do stuff like that with other problems as well.</i></p> <p>So you tend to help people with Maths because that's something you're good at.</p>
6.	<p>What things do your classmates do to help one another with their work?</p> <p><i>They like, people who want help they go and ask people if the people before you ask the teacher.</i></p> <p>Is that a rule in your class?</p> <p><i>Yes, and plus also we've got the room 15 yellow pages.</i></p> <p>What's that?</p> <p><i>It's a sheet of paper and it's got everything that people might have problems with and it's got people beside who you can ask.</i></p> <p>OK so it's sort of like the yellow pages in the telephone book.</p> <p><i>Yeah.</i></p> <p>Oh, that's a really good idea. I hadn't heard about that before.</p>

Number	Question
7.	<p>With so many differences in your class how does the teacher teach everyone?  <i>Well she, she ah I don't know actually but I think she um like sets we get work set at our age level and stuff like that.</i>            Say for instance in Maths does the whole class do the same thing.  <i>Um no, we get split into four groups and we get work set at our stage that we're at.</i>            Ok so one of the ways the teacher works out things is to put you all into different groups.  <i>Yes.</i>            Does that happen in any other subjects other than maths?  <i>Yes, for reading we have separate reading groups and when we do computers and music we have the two highest groups and the two lowest groups mix and so that the two highest groups are one group and the two lowest groups are the other group and then they get work set at those levels and when we go to special technology .</i></p>
8.	<p>Does the teacher have any other adults to help in the class?  <i>Yes. There's [named person] who helps [named student] go, [named student] which is um paralyzed in needs to go toilet. And there's [another named person] who helps [named student] with her work.</i>            Ok, so do either of those ladies help anyone else in the class?  <i>Yes</i>            What sorts of things might they do?  <i>They might help you out make maths or reading problems easier.</i>            OK, so do they tend to come in the room when there is reading or Maths?  <i>Yes.</i></p>
9.	<p>Sometimes teachers ask children to work together in groups.            When you are working in groups what do you do?  <i>We do stuff like, um I don't know. No I don't know.</i>            Are there any special rules you have when you are working in groups?            Can you tell me what those rules are?  <i>Yes, there's that you have to be quiet and sensible. When you're working outside you've got to make sure you don't disturb the other classes.</i></p>
10.	<p>Occasionally teachers ask children to teach other children or help them with their work.            Have you ever been asked to do this?  <i>Yes.</i>            What did you do?  <i>[teacher] yesterday gave me and [named student] a sheet and we had to use them as our maths sheet and then we used them as answering sheets so that green group, the lowest group can work out answers easily if they can't figure them out themselves.</i>            So did you go over and help green group?  <i>Yes.</i>            Do you think the other child learned something?  <i>Yes</i>            How do you know?  <i>Because their perspective increases slightly.</i></p>
11.	<p>Do you have special friends in this class?  <i>Yes.</i>            What things do you play with them?  <i>We play sports; we make up games and the like.</i>            Do you ever play with children who are not your special friends?  <i>No</i></p>

Number	Question
12.	<p>Some children have extra help with their school work.            Are there any children in your class that do?  <i>Yep.</i>            What sort of extra help do they get?  <i>They get, the extra help that they get is like real good people at subjects who are finished and have free time they usually help out and sometimes the teacher and the teacher aides help them out as well if they're real real stuck.</i></p>
13.	<p>What do you like about this class? Is there anything you would want changed?  <i>The thing I like about the class is that everyone is friendly and they are no bullies in the class and that your, when you ask someone if you want to join in with something the answer is always yes.</i>  <i>Yes. I hope that we get a class computer because I don't, the rest of the classes do except for our class and room 14</i></p>
14.	<p>Is there anything else you would like to tell me about your class?  <i>We have group points. The same groups that we have in reading. We have class money. If we finish, if the class finishes all their work we all get free time.</i></p> <p>You say you've got class money. How does that work?  <i>Well, when you get your home book signed and you earn money by your parents signing your book.</i></p> <p>What can you spend your money on?  <i>You can spend it on free time. You can spend it on an extra night for homework.</i></p> <p>Do you mean no homework for an extra night?  <i>No you get an extra night for homework so that you can finish it.</i>  <i>And you can buy the class a game. You can buy art. You can buy an afternoon of art.</i></p> <p>How much money would that cost you, to buy an afternoon of art?  <i>\$12.00.</i></p> <p>So it would take you a while to save up \$12.  <i>Yes.</i></p> <p>Anything else you would like to tell me?  <i>Um no.</i></p>

## Appendix X

### Summary of data from Teacher Reflection Journals

#### Summary from Tina's Journals

Question Topics	Journal One	Journal Two	Journal Three
Activity Description	Communicating ideas through visual arts, dance, drama and music	Maths warm up activity (whole class)	Box construction of animals
Factors guiding choice of activity to reflect on	"Meaty" topic for five year olds. Needed to determine prior knowledge for future planning	Needed to cater for all children's needs and abilities if choice of activity	Needed to determine whether prior activities around distinguishing animals and their body parts would follow into construction activities
Outcomes, Objectives, Goals	That children would understand what visual arts, dance, drama and music are	Concept of before/after would be understood	Animals are different and what makes them different from each other Construction is a form of art
Preparation Positives	Use of photos	Having a variety of tools that the children could use	Activities designed to teach about different body parts and how animals move
Preparation changes	Focus on one media at a time	More activities to cater for all levels of knowledge	A greater variety of boxes
Delivery positives	Use of questioning to stimulate discussion	Chanting and clapping Asking children how they got answer so that others could have a model and teacher could assess	Use of pictures and referral back to animal sketches. Looking at boxes and how they might be used in animal construction
Delivery changes	One media at a time	Encourage those children who didn't participate (no method given)	Nil
Evaluation of lesson description	Assessment of children's knowledge – no description of how	Jotting down observations in scrapbook kept for that purpose – can monitor progress, individual needs and future planning	Pre and post sketches of animals to determine how their knowledge developed during the art experience
Retain or repeat in future	Consolidate and build on prior knowledge	(Answer didn't address question)	
Change in future	Focus on one area	No response	
Factors enhancing children's participation	Photos Music	Variety of tools used Clapping and chanting Use of whiteboard	Use of pictures, books, puppets, movement and dance
Participation barriers	Prior knowledge of media was poor	No knowledge of the concepts of before or after	Little knowledge of different animals
Future action to overcome barriers	Use concrete examples of media not just photos e.g. making music	Use of children in time and space so could see where they were (place in a line)	More focus on different animals and their differences
Feelings, emotions, opinions	Teachers knowledge and enjoyment of media helped with children's understanding	Nil	Nil
Assumptions guiding planning	That children would have knowledge of and experience in different media forms	That some children wouldn't know the concept and others would just need reinforcement	That constructing animals from boxes would be a relatively uncomplicated activity and would be enhanced by pre sketching and other activities

*Enhancing teacher learning in inclusion*

Question Topics	Journal One	Journal Two	Journal Three
Assumptions now questioned	Depth of understanding (on children's part) Not questioning own assumptions?	Nil	Children's physical abilities to construct (e.g. put two boxes together) was not well developed. Needed extra adult help
Other reflections		Because some children appear to understand the concept of number and others didn't, what exposure to number as pre-schoolers did they have?	Activity hadn't concluded at time of reflection

***Summary from Janine's journals***

Question Topics	Journal One	Journal Two	Journal Three	Journal Four
Activity Description	Symmetry in Maths	Spelling re-test	Language Features – personification – use of poem to illustrate	Creative Writing – using descriptive language
Factors guiding choice of activity to reflect on	Teacher felt that maths concepts got lost in “art” activities	Activity is core to programme and was introduced through observations on teaching practice	Was a new activity to teaching practice	Because children fail to use adverbs and adjectives to describe their feelings and ideas
Outcomes, Objectives, Goals	Maths is around us in everyday life	Spelling words are known	Personification is a strong form of describing something	Use of adverbs and adjectives helps the reader to build up an image in their head
Preparation Positives	Tapa cloth Art supplies available for the children	Had prepared the words on the board – no waiting for children	Use of a website to find activity	Boards written up
Preparation changes	Narrow their focus (answer not related to preparation)	None	None	Find different poems
Delivery positives	That children thought they were doing art	Follow usual procedure	Poem was straight forward and used personification clearly and accurately	Instructions given orally and written Examples given on how to embellish a simple story
Delivery changes	Need to remind children of focus of lesson – geometry	None thought of	Photocopy the poem for poor readers so that they could concentrate on language features	Children to write bones of story and then embellish on edit – get the concepts down first
Evaluation description	Evaluated children's focus on colour rather than patterns	No evaluation	Children had to underline all personification in poem – took books in to check on children's understanding of concept	Checking to see if students met learning criteria
Retain or repeat in future	Use of colour	Continue with usual	Use the poem again	
Change in future	Restrict range of colours	None	Photocopy poem for poorer readers (children required to copy poem before marking examples of feature)	(See delivery changes)

*Enhancing teacher learning in inclusion*

Question Topics	Journal One	Journal Two	Journal Three	Journal Four
Factors enhancing children's participation	Because it wasn't considered maths those children experiencing difficulty in maths participated freely	Nil		Raining at time of lesson – helped with imagery
Participation barriers	Focus on colour rather than symmetry	Having to copy from board rather than a sheet beside them	Fine motor skills – copying	Children focussed on sentence structure rather than on imagery
Future action to overcome barriers	Focus more on the patterns	Photocopy a list	Photocopy the poem	(see delivery changes)
Feelings, emotions, opinions	Relieved that all the children participated enthusiastically	Confident because am comfortable with repeat practice	Excited that the children had begun to recognise concept	Felt good that students developed an understanding of what adverbs and adjectives were
Assumptions guiding planning	That less able children would enjoy the activity		That by using web site I would get good examples	That lots of rain recently would help students with ideas
Assumptions now questioned	None		Assumptions were proven correct	Children are unaware of what influences them
Other Reflections	Integration of maths and art enabled more children to participate	Reflected because of routine practice – found it difficult to reflect on because of doing the same thing for so long	Activity would work better as group activity rather than whole class activity	