Children's Experience Of Learning:

A Naturalistic Inquiry Into the Mainstream Education of Special Needs Students in New Zealand

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ABSTRACT

Current trends in New Zealand schools for the teaching of students with special abilities, learning difficulties, or metacognitive deficits are to retain these 'special needs' students within mainstream classrooms, although schools often supplement regular courses with 'pullout' programmes where necessary. However, mainstream inclusion for 'special needs' students has been criticised on the basis that the structure and organisation of New Zealand schools does not support individual interventions or the planning of flexible programmes. This study contextualises this criticism by providing a qualitative record of the learning experiences of a group of children classed as 'special needs' students. It may stimulate readers to understand the wide range of needs in New Zealand schools.

The research sample was composed of 'special needs' children within Auckland schools, as classified by their teachers and parents; it included 'booster class' students who were not achieving to the levels expected for their chronological ages, as well as 'gifted' children from 'extension classes'

who had demonstrated advanced academic performance or had the ability to perform. Cognitive research suggests that these special learning needs are not simply innate within each child, but are characterised by either unusually high or low levels of cognitive and metacognitive strategy use, involving a mixture of learned behaviours, beliefs and skills. Research has shown these to be closely related to the learning environment and social context of the classroom. This study aims to discover how a range of 'special needs' students perceive contextual classroom influences that may help or hinder their ability to focus on learning.

The data is also analysed in light of goal orientation or motivational theory about the self-perceptions, social goals and constructs that motivate students to engage in classroom tasks and activities. Children develop metacognitive or 'executive decision-making' processes that inform their judgements about where and how to strategically apply effort and skills. The different levels of metacognitive function displayed by sampled 'special needs' students reflect the dynamic interaction between a child's growing knowledge and abilities, and the social context of their learning environment. Self-perception of ability, the confidence to effectively accomplish goals, and attributive beliefs about the causes of success and failure can either motivate interest and effort in academic activities, encouraging further metacognitive development, or conversely reduce motivation and lead to self-defeating behaviours and beliefs, such as task avoidance. Therefore, emotional reactions to the learning environment, such as unhappiness, anxiety, boredom or frustration, can either boost or retard academic learning and performance.

The findings of this naturalistic inquiry indicate that children are able to recognise a range of influences on their ability or motivation to engage in school learning activities; their accounts often correspond with issues identified in other educational research, typically in empirical cognitive and

developmental studies. The children raise negative factors such as inappropriate levels of language difficulty, degree of challenge in set tasks, anti-social classroom interactions, and problems with noise, interruptions and availability of teacher guidance. However 'special needs' learners also reported that co-operative social interactions, and peer and teacher encouragement assisted their motivation and learning.

Therefore it seems that growth of motivation and metacognition in 'special needs' students learning in mainstream classrooms may be achieved by ensuring that language and learning material is both readily accessible and matched to individual learning needs. Moreover since social interaction is shown to be beneficial to achievement in learning, the promotion of classroom climates that foster co-operation and relationship-building goals, in contrast to instrumental dominance objectives, thereby supports adjustment to the school environment and productive involvement in learning tasks. Negotiated interventions based on an understanding of children's fundamental perceptions and goals, within ongoing, mutually communicative social relationships and enriched learning environments, may assist children to improve their motivation, metacognitive abilities and performance.

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CHAPTER ONE
INTRODUCTION

There is a persistent tension between educational research and its application. The traditional expectation tends to be that the 'results' of 'scientific study' will be applied to teaching practice. However this thesis aims to contribute to a more integrated process, in which dialogue flows from classroom experience to other educational professionals, to 'provide the data and the subject matter which form the problems of inquiry' (Dewey, 1929, in Lageman & Shulman, 1999, p 58).

The study focuses on the learning experiences of children classed as 'special needs' students in New Zealand schools, attempting to provide a record of their observations and ideas about motivation, learning and academic achievement. The research sample includes students from 'booster classes' who are not considered to have reached the levels of academic achievement expected for their chronological ages, as well as students from 'extension school classes.' These 'gifted' children are either performing academically beyond the level of their peer cohort, or are considered to have the potential to do so.

Therefore, this study aims to describe the accounts of children who differ from the norm, and learning experiences that diverge from the mainstream. However, it does not attempt to quantify or evaluate the ways in which participants' levels of achievement vary from the accepted standards, accepting the classification of 'special needs' students, as assessed by teachers and parents within the schools (appendix A, B, C, D). The designation of 'special needs' implies that these students require unique learning environments or opportunities, and to some extent this thesis seeks to investigate ways in which students feel their 'special needs' are being met within the context of the educational system that is operating at the time of the study.

The research sample encompasses children with learning abilities that are judged to be either more or less advanced than the level of their peers. Concepts of ability are complex, but include components that are biologically based such as genetically determined perceptual efficiency (Campione & Brown, 1978), together with adaptive factors such as effort, motivation and appropriate approaches to learning (Renzulli & Reis; 1985; Ryber, 1998). These latter elements partly determine children's capacity for learning behaviour and their ability to interact effectively with their environment; however the extent to which both effort and ability are 'strategically directed' is also crucial (Anderson & Jennings, 1980). Studies of the process of learning report that 'gifted' children tend to learn new strategies with greater ease, use strategies more efficiently, transfer them to new tasks and verbalise their thinking processes more articulately than their age peers (Cheng, 1993). Conversely the group of 'special needs' students classified as 'learning disabled,' or having 'learning difficulties' (LD), "do not seem to know how to attend properly, how to remember more effectively, or how to use language more appropriately" (Chapman, 1992, p.66). These children do not extrapolate information from strategy use and seem to need explicit advice on how to approach specific tasks (Borkowski, Day, Saenz, Dietmeyer, Estrada, & Groteluschen, 1992).

The skills and types of information in these descriptions have been classed as 'cognitive' and 'metacognitive' knowledge (Borkowski, Johnson & Reid, 1987), and this study is an attempt to investigate this class of concepts by describing the experiences of children with contrasting learning processes, in the hope that the data may be useful for work with 'special needs' students, as well as for general understanding of cognitive and metacognitive knowledge.

Cognition and Metacognition

Cognitive knowledge denotes the repertoire of strategies with which an individual thinks, and affects how they collect, store, interpret, understand and

use information (Chapman, 1992). How a student approaches learning also depends on their understanding of the learning process, together with what they know about their own behaviour as learners. Awareness of these thought processes is usually developed as children reflect on strategy use, which helps them to accomplish tasks by informing and directing their actions (Borkowski, Carr, Rellinger & Pressley, 1990). This has led to the theoretical conception of the exemplary learner or "the good strategy user" as having an idealised level of learning competence (Pressley, Goodchild, Fleet, Zajchowski & Evans 1989; Pressley, Symons, Snyder & Cariglia-Bull, 1989). Contemporary theories view children's abilities as transformable, and emphasise explicit learning about skills and self-regulation.

The executive control process that is responsible for planning, monitoring, testing, evaluating and revising action is described as metacognitive. Metacognitive knowledge' describes understanding of cognitive thinking strategies, and promotes transfer and generalisation of learning in a range of situations (Cole & Chan, 1990). Metacognitive understanding includes awareness that use of thinking strategies requires effort, but that the exercise of planning before taking action usually produces success. It also teaches children that initial strategies and efforts sometimes need to be modified as tasks proceed, and that competing goals and behaviours, such as social interaction, can interfere with accomplishment of tasks (Borkowski *et al.*, 1990; 1992; Borkowski *et al.*, 1987). Students who are metacognitively aware develop confidence about their abilities because they possess effective learning strategies and know how to maintain these strategic behaviours; this assurance provides motivation to learn (Pressley, Borkowski & Schneider, 1987). Children with high ability consistently display more metacognitive skills than their peers (Kanevsky, 1992), while many children classed as 'LD' do not seem to be metacognitively aware, and are not confident or motivated about their own achievement (Borkowski *et al.*, 1992).

Thus, students' beliefs about the effectiveness of goal directed behaviour and their knowledge about the attributes of specific strategies, seem to interact to promote self-regulation and motivation and achievement in learning (Pressley *et al.*,1987). Practical teaching programmes have been designed to apply these concepts about learning patterns and processes to the education of 'special needs' students by attempting to facilitate their acquisition and/or use of cognitive and metacognitive skills (e.g., Betts, 1985; Duffy, 1986; 1987; Palincsar & Brown, 1984). However an overly simplistic interpretation of metacognition as the "executive manager of all cognitive and behavioural functioning" can lead to teaching interventions which focus specifically and/or wholly on individual metacognitive deficiencies, to the exclusion of external or environmental factors that may equally influence cognitive ability (Larson & Gerber 1996, p.155). It is argued that metacognition is a socially constructed, transpersonal phenomenon, occurring within ongoing social relationships that provide the "basis for effective communication, explanation, and instruction that forms the mechanism of metacognitive growth" (Larson & Gerber, 1996, p.160).

Academic and Social Achievement

Therefore teachers must be aware that the development of metacognitive awareness can be dependent on their students' emotional states and their assumptions about the causes of academic success and failure (i.e., attributions). Teaching interventions based on mediated learning (Vygotsky, 1978, in Ryba, 1998) emphasise the importance of social interaction as a framework for developing cognitive processes, and this study attempts to acknowledge issues raised by children's social environments and by their individual responses to complex classroom interactions and constraints. For ideal metacognitive functioning to occur, a child must have the capacity to control impulses, delay gratification, regulate mood, control distress, to empathise and to have hope (Goleman, 1995, in Ryba, 1998). Many children experience problems with these responses, for example the noticeable cases of attention deficit hyperactivity disorder in either gifted children or children who also have other learning

problems. Perhaps less obvious examples include children who have negative attitudes to themselves as learners or to social involvement. These children tend to be stalled metacognitively by their pessimism, which causes them to view past mistakes as debilitating rather than learning from them, and prevents them from setting appropriate goals for the future, or developing strategies for achieving these plans (Pervin, 1993; Pintrinch & Schunk, 1996).

Borkowsi *et al.* (1992) argue that a 'self-system' construct underpins the development of metacognition and helps to determine how a child will respond to academic tasks. The notion of self-system involves a learner's self-concept or self-perception of ability, together with their self-efficacy, or the confidence to effect action, causal attributions or beliefs about the causes of success or failure, and expectations related to achievement (Borkowski, 1992; Chapman & Tunmer, 1996; Larsen & Gerber; Wong, 1991).

Repeated failure experiences at school tend to lead children with 'LD' to develop a self-concept of low ability, a lack of confidence about the accomplishment of academic tasks, feelings of ineffectiveness and lack of control over learning events or achievement (Chapman & Tunmer, 1996). This kind of self-system is debilitating for students as it further prevents them from acquiring adequate strategic or metacognitive knowledge. Because they perceive that effort is useless in the face of inevitable failure, these learners lose motivation to cognitively engage in classroom tasks and demonstrate behaviours that further restrict their own learning opportunities (Borkowski *et al.*, 1992). It may be noted that Western society places high value on ability, and the social pressures of being perceived as 'lacking' may cause children to experience a decline in self-evaluation and therefore of self-worth (Covington, 1992, Borkowski *et al.*, 1990). Tunmer & Chapman (1996) consider that it is not students' attitudes towards specific tasks that primarily cause academic failure or underachievement, but rather their 'learned helpless' behaviour (Dweck & Repucci, 1973) and negative self-perceptions (Licht & Kistner, 1986).

Lack of motivation due to negative self-systems can be a primary cause of underachievement, as motivation has been established as "a prerequisite for learning, and its absence may be a cause of learning problems, a factor maintaining such problems, or both" (Adleman & Taylor, 1993, p.163). Conversely, feelings of pleasure or positive emotion related to academic achievement may stimulate motivation and encourage persistent learning in 'gifted children'. It seems that "differences within children's self and metacognitive systems account, in part, for between-group differences among gifted, learning disabled [LD] and average-ability children who are classified as 'helpless'" (Borkowski *et al.*, 1990, p. 66).

However, cognitive and emotional functioning can act against achievement goals, as constructive "metacognitive judgements & beliefs guide decision making at critical points in classroom learning" (Paris & Winograd, 1990, p.30). For students the decision whether or not to cognitively engage in task activity, or expend effort in learning situations, depends on considerations such as the presence of distractions, expected rewards, expectations for success and the amount of effort required to accomplish a task. The choice to invest effort is traded off against a student's attitude and their expectations for success or failure. Thus, from their viewpoint,

> *"is it worth the risk to try hard on a task in which the expectations for success are low? Most students would rather avoid a task than to work hard for little gain. Conversely, many students are not motivated to expend effort on a task that is easy to master and offers little sense of enjoyment or mastery. Pride and self-competence are not cultivated by either circumstance"* (Paris & Winograd, 1990, p. 30).

Therefore, because these judgements also implicate metacognitive functioning and self-systems in the underachievement of gifted learners (Clark,

1992; Davis & Rimm, 1994), it seems that teaching that incorporates cognitive and metacognitive strategy instruction is of value to a cross section of 'special needs' and mainstream learners. Rimm (1997) suggests that when "learners lose their sense of [cognitive] control over school outcomes ... teachers are less likely to identify these children as gifted because their intelligence or creativity may no longer be evident in the classroom" (p.418). In fact many gifted students in New Zealand demonstrate a significant discrepancy between their ability and their performance (Ministry of Education, 2000).

Special Needs Teaching in New Zealand

In New Zealand, prior to the Education Act of 1989, services for 'special needs' students were defined by administrative categories for blind, physically disabled, intellectually handicapped, speech impaired and maladjusted children, and those with reading and language difficulties (Chapman, 1988). Special abilities and LD (metacognitive deficit) have never been formally recognised as an area of special education (Chapman, 1992). The provision of intervention for learners with metacognitive deficits or learning difficulties has been confounded by an inability to differentiate LD students from other learners. Studies have found no clear boundaries between LD and other learning problems and "in reality it's hard to find the "real" LD child ... too many non-LD children can have similar problems as LD children" (Chapman, 1992, p. 52). Hammill (1990) and Torgesen (1991) contend that children with severe learning problems may also have other disabling learning conditions that coexist with LD. Therefore although the inquirer was initially interested to study metacognitive deficiencies in relation to LD, it was not practical to employ LD as a criterion for participant selection in this study, due to problems of definition and identification.

New Zealand's current policy for special education is non-categorical, to allow for a broader view of special needs and to emphasise teaching rather than focusing on students' deficits or disabilities. A non-categorical definition also recognises that any child might have LD along with other known learning

problems or special abilities (Chapman, 1992). The shift to this post reform approach has seen a marked trend towards inclusion of children with special educational needs in regular classes (Mitchell, 1995). A variety of special educational delivery options have been developed to cater for special needs, for example in-class interventions, pullout remedial and enrichment classes, full-time accelerate classes, or classes for behaviour difficulties and sessions of one-on-one instruction. In addition private providers offer 'special needs' support either in consort with state funded education or in place of it.

However, although the general trend has been to increase attention on learning problems associated with LD and special abilities (Mitchell, 1995; Moltzen, 1993; Moltzen & Mitchell 1992), the problem with laissez-faire inclusion of special needs students in mainstream classes is that the structure and organisation of New Zealand schools does not support individual assessment or programme planning for a wide range of needs (Ryba, 1995; Hood, 1998). When the curriculum is not individualised, and contains tasks and expectations that are unrealistic for the developmental and academic level of these students, 'special needs' students can develop a negative self-system, followed by potential decrements in motivation, due to their failure to develop cognitive and metacognitive skills (Chapman, 1998). Chapman (1988) argues that to counter these problems mainstream classrooms should provide individualised, co-operative, non-competitive learning environments and programmes for 'special needs' students (citing Stainback, Stainback, Courtnage and Jaben (1985), and Ames (1981)), and that these features are also generally beneficial in all effective teaching (Wang & Baker, 1985-86).

In conclusion, the different levels of strategy use and metacognitive processing demonstrated by 'learning disabled' or 'gifted' groups of children may be attributed to a mixture of capabilities, learned behaviours, beliefs, and factors related to the learning environment or social context of the classroom. In

studying children's contrasting concepts about learning, this study aims to discover how 'special needs' students perceive contextual classroom influences that may help or hinder their ability to focus on learning, and to conduct an analysis of the metacognitive judgements which motivate students to engage in tasks and activities. It aims to avoid the alleged deficiencies of much metacognitive theory by investigating the self-perceptions, goals and social concerns that occupy the thoughts of children and teachers within natural classroom contexts (Larsen & Gerber, 1996, p.158).

However, because a valid assessment of these qualitative, social and cognitive dynamics requires that the researcher does not impose his or her own values and interpretations on the findings, this study followed the processes of naturalistic inquiry and was guided by an 'emergent design,' as described in the methodology. Therefore a very broad range of reading, that included, motivational, personality, communication, cognitive-educational and developmental literature was narrowed only as the data began to be collected and collated. The literature review in this document consequently focuses only on a specific area of theory that was deemed to be most relevant to the themes that emerged from the results: current cognitive and goal orientation theories about the relationship between learning, motivation and metacognition in schools. It has also been placed after the chapter describing the methodology used for data collection, collation and interpretation.

CHAPTER TWO
METHODOLOGY

In order to produce research about the learning experiences and motivation of 'special needs' children, which could be understood and applied within the social context of the school environment, it was important to develop a methodology that was capable of acknowledging and encompassing the complexity of interactions that influence learning. After a thorough survey of various methodological approaches it was decided that the key principles of qualitative research, within the post-positivist, naturalistic paradigm, would best support this purpose. This chapter outlines the methodologies that have been developed to gather and interpret multifaceted social and cognitive data, especially in the context of childhood learning environments, and explains how they were integrated into the research design in practice.

Qualitative Naturalistic Methodology

Naturalistic inquiry enhances understanding of children's realities by producing a 'thickly' descriptive record with which readers may identify, comparing similarities and/or differences from their own experience (Lincoln & Guba, 1990). Observations are conducted in a naturalistic setting, in this case within the classroom, and the aim is to construct a holistic word picture, rather than a quantifiable data set or representative range (Creswell, 1994). This information can form a detailed archive of material for reinterpretation in other contexts and often raises questions for future research (Adleman, Jenkins & Kemmis, 1976).

In addition, naturalistic inquiry may prompt and facilitate change by revealing contradictions and imbalances embedded within the social context of the study. It is hoped that this case study may empower participants, their families and teachers, assisting them to recognise and understand their own circumstances

and, where necessary, to co-operatively effect change. Aldeman *et al.* (1976) consider that a natural case study with which others may empathise can provide "a step to action...Insights may be directly interpreted and put to use for staff or individual self-development, for within-institutional feedback, for formative evaluation, and in educational policy-making" (p.17).

The processes of naturalistic inquiry have been developed to facilitate analysis of complex social issues by acknowledging multiple, value-based perspectives. They attempt to encompass the many realities that arise from different experiences, recognising that reality cannot be understood in isolation from its context and that knowledge is often socially constructed by parties active in the research process (Lincoln & Guba, 1985; Schwandt, 1994). The aim of qualitative inquiry then, is not to search out evidence to prove or disprove hypotheses (Lincoln & Guba, 1985) but rather to describe, explain, clarify and demystify the social constructions that researchers and participants create around themselves (Beck, 1979). This study aimed to investigate the complex fields that make up learning environments, and therefore used a range of the methods developed by naturalistic inquiry to elicit in depth, descriptive information, including interviews, focus groups and narrative storytelling.

The design of the study was kept flexible in order to avoid the researcher's constructs or notions of the situation limiting its scope (Creswell, 1994). Because a naturalistic inquirer does not presume to know all about the participants of the research in advance, the research objectives for this study were initially kept broad, but were narrowed and refined as the study progressed. Although there is "some debate about when someone doing a qualitative study should begin a review of literature" (Glaser, 1978, in Bogdan & Biklan, 1998, p.163) this study developed from broad reading that was iteratively directed by themes that emerged from the methodology and data. The direction of the study was gradually determined as the data was collected and examined, and the inquirer was able to respond to patterns. Lincoln and Guba (1985, p.209) refer to this

process as the "emergent design." Therefore the literature review in this thesis is placed after the methodology, to indicate that its focus has been determined from the consolidation of a wide range of readings to focus on a particular paradigm or framework which forms a close fit with the data that emerged.

Naturalistic inquiry uses a variety of data collection methods, but the main data-gathering instrument is the researcher, who inevitably informs the study through both tacit and propositional knowledge as he or she processes and synthesises data. Tacit knowledge is derived from experience and involves "unexpressible associations which give rise to new meanings, new ideas, and new applications of the old" (Stake, 1978, p.6). Propositional knowledge on the other hand is explicit knowledge "composed of all interpersonally shareable statements" (Stake, 1978 p.6). This study aimed to ensure that the researcher's views did not dominate data collection or interpretation, and that the value-laden knowledge the researcher brought to the study was transparent, allowing readers the opportunity to make their own compensation for biases (Lincoln & Guba, 1985).

Because it uses the human-as-instrument, naturalistic inquiry has been subject to charges of personal bias (Bernstein 1974; Bogdan & Biklen, 1998). However, Lincoln and Guba (1985) argue that "all instruments are value-based" (p.39), while only the human instrument is able to recognise these biases and both manage their impact and make them explicit, for example by checking assumptions with respondents. Therefore this study employed several empirical procedures designed to enhance the validity and credibility of the research, and also aimed to create the quality and kind of interaction between the inquirer and the participants that would allow for negotiated interpretation, or a mutual shaping of data. The benefits of a human researcher include the adaptability to simultaneously collect and process information from different sources and/or levels, to locate a target without prior planning, to respond flexibly to participants

and circumstances, and to explore atypical responses in order to allow an holistic understanding of a situation or phenomenon (Lincoln & Guba, 1985).

Gathering Qualitative Data from Students

In designing this research the inquirer was aware that accessing participants' privately held beliefs about learning within school environments would not necessarily be a straightforward task. For example, Watson (1993) argued that probing into circumstances associated with personal success or failure involves comparison and evaluation, and may induce feelings of self-consciousness. Harter (1996) found that young people in school often stated what they thought others wanted to hear rather than expressing their own beliefs, a behaviour which may be explained by Goffman's (1959) contention that managing impressions and manipulating information are everyday aspects of social interaction that become particularly salient in unfamiliar situations. Cornwell (1984) argued that research participants do not intend to mislead, but instead try to protect themselves by reporting non-controversial 'public accounts' of reality that uncritically reinforce commonly accepted assumptions. This study attempted to elicit private 'accounts' from respondents, which Cornwell (1984) describes as less guarded responses given when participants feel secure. Private accounts are a more accurate reflection of participants' beliefs, but are more difficult to access through direct questioning. Cornwell (1984) observed that the shift in emphasis from public to private accounts corresponded to a shift in concern from self-presentation to a focus on the communication of content and detail.

Thus, it was necessary to select data gathering methods that enabled respondents to be comfortable and not self-conscious. In addition, methods were required that gave children time to reflect on and elaborate their responses and to return to topics as they thought of more to add. A survey of various data collection methods discovered three that seemed particularly applicable to the aims and limitations of this study: focus group discussions, individual interviews, and narrative storytelling.

Firstly, this study used interviews with both individuals and focus groups (in the generic sense of the term as described by Denzin & Lincoln, 1994). Focus group discussions enable insights gained from the cognitive interaction of ideas among participants (Mertens, 1998), which may benefit group members by enhancing understanding of the issues under consideration (Cohen & Manion, 1994). However, group discourse may also interfere with individual expression or unduly influence individual perceptions (Denzin & Lincoln, 1994). Therefore these discussions were conceived as group narratives and examined on a continuum that spanned from individual stories with no consensus at all to accounts that were endorsed by all members of a group (Polkinghorne, 1988). Focus group interviews were also flexible, allowing opportunity for participant reflection and elaboration (Denzin & Lincoln, 1994).

Group and individual conversations were guided by semi-structured questions (appendix E) derived from Bronfenbrenner's (1979) Ecological Model of Human Development (appendix F) and Anderson's (1990), Scale Description and Sample Items for Learning Environment Inventory (appendix G) (adapted from Frazer, Anderson and Walberg's (1982) Learning Environment Inventory). The questions provided broad fields within which children could explore what they believed either helped or hindered learning, and comprised the following areas: interactions between students, teacher and students, students and material to be learned, students and the classroom environment, and students and the school-wide environment. Some of the questions were in the form of stem sentences, for example "*Kids help me with my learning when ...*"

In addition to these five categories were questions intended to:

(a) Focus participants' attention on the research and stimulate consideration of the place of schooling in society.

(b) Prompt memories of learning experiences encountered at school, both academic and social.

(c) Probe knowledge of different approaches to learning.
(d) Provoke discussion about out of school activities.
(e) Compare learning experienced out of school with learning in school.

These questions aimed to help children focus on interactions within their learning situations at school and provide boundaries within which discussion was likely to be most productive. They also provided consistent reference points for analysis of data from the different groups and individuals, which assisted in the systematic handling of information.

Thirdly, the aims of this study were found to be compatible with the intentions of descriptive narrative research within the naturalistic paradigm. Narrative research takes as its subject the stories that people tell; this data offers a rich resource for insights into diverse perceptions (Stiles, 1990), and is used in a variety of human situations including health psychology (Murray, 1997), psychoanalysis (Spence, 1982) and education (Casey, 1995). Involvement in story-telling shifts concern from self-presentation to focus attention on story detail, and the open-ended nature of stories in various forms allows the production of detailed accounts of the ordering principles that individuals or groups use to make sense out of events in their lives (Polkinghorne, 1988). This coincides with the search for personal or group beliefs about learning because stories are a familiar form of comprehension and communication that are widely used in everyday interactions (Mink 1978; Murray, 1997). They interweave mental constructions into sequences in the making of narratives (Polkinghorne, 1988). Although the present research employed narrative data collection methods it was not concerned with interpreting and explaining the complexity of individual student's self-constructs. Therefore analysis of the data generated was not subject to the sort of in-depth interpretation or supporting cultural and historical data that is associated with the narrative study of lives.

Stories can be viewed as organising systems that people use to establish the importance of past events and to anticipate or project possible outcomes of future events or actions (McAdams 1991; Polkinghorne, 1988). They may be consciously considered accounts, or interpretations that are held below conscious awareness. Narrative accounts are complex systems that involve interactions between events, across time. Culture, society and historical events, together with experience from personal life settings influence the stories that people construct, and constructed narratives influence peoples' understanding of themselves and their world. Neither narrative nor naturalistic research conceptualises stories as realities or truths in the objective sense. The researcher was careful to recognise that the stories gathered in this study may have been descriptions of actual or vicarious experiences; they may have involved issues from past schooling or dealt with current concerns. Irrespective of their sources, the narrated themes were viewed as important because they represented issues or concern that had significance in memory (McAdams, 1991; Singer & Salovey, 1993).

In order to affirm the value and validity of a naturalistic inquiry such as this, Lincoln and Guba (1985) recommend the careful observation of criteria corresponding to those employed in the assessment of quantitative research. For example, empirical procedures to establish credibility, such as prolonged engagement, persistent observation, member checks, triangulation, peer debriefing and progressive subjectivity were carefully observed throughout this study, and will be discussed in the context of data collection and interpretation (Mertons, 1998). The processes of recording and reporting naturalistic observations were designed to guarantee that, although material cannot be generalised, it is transferable; that is the descriptions contain sufficient authentic data for a reader to make informed judgements, or for an independent auditor to document the process of the inquiry (Lincoln & Guba, 1985). Thorough recording of observations and analysis according to logical and explicit procedures also

ensures the dependability and confirmability of the research data and its interpretation (Stainback & Stainback, 1988).

Recruitment of Participants

Samples in naturalistic inquiry are purposive; that is, subjects and participants are selected because they are typical of the focus of the study, rather than random or representative of wider groups. In this case, several schools within the greater Auckland area were selected on the basis that they offer supportive programmes for special needs students and have sufficient populations that a reasonable number of special needs students would volunteer. Confining the geographical range to locations within Auckland also enabled the researcher to make several visits to each school while the research was in progress, to ensure credibility by prolonged and persistent observation.

Schools were firstly contacted by telephone and those who were interested in participating were informed, in writing, about the nature of the research and its operational requirements, including ethical considerations (appendix H). Three school principals expressed interest: one from a private school, one from a state primary and the other a state intermediate. The state primary school has mixed ability classes where children are supported with one-on-one reading and special enrichment activities, but by virtue of coincidence the particular classroom chosen for targeting had a high concentration of special needs students. The intermediate school streams 'accelerate' students, while children with learning difficulties are 'mainstreamed' and their special learning needs supported in pullout programmes called 'booster classes'. Special needs teachers liase with regular classroom teachers to exchange information in support of their pupils. This study invited participation from children from the booster classes. The third participating school was a private provider specialising in pullout programmes for primary and intermediate age children with special abilities who attend a variety of Auckland schools.

Following the principals' approval and discussion with the schools special needs co-ordinators and teachers, students and their parents and or caregivers and teachers were contacted in writing and invited to participate in the research. Invitations and information sheets (appendix I) explaining the purpose of the research and the procedures involved were sent to every student and parent taking part in special group programmes. The voluntary aspect of participation was stressed and the children were told they could withdraw from the study at any time or at any stage. In the event of withdrawal, participants were assured that any written records could be destroyed on request. A consent form (appendix J) was made available, and was signed by every participant's parents or caregivers to indicate informed consent.

Confidentiality and anonymity are always issues in qualitative research, particularly with regard to interviews and focus group discussions. Because the sample for this study was small it may be possible to trace participants attending special classes by knowing which school they attended. Therefore the anonymity of schools was preserved by using substitute names, and individual privacy or confidentiality was secured through the coding of data, use of unnamed quotations in the reporting of data, and a focus on stories and their fictional characters. However, as it was inevitable that members of each focus group would learn about the opinions of their fellow members, attention was drawn to this point on the information sheet (appendix I) to ensure that it was considered before participants gave consent (appendix J). Once participation was confirmed, a time and date was arranged for the research to commence.

The Sample

Fifty-eight children over the three schools elected to participate in the research at the commencement of the project in 1999. However, five volunteers from the state primary school did not have special learning needs. Although their contribution to the study was welcomed and valued, as a separate group of

regular needs students with potentially different views, their numbers were too few to provide balanced comparative data. Thus, analyses for the study were based on data collected from the remaining fifty-three participants, all of whom were special needs students between the ages of ten and thirteen years. Thirty-four children attended booster classes. Four children received additional individual tuition. Nineteen children from the classes for special abilities participated.

Participants from these special needs classes had been effectively pre-selected by the school they attended, on the basis of specific information and criteria such as standardised tests. For example the children most likely to benefit from additional tuition in booster classes were identified through Progressive Achievement Tests (PAT) in the areas of reading, mathematics and listening comprehension, as well as school devised tests, teacher reports and assessments of student attitudes towards learning (appendix A). Teaching staff from the respective schools consulted with parents or caregivers of the children concerned to make decisions regarding placement on special programmes. Children achieving above the expected academic level for their chronological age are considered for extension school classes with reference to the school's definition of special abilities (appendix B), and assessments of students' characteristics, learning skills, intellectual development, creativity, attitudes to learning, and personal and social development. These are partly assessed through interviews with the student and their parent/s or caregivers and questionnaires for parents (appendix C) and teachers (appendix D). The school also requests an educational psychologists report, if one is available. Selection for this study then was made purely on the basis of inclusion in 'special needs' classes, and willingness to volunteer for participation.

Principles of Data Collection

Qualitative research such as this study must establish credibility, to address the issue of internal validity, or "how accurately a variable fits a concept" (Bouma, 1996, p.82). The criteria employed during data collection to ensure that the researcher accurately represents participant viewpoints (Mertens, 1998) include 'prolonged engagement', 'persistent observation', 'member checks' and 'triangulation'.

'Prolonged engagement' requires the investment of sufficient time to become familiar with the setting to be researched, to test for misinformation, and to build trust. In this study the inquirer organised preliminary discussions with Special Needs Co-ordinators and/or the Special Needs Teachers about the way learning needs were addressed in their school. These were conducted by meeting or in some cases by telephone. A copy of the schedule of questions was provided to principals and the other special needs staff in order to gain feedback about the requirements of the study and integrate it with the timetable so as to cause least disruption to participants. Principals and teachers made useful suggestions about organisational matters and without exception were welcoming and supportive of the proposed study.

The researcher also spent time as an observer in the various classrooms in order to accustom the children to an outside presence in their environment. Familiarity with the researcher's presence reduces a tendency to overreact, or to misinform the inquirer with spurious public accounts (Cornwell, 1984). In addition, prolonged engagement allows the researcher to realise and highlight any distortions in data collection or interpretation that are based on "a priori values and constructions" (Lincoln & Guba, 1985, p.302). Thus, if the inquirer were to enter the research with misinformation, then proximity to the setting and the participants would provide alternative knowledge to challenge inappropriate preconceptions.

'Persistent observation', as Lincoln and Guba, (1985, p.304) point out, is what renders prolonged engagement purposeful and not just "mindless immersion". The intent of persistent observation is to recognise the attributes of a situation that have most relevance to the focus of the research. Qualitative observations occur in naturalistic settings without a predetermined framework (Adler & Adler, 1994). Lincoln and Guba (1985, p. 304) suggest that "if prolonged engagement provides scope, persistent observation provides depth". The inquirer observed and recorded a range of special needs lessons and student activities, making entries in a research journal (appendix K) which included salient details about the students and their physical environment, as well as dates, times and reflections about the process of the inquiry and the parallel progress of the literature review. Observations about classroom layout, wall displays, lighting, patterns of human interaction, frequency of interaction, characteristics of student groups, programme content and materials, non verbal communications and so on were recorded in note form and diagrams in the research journal. Later in the study aspects of this additional source of data provided support for some of the observations and beliefs that students articulated about special educational settings.

Ethical Considerations

Another reason for spending time in the setting prior to research was to build trust between researcher and respondents. Trust, according to Lincoln and Guba (1985) "is not a matter of personal characteristics... Rather it is a developmental process to be engaged in daily: to demonstrate to the respondents that their confidences will not be used against them" (p.303). Although students had signed a consent form indicating that they understood the purpose of the research, because the aims of this study conformed to the standpoint of the qualitative methodologies of emancipatory and naturalistic research, there were additional ethical considerations related to participant empowerment. In order to share power with respondents the researcher adopted a collaborative approach

(Etter-Lewis, 1996), in which participants were encouraged to know about the research, to make decisions about research proceedings and to teach the researcher about issues that were of concern to children at school. When participants have the opportunity to ask questions and have those questions answered to their satisfaction, then the basis of trust is established. Also, participants were encouraged to correct and explain if the researcher misunderstood or misinterpreted what was being said.

As children were involved in expressing personal thoughts that could become a source of humiliation, it was important to treat children with respect throughout the research and to affirm their sense of dignity (Bakan, 1996). Although individual dignity is subjective and differs between people and settings, a person's dignity represents their sense of wholeness and "offended dignity functions as a pain signal in the sphere of human relations" (Rosenwald, 1996, p.250). In order to avoid the potential harmful effects of humiliation as an outcome of this research, this study gave primary consideration to the needs and wishes of the children.

Trial of Question Schedule

Three students agreed, with parental consent, to trial the initial schedule of questions within a focus group situation; one student was interviewed separately. The focus group discussion took place in the home of one of the members and the interview was conducted in the home of the interviewee. The discussion and interview were recorded, timed and the tapes analysed by the researcher for possible improvements to the interview questions or procedures. Analysis of the process showed that sessions were too long and that some of the questions were unnecessarily complicated and required clarification. In addition, a 'Q-sorting' activity designed to encourage participant involvement, was considered too complicated and time consuming for larger groups of children in the classroom, and was dropped from the schedule. It appeared that individual follow up interviews, originally planned to clarify meaning in cases of doubt, were less likely

to be needed, although they were retained as an option. It proved to be more natural and easier to seek clarification of meaning during the interview rather than to wait for a further interview. In a similar fashion, the researcher also found this to be a suitable way to check her understanding and interpretation of the issues being discussed.

A technical problem also surfaced in the piloting of the question schedule. The audiocassettes used for recording proved inadequate at more than a metre or so away from the participant and consequently some of the conversation was indistinct. It was decided that the audiocassettes were to be hand held by participants when they were speaking and this technique proved to be successful in practice, discouraging the tendency for any one person to dominate group discussion.

Focus Group Discussions

The numbers of children participating in focus group discussions varied in size due to unforeseen changes to the timetable. The largest groups comprised six children and the smallest two. In all but one class the group members sat to one side of the classroom while lessons were in progress; the other discussion took place in an adjacent room. In all situations the main body of the class focussed their attention on the lessons in progress, and members of the focus group were able to be talk in confidence. Before each session the researcher explained the purpose of the study again, together with the research procedures to be used and the right of participants to withdraw. Any questions were answered, and participants then signed student consent forms, which were filed with parental consents.

During the discussions the researcher's role was to facilitate rather than to control conversations. In keeping with theoretical perspectives of qualitative research such as naturalistic and narrative paradigms, a flexible approach was adopted, permitting participants to digress as personal stories were told and

issues were discussed. In this way, participants maintained control of proceedings and their expansive responses often answered more than one question. They also returned to questions, adding more information and raising points for discussion. Within the context of the focus group, less guarded accounts emerged as students debated issues rather than giving self-conscious responses to direct questions.

The children decided amongst themselves who would speak first. All groups spontaneously devised orderly systems for passing the cassette-recorder from one child to another, giving each opportunity to contribute to the conversation. On occasions, individuals passed over turns to speak and at other times the discussion became more intense and the cassette-recorder was passed around quite quickly. Although in two instances the researcher encouraged speakers to allow other members a turn, in general participants assumed responsibility for the pace of discourse, telling the researcher when they had finished with one question and were ready to move on to another. The cassette-recorder was passed to the researcher when she had something to say and in this way she appeared more of a group member. In one group, after the researcher had posed the first few questions, participants suggested they read the schedule out for themselves.

During discussions participants did not always agree about issues and were not reticent in expressing their own differing views, as can be seen in the following example where two students discussed the relevance of science topics:

> *"We learn stuff that we don't really need to learn. Like in science... if someone wants to learn about space because they think they are going to have a job doing that... We're never going to need that information again"* (T1. P 4/5).

> *"OK, say if there's an asteroid or something coming and you think it's a shooting star and you make a wish, and then you get this*

telescope...'what's that, I should have learned that at school' [you say] and stuff, and you don't really know what it is" (T1. P 4/5).

In all but minor ways the group discussions proceeded smoothly and needed only minimal input from the researcher. The researcher listened attentively to the conversations and, at salient points throughout the discussion, was able to ask questions to clarify her understanding of participants' intended meanings.

These 'member checks' are another way to establish credibility in qualitative research, by verifying that the researcher's developing constructions accurately represent the positions of participants (Mertens, 1998). Throughout this study the researcher conducted regular member checks, to clarify her understanding of the intended meanings of participants. For example, a phrase that reiterates a student's answer, such as "*just to confirm what you said, it's harder work at extension school but it's enjoyable to do*" (N.12) allows them to confirm, reconsider or clarify the statement. Another opportunity to check the authenticity of data occurred at the conclusion of focus group discussions when children listened to themselves on tape. They were curious to hear themselves and listened attentively, and although it was not possible to replay the entire discussion, all heard a portion of the tape. The researcher tentatively interpreted the fact that no students made any attempts to censure or alter the content of the tapes as affirmation of their intended meanings.

Lincoln and Guba (1985) also suggest that "insights gleaned from one group can be tested with another" (p.314). For example, as this inquiry proceeded the idea that fun and learning should go hand in hand begged further investigation and was specifically probed with other groups in additional questions. The related procedure of 'triangulation', recommended by Lincoln and Guba (1985) for improving the credibility and trustworthiness of naturalistic research was also employed. Information gathered from different sources or methods can be matched and compared to check for consistency of evidence (Mertens, 1998).

For example, comments made during the discussions and interviews about special educational settings were found to be supported by the researcher's observations of classroom environments. In this study, triangulation predominantly relied on the converging data from subjects located in three separate sites during focus group and individual interviews and narrative accounts. This was supported by evidence from cognitive-educational and developmental literature, gleaned as the research was conducted and patterns began to emerge in the data.

Individual Interviews

Interviews were conducted when participants preferred not to have their contribution recorded. Four children were interviewed individually and data from the interviews were documented in note form by the interviewer. The interviews were semi-structured using the same questions as in the focus groups. The interviews were conducted in a conversational style, which allowed for digression from the structured questions. In order to ensure that the researcher's summary correctly reflected participants' comments the notes were read back to participants from time to time, although some quotes were recorded directly.

Although the interviews were conducted in a relaxed conversational style, two participants appeared to be self-conscious. The researcher used prompts to assist students to expand on some of their responses but considered it preferable not to press for more information. Hence two interviews rendered only basic answers to the questions posed. In contrast, the other two interviewees spoke freely about their experience and spontaneously described and explained their opinions. One of these latter interviews lasted for one hour. These longer interviews yielded data that contained more personal-confidential information that was not as obvious in the group discussions. Although both focus group participants and individual interviewees talked about many of the same concerns and issues, in the group situations participants appeared to try to package information for group consumption. For example, in the following quote the

participant is talking about homework difficulties in the third person with the implication that the rest of the group shared similar difficulties.

> *"It's a bit silly about our cross-country because you're not allowed to do the fun run unless you're injured and so you have to do the hard one. And when you come to homework, like you learn stuff at school and you have to do the same stuff at home again and it seems a bit silly. But it's still really hard because sometimes they add different stuff into it and you don't know about it, and you find out when you get to school that its all wrong, and you have to sit in detention trying to work at it and make it proper. And you feel like someone's gone and wasted your time."* (T4, p.7).

It seems likely therefore that group situations discourage disclosure of personal details, or that sensitive information is repackaged and presented in a less open manner. However focus groups do have the advantage of enhancing children's appreciation of ideas through discussion and interaction, for example when, in group interview situations, members questioned and broadened each other's perceptions of severe learning difficulties (Lewis, 1992).

Gathering of narrative accounts

In the next phase of this study, children were asked to record a short story about school. Three cassette-recorders were available for this purpose. Some participants preferred privacy when recording their stories and chose to work in a quiet part of the classroom (e.g., the reading area). Students sometimes had to wait for a turn to record their account, but never for more than ten minutes. When the stories were transcribed, three stories were unaccounted for, which may either indicate a fault with the audiocassette recording process or decisions by individual children not to record their stories. In the end, a total of 46 stories were transcribed.

At the conclusion of all the data gathering sessions the researcher thanked participants for their contribution and children returned to their scheduled classes. Teachers were thanked in person and letters of thanks were sent to schools' principals or assistant principals (appendix L)

Data Recording and Management in Valid Qualitative Research:

To establish a dependable audit trail for this study the research journal and information schedules were retained, together with the coded interview notes and transcriptions. These are available for the purpose of verification by an independent auditor for a minimum of two years. 'Dependability' in qualitative research is equivalent to reliability in traditional research (Lincoln & Guba, 1985). Reliability means that the measuring device employed in a study must produce the same results when the measurement is repeated (Bouma, 1996), but because qualitative research expects that results will change, exhaustive detail must be dependably tracked and documented (Miles & Huberman, 1984).

The researcher first transcribed the audiocassette recordings from the focus group discussions. This activity proved valuable during data categorisation as the inquirer developed detailed knowledge of transcript contents. To ease the handling of data and to ensure trustworthiness and internal referencing, each transcript was initially coded according to transcript number and page number, or by place (i.e., research notebook) and page number. The interview notes were also coded by place and page number. Thus, an example may read T7, p. 5, or N27. This method of coding transcriptions and interview notes enabled cited quotations to be traced back to the original data.

Data analysis in naturalistic inquiry allows the researcher or auditor to reconstruct conceptual categories used by participants. Therefore, the way that the inquirer manages and classifies the data should ensure that the interpretation of the study is grounded in participant experience rather than the researcher's constructions (Lincoln & Guba, 1985; Widdershoven & Smits, 1996).

'Confirmability' in qualitative research is the parallel of objectivity in traditional research (Lincoln & Guba, 1985), which aims to minimise the influence of the researcher's judgement in a study (Mertens, 1998). Confirmability however, ensures that research data and the interpretation of research data are not imaginative inventions created by the researcher. The sources of qualitative data and the logic used for processing and interpretation must be explicit and traceable through the audit trail (Mertens, 1998).

Processing and Categorisation of Qualitative and Narrative Data

This study processed data according to the constant comparative method described by Glaser and Strauss (1967) and refined by Lincoln and Guba (1985). This method continually tests emerging theory against data that is systematically collected and processed (Mertens, 1998), enabling the researcher to deal with units of information that "will sooner or later serve as the basis for defining categories" (Lincoln & Guba, 1985 p.344). Each informational unit must be both heuristic and integral, that is it must lead to understanding or action, and must be decipherable in the absence of additional information other than the research context (Lincoln & Guba, 1985).

In this research the units of information from transcriptions and interview notes were defined and listed in one of two notebooks according to the type of response (given to a question in the schedule) and to the unit's position in the transcript or notes. Data associated with learning difficulties were listed separately from units allied to special abilities. For example, responses from booster class participants to question ten read, *"[Kids help me with my learning] if I'm stuck on something. They'll help me if I ask"* (T, 6 p. 5; T 8, p. 2). Groups of responses are noted, for example, *"when you are in class there are always kids there to help you..."* (T5, p.9 x 2) meaning two similar responses in transcript 5, page 9. However, the latter quote continued *"...and sometimes when kids try to help, it makes you confused. They say words that you don't know"*. The latter half of the quote was then highlighted to denote its categorisation with Question

eleven (*Kids get in the way of my learning when....*) along with an explanatory note in the margin. Thus, a comprehensive catalogue of informational items and their location in the original data was compiled.

These aggregated responses were checked against each other for consistency of meaning. Then, in the margin adjacent to the sample response, initial descriptors of category were inserted. For example, *"[kids help me with my learning] if I'm stuck on something"* (T3, p.5) was classed as information regarding peer tutoring. These descriptors were then entered onto separate diagrams, one for each question in the question schedule, enabling similarities and/or relationships to emerge.

However, because participants had the opportunity to reflect on and to return to topics as their discussions progressed, individuals often made reference to issues more than once. To ensure that emergent themes accurately reflected the balance of participant ideas and were not distorted by individual group members reiterating the same issues, a check was run on the authorship of the separate informational units by tracing codes back to the original data.

This process resulted in the amalgamation of some units; for example, the category of peer instruction originally listed twenty-nine separate references, but two from the same student could be counted as one contribution. In order to identify combined references both codes were retained, for example (T1. P.11/12):

> *Kids help me with my learning when like now and when they need help they are all helping me to learn. And what we are doing now we are co-operating kind of thing and it teaches you new stuff* (T1. p.11); and
>
> *I reckon it helps me to learn when we work in pairs or in a group and there's a question and like none of us understand it. It's really good*

because we help each other. Like one person might suddenly get one part of the question, understand one part of it, and someone else might understand another part. So we kind of put it together kind of thing and so we help each other. Like work out the question and its really good (T1, p.12).

The next stage of the process involved rewriting 'category descriptors as overlapping categories were subsumed. The umbrella categories and subcategories were diagrammed in order to enable the inquirer to systematically review the catalogues containing the units of information, and list codes under appropriate descriptors. The amount or weighting of the material within individual categories distinguished the themes as either major or minor.

Lincoln and Guba (1985) suggest "the naturalist must be able to recognize when the atypical may have importance" (p.304). Thus, although some material irrelevant to this study was discarded (e.g. responses describing hobbies), the lesser categories were carefully examined for their relationship to the larger ones and to the relevant literature. Some of these atypical categories prompted the inclusion of material, which, although not commonly represented, was nonetheless important in understanding motivation at school.

Story content was categorised in a very similar way. Each of the 46 stories was read carefully and themes were recorded on a chart along with the codes denoting position in the original data. The story theme/s represented issues or events that had significance in memory, although in actuality the events depicted may or may not have occurred (McAdams, 1991). The object of narrative analysis can be to abstract the theme or point of a story but other models and categorisations of narrative plots depend on "the particular perspective of the researcher or the interest of the discipline" (Polkinghorne, 1988, p.167). Analysis of narratives in this study was delimited or narrowed by the themes that emerged from the focus group and interview data. Story content was mainly concerned

with social issues, and concerns about learning and academic achievement at school, and was categorised accordingly.

Interestingly, although the focus group discussions were concerned with issues surrounding academic learning, some twenty-six percent of the stories that followed were concerned solely with social issues. This suggested that the focus group discussion did not necessarily influence story choice. The stories were initially sorted according to social or academic themes, or a third category, combining the two issues. The stories were also examined for atypical content that did not appear in the categories derived from focus group and interview data. During this process of recording, sorting and comparing data from the focus groups interviews and stories, trends emerged that directed the emphasis of the analysis and theory-building.

Interpretation of Qualitative Data

The theory or tentative conclusions arrived at in this research are classed as *substantive* or *idiographic* because they apply to specific students in particular learning situations, and are limited as to time and context (Bogdan & Biklen, 1992; Mertens, 1998). The researcher's interpretations followed from patterns that arose from the accumulated pieces of interconnected data, and were validated with reference to current cognitive and educational theory. This process allows for unforeseen factors to emerge, and is described as 'grounded theory' (Glaser & Strauss, 1967). Grounded theory prescribes the use of systematic interpretative procedures that circumvent the formation of superficial impressionistic interpretations.

Although Lincoln and Guba (1985) suggest that "grounded theory... is a necessary consequence of the naturalistic paradigm" (p. 204), this study did not seek to evaluate or generalise from its findings, and is therefore distinct from 'formal grounded theory' (Glaser & Strauss, 1967). Interpretation was based on

the systematic methodology of the grounded approach, which enables the enquirer "to become aware of important factors which did not form part of his preconceived notion of the situation" (Sapsford & Evans, 1984, p.263).

An Emergent Aim of the Research

This study engendered a critical examination of the socially accepted processes that may disadvantage participants, as highlighted throughout the discussions and narratives, and advocated by proponents of critical theory within the emancipatory paradigm, including a range of participatory action researchers, Marxists, feminists, ethnic minorities and active research participants (Mertens, 1998). Lather (1986) suggests that research which resonates with "people's lived concerns, fears, and aspirations... serves an energizing, catalytic role" (pp.266-267) and may empower participants to co-operatively effect change. This study involved both participants and the researcher in critical analysis of school learning, by examining social practices that are taken for granted and that perpetuate oppressive social structures and policies, and aimed to empower participants by affirming the authority of self (Etter-Lewis, 1996; Mertens, 1998).

Because such analysis is intended to inform participants and initiate adult exploration and evaluation of the need for change in structures and policies within schools, Creswell (1994) recommends that qualitative case studies be written in personal informal language, that readers might identify and respond to the work. Sherman (1993) advocates use of the active voice in the reporting of qualitative research, in order to reflect the immediacy of the data. However despite these recommendations, this report was written using the traditional 'third person' style in order that the researcher may stay in the background and not draw attention away from the researched (Van Maanen, 1988). This study was concerned to accurately and fairly represent participants' perspectives and beliefs, using direct quotes from the data to preserve authenticity and present a balanced report.

The value and usefulness of this research is determined by its 'transferability'. Lincoln and Guba (1985) equate transferability in qualitative research with external validity, or the degree to which results can be generalised, in empirical research. Thus the reader assesses the degree of similarity between research situation and his or her context, and the researcher is charged with providing sufficient detail of circumstance for the reader to make informed judgements (Mertens, 1998). Throughout this research the inquirer documented all thought processes during data collection and interpretation, and the accompanying exploration of research literature. Therefore she was enabled to monitor her 'progressive subjectivity' and to provide a documented process of changing thought constructs and beliefs from the commencement to the end of the study. 'Peer debriefing', that is questioning of findings, analysis and conclusions by disinterested peers, also test the credibility of qualitative research by helping the inquirer to confront his or her own values and biases and to guide the progression of the study. In the present study the research supervisors fulfilled the role of peers, in order that they could "challenge the researcher who has not kept an open mind but found only what was expected from the beginning" (Mertens, 1998, p.182).

The naturalistic research design that has formed the model for this thesis therefore advocates that the direction of the literature review emerges as the data is analysed. This project has evolved from an interest in 'learning disabled' and 'special needs' children in New Zealand and a wish to gather useful data about their experiences in mainstream classes that may facilitate teaching and learning practice, into an exploration of metacognitive and motivational themes that emerged in the transcripts. Therefore, the ensuing literature review will focus mainly on current cognitive motivational theories of goal orientation with relation to social interaction and academic achievement, despite the fact that the actual reading for the project formed a much broader base.

CHAPTER THREE
REVIEW OF LITERATURE

This study encouraged 'special needs' students to describe how they perceive and interpret their learning experiences within the context of mainstream classes. Themes that emerge strongly from the discussions and narratives are the environmental and social influences which help or hinder students' ability to focus on learning, as well as students' self-perceptions of their own learning abilities, and the processes that motivate their achievements and guide their goals and behaviour. Thus, a thorough survey of the relevant literature was iteratively narrowed to focus on current cognitive thought pertaining to motivation, self-system concepts, social interactions, learning and metacognition, and specifically to educational theories of goal orientation that seem to form a good fit with this data set.

Students' Goals for Learning and Academic Achievement

Goal orientation denotes a current cognitive theory of motivation that is directly related to learning in the context of the classroom and continues to be the subject of experimental studies and research (Pintrich & Schunk, 1996). Students' learning goals represent cognitive models of future events and circumstances which students strive to attain by use of metacognitive planning and motivational processes (Wentzel, 1996). Although goals are situation specific, they reward study because they can reveal values and frustrations. Analysis of students' goals has revealed that they can be divided into two broad patterns of perceptions, which focus on either learning or performance (Pintrich & Schunk, 1996). Some students, for example, focus their attention on the processes involved in a learning task, enjoying it for its own sake (or task-intrinsic value), while others are preoccupied with task-extrinsic concerns such as "social expectations or values associated with the consequences of task performance" (Wentzel, 1996, p.229). These patterns are important motivators and regulators

of behaviour, suggesting "different ways of approaching, engaging in and responding to achievement situations" (Ames, 1992b, p.261).

A task-intrinsic orientation (i.e., task involvement or the adoption of learning goals) has been shown to be a superior approach for student learning (Borkowski, Day, Saenz, Deitmeyer, Estrada, & Groteluschen, 1992; Dweck & Leggett, 1988; Nicholls, 1984) because it leads to positive and constructive attributions, or perceived causes of outcomes. Task-intrinsic orientations such as 'learning goal orientation' (Dweck & Leggett, 1988) and 'task involvement' (Nicholls, 1984) stimulate interest in tasks, increase cognitive engagement, effort and persistence, and eventually improve performance. Conversely, students who have task-extrinsic orientations, signified by 'performance goals' (Dweck & Leggett, 1988) and 'ego-involvement' (Nicholls, 1984), attribute learning problems to external factors, and tend to be more anxious, exert less effort, and pay less attention in class. In the face of difficulty they fail to persist, and consequently perform at lower levels (Pintrich & Schunk, 1996).

One school of thought attributes students' task orientations and choice of goals to their self-conceptions or their implicit theories of intelligence and ability (Dweck & Leggett, 1988). For example, students who have formed the belief that intelligence is a fixed entity tend to focus their attention on confirming their intellectual adequacy. Negative judgements of achievement therefore pose a threat to self-concept and self-esteem (Covington & Omelich, 1979). Dweck (1996) argues that the pursuit of performance goals reinforces attributions to intelligence with negative effects on ability. Conversely, students who believe that intelligence can be increased, adapted or transformed (incremental theory) tend to focus their attention on learning goals in an effort to extend their abilities (Dweck, 1985, 1996). Dweck and Leggett (1988) view learning and performance goals as opposite poles on a continuum, implying that each orientation may be pursued independently but not together.

Another theoretical standpoint argues that ego or task involved goals correspond to students' ideas about the purpose of learning at school, although not necessarily to their wider "beliefs about how the world works" (Nicholls, 1992, p. 271). For example, students who hold the belief that knowledge is intrinsically useful and valuable tend to become task involved, whereas students who believe schooling will bring social status tend to be concerned about their standing or performance relative to their peers. Nicholls also suggests that task and performance orientations toward learning can be interchangeable, or held simultaneously. For example, a student may wish to be judged the most able among their peers but at the same time believe that they can improve their learning and performance (Nicholls, 1990).

Regardless of the reasons for ego involvement (Nicholls, 1989) or the adoption of performance goals (Dweck, 1985), these extrinsic orientations focus students' attention on judgements about their learning abilities. This preoccupation not only directs students' awareness away from goals to do with learning but also appears to develop their sensitivity to cues that signal failure. Thus, performance oriented students tend to perceive mistakes and setbacks as failures, and then, in an effort to protect their self-perceptions of ability and sense of worth, attribute perceived failures to causes over which they have no control, blaming an innate lack of ability or factors such as task difficulty (Covington & Omelich, 1979; Dweck & Leggett, 1988; Dweck, 1996). Alternatively they may assign a different meaning to failure by devaluing the task (Pintrich & Schunk, 1996). Duda and Nicholls (1992) have noted that in the absence of an intrinsic-task orientation, children sometimes divert their goals towards avoiding situations that threaten failure by evading work or effort, rather than achieving grades and performance (Pintrich & Schunk, 1996). Often students will also lesson the likelihood of failure by lowering their self-expectations of achievement (Borkowski *et al.*, 1992; Covington & Omelich, 1979; Dweck & Leggett, 1988). Students who exhibit these self-defeating, 'helpless' behaviours in response to academic setbacks often deprive themselves of learning opportunities, and as a result can

be caught in a downward motivational spiral (Dweck & Leggett, 1988; Elliott & Dweck, 1988).

In contrast, students who are task-involved (Nicholls, 1989) or have learning goals (Dweck & Leggett, 1988) will cognitively engage in academic tasks at school and therefore perform better than their 'ability' might suggest. They typically focus their attention on learning new skills or improving competence in existing skills, and in gaining insight into the subject they are studying (Dweck & Leggett, 1988; Nicholls, 1984; Schunk; 1989). These students pay attention to instruction, rehearse and organise new information, relate new knowledge to what they already know, and try out skills and knowledge in different contexts (Pintrinch & Garcia, 1991; Pintrich & Schunk, 1996). When they do not understand the material to be learned they are motivated to ask for help (Zimmerman & Martinez-Pons, 1992). They try hard and persist, and in the face of setbacks they actively cope (Skinner & Belmont, 1993), by employing metacognitive strategies such as applying greater effort, a modified approach to the task, and/or prioritisation or co-ordination of competing goals (Borkowski *et al.*, 1992).

This knowledge of effective goal strategies enhances motivation and the confidence to pursue goals (Erdley, 1996; Ford & Nichols, 1991; Juvonen, 1996; Pressley, Borkowski, & Schneider, 1987). In the academic domain research suggests that efficacy and perceptions of control follow when a child understands the metacognitive links between effort, implementation of appropriate strategies and successful task outcomes (Chapman & Tunmer, 1996; McCombs, 1988; Short & Weissberg-Benchell, 1989). Task success has flow-on effects for future goals because successful outcomes inform learners that their competencies are developing and this motivates them to engage in more challenging tasks (Borkowski *et al.*, 1992). Explicit strategy instruction, which puts emphasis on effort-related achievement and the idea that mistakes are learning tools, can involve students in the process of learning and encourage the adoption of

constructive goals and metacognitive processes (Dweck, 1986; Nicholls, 1989,1990). Taken together, and at every level of ability, these task-intrinsic learning activities can improve academic performance.

However, this kind of task-oriented learning behaviour is exemplary, and this study acknowledges that learners do not always perform perfectly in the dynamic social context of the classroom where their attention may not consistently focus on learning goals. Students' dilemmas about whether to cognitively engage in task activity or attend to competing cognitive demands can be dependent on emotional responses to environmental cues or events, including social concerns, expected rewards, expectations for success and the amount of effort required to accomplish the task particularly when the need for hard work is interpreted as an indication of low ability. This research aims to examine the environmental cues or events that students believe can interfere with their ability to focus on task activity and learning.

Social and Emotional Goals

In the school context, social concerns about making friends, being popular, or pleasing teachers and parents can influence learning behaviour and motivation and sometimes compete with academic goals (Dweck, 1996). Orientation towards social issues can be categorised similarly to approaches to academic achievement (Dweck, 1996); for example the goal of being liked or accepted by peers in the social arena can be likened to a performance goal (Dweck & Leggett, 1988; Erdley, 1996; Juvonen; 1996; Wentzel, 1996). Students who lack confidence in their academic or social talents are attentive to cues that signal rejection or failure, and as a consequence may avoid risk in these endeavours (Dweck & Leggett, 1988;Taylor & Asher, 1984). In contrast, relationship goals (Wentzel, 1996), like learning goals (Dweck & Leggett, 1988), "involve striving to develop the valued commodity rather than to win approval for it" (Dweck, 1996, p.182). Children can derive similar feelings of effectiveness and control from

effective use of social strategies and skills as they do from successful learning in the academic arena. Relationship goals are pro-social and include behaviours such as helping friends and sharing, in contrast to instrumental goals such as dominating peers or controlling resources (Erdley, 1996; Wentzel, 1996).

Students' theories of self also affect goal choice and goal pursuit within the social arena. That is, students who view their intelligence or personality as fixed entities are inclined to adopt performance goals with regard to academic or social relationships respectively, while those who feel their personal characteristics can develop and grow incrementally are more likely to work towards relationship goals. Erdley, Loomis, Cain, Dumas-Hines, & Frances (1997) have established that performance related social goals can promote anxiety about other peoples' judgements of personality or lead to negative self-attributions and helplessness in the face of rejection. Children may also assign negative motives to the actions of others if faced with difficulty, and adjust their goal priorities accordingly. For example, in ambiguous or conflict situations they may interpret the actions of peers as antagonistic, and reprioritise pro-social goal pursuit to refocus on retaliation or dominance intentions, especially if they believe aggressive behaviour to be legitimate (Erdley & Asher, 1993; Dweck, 1996; Erdley, 1996). Other children who value relationship-building goals may refocus on the avoidance of rejection if faced with rebuff (Dweck, 1996). Children may learn to place emphasis on instrumental, performance goals in the social domain and may develop similar orientations towards their academic performance.

School children typically pursue a number of inter-related goals at any one time, but their relative prominence may change as new goals emerge in response to events and environmental cues (Dweck, 1996). Students in the classroom are naturally concerned about their social world, sometimes to the detriment of learning goals (Wentzel, 1991a, 1992), although in reality these goals are interdependent, and goal theory has been criticised for separated social and learning goals (Ford 1996; Schunk & Zimmerman, 1996; Wentzel, 1991a). The

desire for friendship can promote learning, or conversely the goals can be traded off against one another. For example, some students capable of high academic achievement make judgements to forfeit learning goals in pursuit of the social goal of peer acceptance (Davis & Rimm, 1994; Dweck, 1996; Juvonen, 1996). Research conducted by Asher and Renshaw (1981), and Oden and Asher (1977) suggests that unpopular students who lack confidence to pursue social goals can be helped by coaching interventions that teach pro-social strategies to initiate mutually rewarding interaction with peers. In turn, the development of constructive friendships (Oden & Asher, 1977) has been found to promote school involvement and improve students' academic performance in many cases (Kupersmidt, Coie, & Dodge, 1990; Skinner & Belmont, 1993; & Wentzel, 1991b,c).

The goals that children prize and pursue carry values, and priorities are to some extent determined by students' 'self-efficacy' or belief in their ability to successfully perform specific tasks (Bandura, 1986; Dweck, 1996). Children who consistently experience academic or social failure may begin to doubt their ability to perform certain tasks or master social skills, and therefore imbue other goals with greater significance, redirecting their attention and effort in order to avoid anticipated failures. For example, Erdley and Asher (1993) demonstrate that aggressive children are confident about achieving goals associated with aggressive behaviour, but may devalue other aspirations to defend or conceal their lack of pro-social strategies (Dweck, 1985; 1996; Covington & Omelich, 1979). A child who is not coping in a social situation may attribute the cause of rejection to reasons beyond personal control or devalue a problematic relationship in order to 'save face' (Diener & Dweck, 1978; Goetz & Dweck, 1980). Often avoiding the situation precludes students from learning cognitive or metacognitive strategies that might help them overcome their problem. However, the learning environment may mediate a child's self-perception of their ability to achieve goals, for example if it provides cues such as encouragement and persuasion by teachers and peers, evidence of successful performance of tasks

by other students, or the success of the learner's own attempts (Schunk & Zimmerman, 1996).

Therefore, social cues and contexts play an important role in children's academic and social life. In the academic domain students' metacognitive decisions to reprioritise goals may be prompted by response to feedback from teachers or peers, and the motives that learners attribute to these appraisals. However, even when the intention is to praise, comments that do not coincide with the child's theory of self may be interpreted negatively; for example Simone de Beauvoir's observation of her childhood responses (1963, in Peterson, 1989). She states, "I would never forget that a five-year-old is a complete individual, a character in his own right. But this is precisely what adults refuse to admit, and whenever they treated me with condescension I at once took offence and was as cantankerous as any bed-ridden old woman" (p.193). In cases where children's self-perceptions are negative however, "a child's own distinctive way of making sense of this feedback can have a lasting impact on his or her academic achievement" (Peterson, 1989, p.286). Feedback must therefore take account of learners' attribution styles, as these negative 'helpless' attitudes are found "even among exceptionally talented, or 'gifted' pupils" (Peterson, 1989, p. 287) as has been found by Phillips (1984, in Peterson, 1989), who suggested that "in the long run, these talented children's irrational tendency to ignore or distort the positive feedback they were given in school about their own competence and success would be expected to erode children's enthusiasm and comfort in the classroom".

Contextualised Learning in the Classroom

This study has generated data about the interactions between goal orientation, motivation and the social dynamics which impact on children's thinking and achievement in the classroom. The findings support research which suggests that learning environments which promote task-intrinsic goal

orientations, while acknowledging and promoting appropriate pro-social interactions, are most conducive to the provision of 'special needs' learning.

Researchers who have examined classroom contexts to determine factors affecting goal orientation have found for example that in classrooms where children are involved in interpersonal academic competition, or in evaluative situations, academic progress may be measured in relation to performance goals. Environments which explicitly compare students' learning, such as public displays of test scores, foster ego involvement and performance goals (Ames, 1992a; Brophy, 1987; Lepper & Hodell, 1989; Malone & Lepper 1987; Meece, 1991; Marshall & Weinstein, 1984; Nicholls, 1989; Rozenholtz & Simpson, 1984; Schunk & Cox, 1986). Similarly, Nicholls (1990) suggested that ego involvement is more likely when "we think our ability is being tested, [or] if an audience or evaluative comments focus our attention on our competence at a valued task" (p.35). Performance goals tend to cause associated problems of negative attributions, lack of metacognitive processing and development, and an unbalanced emphasis on outside judgement.

Conversely, task feedback that characterises mistakes as part of the learning process, connects effort with successful outcomes, and informs learners about the use of learning strategies, can foster immediate and long-term learning goals (Ames, 1992a; Borkowski, Carr, Rellinger, & Pressley, 1990; Scunk & Cox, 1986). Moreover, students' interest in tasks is fostered if they perceive the subject material to be personally relevant and if the level of task difficulty offers optimal challenge for individual students (Ames, 1992b; Brophy, 1987; Lepper & Hodell, 1989; Malone & Lepper 1987; Meece, 1991). When materials or tasks are too easy for students, or present unattainable challenges, maladaptive attributions may result (Chapman, 1998). Therefore it is important that special needs students receive learning instruction that is tailored and appropriate to their level of skills, and their existing knowledge (Ames, 1992b, Reid & Hresko, 1981). Ames (1992b) also suggests that increased interest and cognitive

engagement in learning tasks can be cultivated by classroom authority structures that allow for the provision of appropriate levels of student choice and control. However, although the opportunity for choice and control encourages personal responsibility for learning, and is particularly effective with gifted students (Betts, 1985), children with learning problems or the very young may not have the cognitive or self-regulatory skills necessary to adapt to such situations (Corno & Rohrkemper, 1985; Ames 1992a).

When incorporated into mainstream classrooms, special needs students may be sensitive to the differences between their own learning processes and those of the majority of their peers. As Clark (1992) suggests "often gifted children see themselves as different, alien, not belonging to the group" (p.134) and students with learning difficulties may feel the same way. Research shows that students who are uneasy about their perceptions of difference from their peers may develop enhanced sensitivity to social scrutiny, or negative judgement, and are at risk of developing counter-productive ego orientation or performance goals (Dietmeyer, & Saenz, 1990). Borkowski and colleagues (1992) note "the composition of classrooms can induce [such] feelings of distinctiveness" (p11) and cite research conducted by McGuire, Child, and Fujioka (1978) suggesting that:

> Minority students in predominantly white schools ... are more conscious of their ethnicity and spontaneously mention it when asked to describe themselves. Minority students may, therefore, become concerned about social scrutiny, experience heightened evaluation apprehension, attend more to task-irrelevant cues, become self-focused, and suffer metacognitive [thinking and learning] deficits associated with distinctiveness (p.11).

Implementing Goal Orientation Theory in Teaching Practice

Dweck (1996) proposes that a child's lack of motivation for learning, or lack of social adjustment at school, can be elucidated and ameliorated by analysis of their social and achievement goals and special needs, with particular reference to

the orientations of goals and the way they are prioritised. Investigation into the prioritisation or valuing of goals such as social acceptance, or goal orientations such as performance focus, can also inform effective teaching of both problem learners and 'gifted' students, in that metacognitive imbalance can lead to stagnation, even in students with academic promise. Examination of the way a student's goals influence their behaviour in the classroom, and are reciprocally influenced by external events and learning outcomes and the way they are interpreted by the child, can reveal whether goal orientation lies towards intrinsic task satisfaction or performance. This has proved to be a valuable model for understanding the motivations and dynamics that underpin children's metacognitive learning behaviour and difficulties, and has been used to design appropriate interventions to increase involvement in task activity, and therefore learning success.

Dweck (1996) contends that to assist students' motivation, adjustment and learning in a given situation at school, it is necessary to assess whether students' goals are appropriate for the learning situation, or for their special needs, and whether goal conflict has caused previously valued goals to be abandoned or deprioritised. It must also be determined whether children have self-concepts or self-theories that incline them towards negative attributions for success or failure, or defensive, work-avoidance goals. This can be particularly relevant for special needs children in mainstream classes. Strategies can then be designed to enable co-ordination of goals and selection of more appropriate and constructive goals, although these must be accompanied by development of cognitive strategies and/or confidence to pursue the revised plans (Dweck, 1996).

However, some problems with the application of goal analysis in the classroom need clarification and frank discussion. Firstly, goal analysis is subject to bias, because adult-held beliefs can impact on the perception and interpretation of children's goals, and as a consequence influence the formulation of intervention strategies. Particularly contentious is the perception that

motivational and learning deficiencies invariably lie within the child, since it ignores the social exchange of metacognitive knowledge which can be conceived as the ultimate objective of goal analysis. Approaches which characterise learning difficulties as deficits residing 'within the child' can discount the necessity to understand the child's beliefs, judgements and choices. For example Shervin (1994) cites the language of special education that describes a student's actions as "*off task behaviour*", when the student might call it "*taking a break;*" or interpret the behaviour of children who claim to "*choose our friends wisely*" as "*displaying poor peer socialisation*" (p.1). Fortunately, though, McKay & Ryba (1995) report major changes in understanding and valuing of individual differences and a more respectful approach to the treatment of special needs children.

The second criticism of goal analysis concerns the collection of data. Dweck (1996) does not specify how information is to be gained from children who lack motivation or are not adjusting to school, apart from simple observation, which provides no real information about the logic or reasoning that produces behaviours. Because questioning children about the causes of personal success or failure necessarily involves comparison and self-evaluation, it might induce feelings of self-consciousness, and under such circumstances children are more likely to report superficial performance goals and make defensive attributions (Watson, 1993). Therefore, in order to collect meaningful data for a goal analysis, it is recommended that teachers follow a process of negotiated 'co-construction' or reciprocal teaching, as designed by Palicsar and Brown (1984). Reciprocal teaching emphasises interactive communication and a mutual flow of information and self-reflection between student and teacher, together with opportunities for clarification and correction of the teacher's perceptions of students' motivations for behaviour (Etter-Lewis, 1996). Reciprocal teaching has been cited as the intervention "with the best empirical support, and acknowledged thus far as coming closest to the ideal" for achieving metacognitive development (Larson and Gerber, 1996, p158).

In conclusion, this study conceptualises motivation as a process whereby children's thoughts, beliefs and feelings about learning instigate and sustain goal directed behaviour. Theories of goal orientation emphasise intra-individual psychological processes that organise whether the type of goals that are pursued in school are oriented towards learning and task-intrinsic satisfaction, or towards performance or ego fulfilment.

Learning goals promote involvement in activities, and increase mental engagement, effort, persistence and feelings of satisfaction. In contrast, performance goals focus student attention on judgements about performance and abilities, and direct attention and effort away from the process of learning to a concern with minimising threats to self-concept. Classroom activities which encourage comparison of ability or achievement direct children's orientation towards performance goals, while structures which make the appropriate information accessible and attractive to students are more likely to encourage task-intrinsic enjoyment of learning, and therefore promote individual reflection on strategy use and metacognitive development.

Corollaries can be observed in the domain of social interactions, where children may value peer approval and social success more than the intrinsic value of relationships, or vice versa. Because goals are valued, dynamic and interdependent it is crucial to understand academic motivation in the light of social goals and contexts. Careful attempts to understand a student's social and achievement goals, and their orientation and relative prioritisation, may elucidate children's motivations and inform individualised, reciprocal teaching practices that may encourage independent, co-operative learning (Dweck, 1996).

However, the practical application of goal analysis is subject to the bias of adult interpretation, which has traditionally viewed motivational and learning problems as deficiencies within the child, and therefore limited the range of teaching interventions to one-way attempts to influence intrapersonal abilites.

This narrow conception of motivation and learning ignores the opportunity for the social exchange of metacognitive knowledge and the possibility for transformation of abilities by sensitive improvements to classroom environments and endorsement of pro-social interactions. Furthermore, the validity of goal analysis is based on reliable data collection, which can also be restricted by the manner of questioning, and therefore should observe established protocols in order to elicit valid responses that can form the basis of effective 'special needs' teaching.

Such an approach should emphasise interactive communication and a mutual flow of information between student and teacher, as exemplified by the method of reciprocal teaching (Palicsar & Brown, 1984). Reciprocal teaching has been commended as the teaching intervention "with the best empirical support, and acknowledged thus far as coming closest to the ideal" for achieving metacognitive development (Larson and Gerber, 1996, p158).

CHAPTER FOUR
FINDINGS

> *"Perspective connotes a view at a distance from a particular focus. Where we look from affects what we see. This means that any one focus of observation gives only a particular result; no single discipline ever gives us a complete picture. A whole picture is an image created morphogenetically from multiple perspectives"* (Schwartz & Ogilvy, 1979, p.15).

The findings presented here derive from three broad groups of perspectives on school learning: firstly those of the children who participated in the study, secondly the combined theoretical perspectives of cognitive-educational and developmental research, and thirdly the tacit and propositional knowledge brought to the study by the researcher. Analysis of these disparate observations produced numerous instances of mutual corroboration, where the 'themes' which emerged from the data and the researcher's notes converged with the literature reviewed.

The findings are offered as verbatim quotes in order to preserve the authenticity of the children's views and responses, which are often expressed in the colloquial New Zealand English of their peer group. This probably reflects the informality of the interview and discussion methodology, which was designed to elicit natural, unselfconscious discourse from participants. It is also hoped that this presentation will allow the data to be used as a resource for further analysis and interpretation by other educational researchers, and/or other readers, who may recognise and respond to the accumulated descriptions of learning in classroom contexts. This may enable a more detailed appreciation of children's motivation, social interactions and cognitive learning, and consequently inform

the implementation of positive educational change, in accordance with the aims of naturalistic inquiry and the emancipatory paradigm.

Commensurate with established principles for considering ethical issues within the qualitative paradigm (Widdershoven & Smits, 1996) the inquirer was careful not to imbue participants' statements with extraneous meanings. Minimising the influence of the researcher's subjective judgement was also important for the validity or 'confirmability' of the research (Lincoln & Guba, 1985; Mertens, 1998). Therefore any interpretations from the data were co-constructed through discussion with respondents at the time of the research. Thus, for the most part, the conceptual themes in the ensuing description are represented by direct quotations from the data and are intended to be self-explanatory. The primary analysis performed by the researcher was to systematically process the accounts into informational units that could be grouped into categories by the constant comparative method (Lincoln and Guba, 1985; Mertens, 1998).

Data gathered from differing learning contexts within the Auckland area have been organised into three parts. The first examines children's long-term goals, their hopes for the future, and their attitudes towards learning. Part two looks at obstacles to learning in mainstream classrooms detailing self-imposed impediments, what students perceive to hinder learning and examples of preferred learning settings. Part three covers participants' beliefs about the benefits of learning at school followed by aspects of mainstream education that are perceived to assist with learning.

PART ONE
Hopes for the Future: Students' Attitudes towards School Learning

A major theme that emerged from children's responses to questions that asked about the reasons for schooling, possible uses for school knowledge and the importance of various subjects is that most participants appeared to view

school learning and academic achievement as a prerequisite for an adult role in society. All but five of the fifty-three participants described positive outcomes associated with scholastic achievement and endorsed the long-term value of "*a good education*" (T.6, p.1).

In contrast, the consequences of a poor education were characterised as negative; for example lack of learning was believed to lead to personal deficiencies such as "*being dumb*" (T1, p.1). It might also cause an inability to maintain the requirements of basic living: for example "*you'd end up in the gutter*" (T5, p.2). One student argued:

> *If you didn't go to school it's not just going to affect your education, it's going to affect your whole life...*(T1, p. 2).

Other discussions provoked more general comments on the long-term or wider value of educational 'life skills', for example:

> *...get a good start in life* (N61)
> *...school teaches what we do in life* (T1, p.1).
> *Skills I will need in the big world once I leave school* (P2.1).

As evinced by these examples, students consistently expressed hopes for personal achievement in both school and in adult life. However, their statements conveyed mixed aspirations that implied different measures of achievement. A few children, as in the following example, appeared to be inspired by newly acquired skills and their possible applications:

> *I like maths cause we learn how to do take-away, not take-away like fish and chips. Maths is really important and we can count our monies. Ten, twenty, and then we can get a job and get one at the dairy* (T1, p. 6).

Other children talked about academic expectations as associated prerequisites for general or specific long term-goals, as illustrated below:

I think, especially if you're going to go to university, you need to know all that you are taught at school (N31),

I have to learn maths for computing and electronics (N61).

Eleven participants associated school achievement with material measures of performance; for example describing the purpose of education as *"to earn lots of money"* (T1, p.1). Others made more unorthodox suggestions, for example:

Because teachers and other adults want to be cruel to us (N61)
You have to go to school to learn because the law says you have to (N31)
You have to go to school because to learn and get out of your parents way, to get social workers paid (N30)

Although many children brought up the negative consequences of lack of academic participation or performance, only two suggestions from focus group discussions and interviews signified self-defeating fear of failure in the form of work avoidance or 'learned helpless' responses:

I was scared to hand in unfinished work and I worked out a way to get out of things (N97).

When I can't do a full page I leave big spaces. Like three words a line... and that's what I do to fill up a page. All my friends do it as well (T8, p.3).

The remark that *"All my friends do it as well"* implies a higher incidence of task avoidance than was reported, in which case the low level of reporting may have been due to self-consciousness about admitting fear of failure or work avoidance in the company of other participants or the researcher. However, the phrase could also represent an attempt to save face by inferring that work avoidance was a common and therefore acceptable behaviour. Either way, it was interesting to note that the two respondents who reported these avoidance

behaviours also recorded narrative stories about characters who overcame learning problems to achieve academic success. Arguably, this indicates that although these respondents may have actively avoided work in situations where they had low expectations for success, they still valued academic achievement.

The remaining participants did not report a focus on work avoidance in association with classroom tasks; instead describing ambition for or evidence of independent self-regulated learning. Out of the thirty-four children in booster classes, twenty-three statements revealed a preference for active involvement in learning tasks, as evinced by these comments:

> *If you haven't worked it out yourself you wouldn't know how to work it out. They're just giving you the answer and then you'll never learn* (T2p,5).
>
> *When something is difficult and they don't help you when you can do it yourself* (T5, p.9).
>
> *It makes it harder for me to learn when she baby feeds us; she tells us the answer instead of us finding out she writes it all on the board so we don't have spelling mistakes*...(T1, p.16).
>
> *When I'm given instructions like how to do something it makes it easier [to learn] but when you're given the straight out answer it doesn't* (T7, p.5).

In the extension school classes seventeen of the nineteen participants made at least one direct reference to active cognitive engagement in and control of different learning situations. These responses indicate that participants from extension classes exhibit task-intrinsic learning goals, such as personal challenge, and prefer to be in control of their own cognitive activity, as illustrated in the examples below:

> *I usually concentrate on the story I've read in a book and then start getting ideas. Then I start writing up my ideas on long pieces or what ever it's*

supposed to be about, and sometimes it' good and sometimes it's not that good (N17/21).

Sometimes I change the way I do things. The idea is to make a difference but sometimes they are all the same easiness (N69).

I like to do it by myself because it's challenging (N6/26/65/73).

The teacher helps me with my learning when I ask her questions specifically because, when I go up to her and like in literature or science or something, and I ask further questions, like going on a bit (N37).

Although the question schedule encouraged students to reflect on their thinking and learning processes, a level of natural metacognitive awareness and decision-making was apparent in the responses from ten of the extension school students, as well as five students from the booster classes.

During some lively debate over a student's suggestion that it was unhelpful for teachers to give out answers to questions, the booster class members demonstrated metacognitive understanding and knowledge of strategic approaches to teaching and learning. They had considered the process of learning prior to participating in this research. The ensuing discussion clarified the notion that different strategies are appropriate for different challenges, and that although given answers were deemed inappropriate for problem solving activities they assisted other sorts of learning, as illustrated by this extract:

I know you are saying its annoying...[but] by them giving you the answer it helps you because you'll remember the answer...Like with times tables, so like when they are giving you the answer they're helping you as well. They're not just giving you the answer and making it easier (T.1, p.16).

However, the quality and scope of the booster students' metacognitive knowledge differed from the more sophisticated descriptions of thinking and

learning provided by ten of the nineteen respondents from extension school classes, for example this description of selection between different cognitive strategies:

> *Sometimes I do the same problem both ways and see which one's quicker and better and easier, and that's my comparison, and the one that's better I use* (N69).

Another student described important skills and knowledge in terms of transferable, or adaptive learning strategies:

> *...Maths, reading and writing because they're the main subjects really. They're like colours red, blue, and green and you make other colours out of them* (T3, p.2).

Accumulated statements from the data reflect participant attitudes to learning and suggest that participants value learning and look upon education as a long-term goal and a prerequisite for an adult role in society. Despite awareness of the long-term social consequences of academic failure, respondents were generally optimistic in their expectations of academic success, although their aspirations and definitions of achievement varied. The data revealed that sixty-seven percent of booster class participants and eighty-nine percent of extension school respondents reported a preference for, or evidence of active participation and control over learning. Responses also demonstrated that prior to this research fourteen percent of booster students and fifty-two percent of extension class participants had some awareness of their own thinking and learning processes. Thus, it may be concluded that the majority of 'special needs' respondents reported a positive attitude towards learning, a wish to control their own learning, and awareness of some strategic approaches to learning. However, a wish for knowledge does not always translate into academic achievement and students' longterm-goals are sometimes deferred or reprioritised because of perceived environmental cues or pressures.

PART TWO
Perceived Barriers to Engagement in Task Activity

In order for respondents to translate their aspirations and long-term goals for academic success and societal participation into reality, they must utilise appropriate strategies and cultivate effective behaviours. Constructive attitudes towards learning and thinking, which recognise mistakes and setbacks as part of the learning process, are essential. It is also crucial that teaching strategies and the classroom environment are responsive to children's goals, needs and frustrations. The focus group and interview questions probed for factors that children believed to hinder their learning, and this section organises the responses into related themes.

Twelve of the thirty-four booster class students and three from extension school, reported difficulty with completing tasks and managing the expected quantity of schoolwork. These represent twenty-eight percent of the total sample. Some of the statements revealed negative thoughts and feelings about task expectations and personal performance, and although the majority did not indicate maladaptive coping strategies or self-defeating motivational patterns, twelve children compared their performance unfavourably to that of their peers, for example:

> *Sometimes the other children are finished and there will be about five people left. Like one of them's you and you can't finish* (T6, p.4).

> *Some people work really fast in my maths group and really efficiently and other people don't work so fast, and the teacher keeps putting a whole lot new stuff on the board. All the fast people got through it all and you know you have to catch up and do the work at home* (N 47).

> *The hardest thing I find is my teacher piles and piles homework on you. You can't go to rugby practice, you can't talk to your friends and you can't even watch TV. You have to rush through dinner and you feel tired and*

can't do anything else afterwards. You feel like you wanna go to bed, so you go to bed (T4, p.7).

I ... do maths with the higher class, and they go really fast and its pretty annoying (N27).

I am quite slow at maths but I usually get the answers right but I am actually quite slow at it. So the teacher starts to mark the work I am still doing and it's like "wait a second I'm still doing this", that's annoying (N26).

You have to get up early and you get real tired during the day. For homework you stay up real late to do it. Like you get real stressed (T6, p.4).

Two extension school participants reported that the teacher in their regular school classes occasionally set special work for them, which they perceived to be particularly difficult and associated with an inability to cope, as the following examples describe:

Student a: *Sometimes we are given complicated stuff-*
Student b: *If we are given heaps of stuff and it overwhelms you-*
Student a*: You want to run away if you are given a whole heap of work to do and it's really complicated hard work* (N53).

Although these were the only extension class students out of nineteen who reported feeling overwhelmed by tasks, their responses suggest that students at all ability levels can be affected emotionally by their perceptions of task difficulty. In contrast to a perceived surfeit of information, some students believed they had insufficient information or instruction for engagement in learning tasks.

However, children who come to expect failure from their attempts at academic tasks are sometimes derailed from their long-term learning and social goals into defensive strategies that avoid the consequences of failure, and represent self-

imposed barriers to learning. This was illustrated in responses from two participants who reported times when their reactions to perceived task difficulty was self-defeating in terms of their desire for learning and academic achievement. One participant, discussing primary school, suggested *"I was scared to hand in unfinished work"* and "I *worked out a way to get out of things"* (N97). Another student felt unable to handle the amount of work expected in class and claimed,

> *When I can't do a full page I leave big spaces. Like three words a line...and that's what I do to fill up a page. All my friends do it as well* (T8, p.3).

These examples indicate that some students who lack efficacy to complete tasks do not attempt to increase task effort or seek advice about more suitable strategies, instead directing their energies towards minimising the consequences of anticipated failure. Why they perceive themselves to be incapable in these situations and why they do not ask for help are matters for speculation. Although some adults and parents believe that children who behave in this way are lazy or intellectually deficient, goal orientation theory offers some understanding of the complex personal and social dynamics that operate in such situations, and provides a basis for remedial intervention.

Appropriateness and Interest Level of Learning Tasks

Eighteen of the thirty-four booster students reported that they did not always fully comprehend the requirements of learning tasks in their mainstream classes because they did not understand the language used. Participants believed that this restricted information and limited their ability to engage in learning activities.

> *It makes it harder for me to learn when we are trying to understand what to do, what it means and we can't ask the teacher and we don't know what to do because she tells us to wait* (T7, p.4).

It makes it harder for me to learn when we are given a complicated clue that you don't understand and you have to work that out too... she tells you a big-as word that you don't understand and you think 'what the! what does that mean'... and then you are totally confused (T2, p.5).

Like when you don't know the words, when you don't know what to do, its hard to learn (T.8, p.2).

...or she writes it in words that you haven't learnt yet, in all these different words that you don't actually understand and you haven't learned yet... And then like a bunch of people won't know and she goes "look it up in the dictionary" and that takes too long and by the time you've finally found the word and understand the question it's time to pack up, and then we don't learn anything (T1, p.16).

In addition to difficulties with vocabulary, one student reported persistent reading difficulties that were accompanied by pessimistic thoughts and negative feelings:

I have been going up and down with my reading- six to nine years reading level and back to seven.... It bores me, that's why I don't try to read anymore (N77-80).

The same student disclosed an inability to use a dictionary, which further restricted access to the information necessary for effective participation in classroom tasks. These types of difficulties suggest the presence of a specific learning difficulty.[1]

[1] Stanovich (1994, cited in Tunmer and Chapman, 1996) suggests that persistent reading problems may be due to a failure to develop "context-free word recognition skill" (p.2). They suggest that if learners "are not sufficiently analytic in their 'word attack skills' ... they may need intensive training in word decoding strategies to develop the habit of making greater use of letter sound information in unfamiliar words" (Tunmer & Chapman, 1996, p. 5).

The data above suggest that booster class participants considered reading and comprehension problems and processing difficulties limit their ability to participate in learning activities. In contrast, twelve of the nineteen participants from extension school found that tasks in mainstream classes were insufficiently challenging for their self-perceived skills and abilities:

> *At primary I was getting really, really bored because I was finding the work really simple and finishing very quickly and then had nothing to do* (N43).

> *[At primary school] I am one of the smarter kids of the class. Everyone needs help so I get stopped every two minutes, asked for a spelling word or how to do this or help because they need help [when] the teacher's busy and stuff* (N51).

> *When I come here [primary school] I get bored. I finish my work within five minutes and the teacher and I end up helping other people with their work for the rest of the day... I find maths very easy cause maths is one of my top subjects. With the spelling, again I'm on the top level and I find my words really easy except Mrs. White isn't allowed to start me any higher because any higher would be like in second year in intermediate and I'm not allowed to go any higher. So I find that really easy. I find the handwriting pretty easy* (N44/45).

> *It makes it harder for me to learn when she gives work that is way too easy it makes it hard for me to learn because I don't learn anything from it* (N39).

> *When we are given hard questions and hard problems it makes it easier for me to learn. When we are given easy questions and stuff like that it makes it harder for me to learn cause I'm not learning anything, I already know it* (N74).

The teacher helps me with my learning when he teaches me something new that I don't really understand and makes it harder for me to learn when he goes over something that I already know and that gets really boring, really, really boring (N72).

Thus, easily accomplished classroom tasks are considered unproductive, in terms of both learning and satisfaction. As twelve participants used the term 'boring' to describe easy tasks, and discussions with both booster class respondents and members of the extension school also frequently referred to 'fun', fourteen participants from the extension classes were asked to define these terms in relation to school learning.

It's quite a hard word to define but when I think of 'boring', I think of something I don't really want to deal with, something that isn't very interesting to me (N/13).

When I think of boring my mind says I don't want to do this. When it's boring its dull and I don't like it (N14/15).

Its like when we had this maths test which was a yellow piece of paper with one hundred questions on it, and you had to try and do them as quickly as you could. You'd do like twenty of them and then you'd think this is boring why am I doing this? And you'll just get slower and slower and run out of time and you won't be finished when you're perfectly capable of doing it in three minutes (N55).

Boring to me means just something that is not letting you use your brain all that much and it's not interesting... it's not interesting and you don't want to do it (N56).

Boring to me means that it's not fun or it means that I'm not getting to expand my mind (N56).

All fourteen definitions indicated that participants expect little satisfaction or enjoyment from tasks that are perceived to be boring and this seems to affect mental involvement, producing tasks that students *"don't really want to deal with"* or *"don't want to do"* or *"it's not interesting and you don't want to do it".* Boredom seems also to relate to the appropriateness of the task set, in terms of challenge or interest level. In contrast the definitions of fun suggest anticipation of task enjoyment, as illustrated in the sample quotes below:

> *Fun usually means ... it's a word related to games and things that you do just for fun because you want to do it, but because you want to do it not because you have to. But at extension school we usually do have to do the work, but even when we do have to do it it's fun, it's enjoyable* (N9/10).
>
> *Fun means highly interesting to me* (N56).
>
> *I think it's fun because I enjoy learning... and I enjoy getting my brain working* (N62).
>
> *I think fun does mean enjoyable but also I think anything that is fun is enjoyable and anything that's enjoyable is fun, and enjoyable is another way of putting it* (N63).
>
> *This class [for example], is more fun than other classes so you actually enjoy it, but when you don't enjoy it, it seems really, really hard but when you enjoy it it's not hard it's just a challenge* (N46).

In accordance with empirical research that links enjoyment, or positive affect, with engagement in task activity (Pretty & Seligman, 1983; Reeve, Cole & Olson, 1986; Ryan, 1982), these definitions of fun suggest that anticipated enjoyment, stimulates task interest, thereby promoting cognitive engagement and enhancing learning opportunities.

Retrospective analysis of the transcripts from booster class discussions revealed common usage of the terms *boring* and *fun* as descriptors of school activity, although the inquirer was unable to directly ask participants for their definitions. However, the data was examined to ascertain the context in which these terms were used in discussion. Interestingly, although the researcher anticipated that booster class participants would report more enjoyment in non-academic activities, because of the learning setbacks they had experienced, a balance was found between references to fun in academic and non academic tasks. In other words booster class respondents reported as much enjoyment in academic learning as they did in other activities.

> *I like social studies cause you learn about a whole lot of things. At the moment we are studying about world war two and it's real fun because we get to see what it was like then* (T1, p.5).

> *They should learn more about science because that's quite fun to learn* (T6, p5).

> *I like maths its fun cause we get to use calculators and protractors and we make graphs, we know how to make them cause we have been learning how to do graphs* (T1, p.6).

> *And some things are real fun like when you go to all those things in booster, co-ordinates that's fun cause you can make animals* (T7, p.4).

> *My teacher helps me with my learning when she makes it fun not boring. That's cause when you enjoy it you learn more* (T1, p.11/ 15).

> *We go to booster. We like it. It's fun. We make things and we learn maths as well, and English and paragraphs and stories and its real fun, and we go to it twice a week. And we do cool kind of maths and cool kind of English. It's real cool* (T6, p.6).

The Need for Individual Support

An important category that surfaced in the study was the perceived need for teacher input. Fifteen of the thirty-four booster class participants and four of the nineteen in extension school reported problems with procuring assistance from the teacher in their mainstream classes.

> *My school makes it harder for me to learn because, um, she* [the teacher] *can't like, go to everyone at once when everyone's calling out* (T6, p4).
>
> *It's hard for me to learn when the teacher leaves you waiting* (T8, p.2)
>
> *It makes it harder for me to learn when she just ignores you...*(T1, p.16).
> *And sometimes the teacher makes learning hard for me when she ignores you and, when she screams at other people and, you're always forgetting things* (T1, p.17).
>
> *When the classroom has too many people in it the teacher can't see you individually, they can only see you on the carpet* (T7, p.5).
>
> *When you have your hand up for ages and ages and, when the teacher starts to come over to you and, like the other people will just run in front of her and show their work and stuff when you were doing the right thing; just sitting there with your hand up. And by the time the teacher comes, if you have a question, you forget it because you are sitting there for so long you just get bored, and she will say "oh don't waste my time" and, it's really hard* (T.1, p.13).
>
> *Sometimes the teacher, like you know how there's so many people in the class, like the teacher can't help you all the time...like most of the time when you're struggling. So that's why I think there's a place here called booster so Mrs. Green can help us. People that are behind that's how we learn and catch up with the others* (T1, p.14).

It's hard for me to learn when the teacher leaves you waiting (T8, p.2)

My teacher makes it harder for me to learn when she has to help all the other people in the class and she can't like do stuff with me. Like in maths I've got my own textbook and it's a form five and I just work from that, and it's not easy for me but I'm learning stuff and it's really cool. So when they do algebra I do algebra as well but from my textbook (N38).

Most of the time I don't need help from my teacher. When he gives us the hard stuff we need help but he is usually too busy to help us because he is helping the other kids with their work (N53).

The teacher makes it harder for me to learn when she gives the whole class something to do and she knows that I can already do it. So she gives me something harder to do but she doesn't have time to show me how and I'm talking about normal school (N.73)

The Classroom Environment

Another recurrent theme throughout the discussions was the perception that interruptions and noise disturb engagement with learning tasks. Sixteen of the thirty-four participants from the booster classes and twelve of the nineteen extension school respondents reported disruptions in concentration, which were generally depicted as annoying, although the term annoying was connected to affect responses of varying intensity. Seventy-six percent of all comments about interruptions were attributed to the activities of other children in the classroom, as evinced by the following statements:

Kids stop me learning when they're annoying, talking and stuff (T8, p.3).

Our classroom makes it harder for me to learn because of the noise that the other children make (N41).

Kids get in the way of my learning when they talk a lot and talk to me (T6, p.3).

Kids get in the way of my learning when they talk to you and distract you all the time (T2, p.3).

Kids get in the way of my learning when um, when they like, if one kid starts talking to you and you have to stop and listen kind of thing and it's really hard to ignore people when someone's trying to talk to you (T1, p.13).

Kids get in the way of my learning when I'm on quite a hard problem and when I've almost got the solution and they talk to me about something completely irrelevant and it makes me completely lose the subject and topic and then I have to start all over again. I get really frustrated (N70).

Other children attributed noise to teachers or other factors of the classroom environment:

[It makes it harder for me to learn when] there's noise sort of stuff. Sometimes it's quiet but sometimes it's real loud. I like it [the noise level] in the middle (T3, p.5).

When it comes to writing stories you need quiet, a lot of quiet (N23).

The teacher makes it harder for me to learn when they're yelling around the classroom and it gets really, really noisy and I can't really concentrate on what I am doing it's kind of annoying because I can't tell them to quiet down a bit, cause they're the teacher (N24).

My teacher makes it harder for me to learn when she goes "clap, clap, clap all right quiet down everybody" cause our room has poor designing in the sound, acoustics I think (N39).

In addition six of the nineteen extension students found themselves in a de facto teaching role when in mainstream classrooms. They perceived the source of their interruptions to be a result of their academic capabilities, and the need of their peers for additional support.

> *[At primary school] I'm one of the smarter kids in the class. Everyone needs help so like I get stopped every two minutes, asked for a spelling word or how to do this or help because they need help. Like the teacher is busy and stuff* (N51).

> *And kids get in the way of my learning when I am doing something like a problem and they ask for the answer or something, and it's pretty obvious, and I have to tell them or else they keep annoying me* (N72).

> *When I'm just trying to concentrate on my own work. I mean I kind of wimpy and they just come up and annoy me. And sometimes because I'm so smart they just come up to me and ask "Barry how do you spell this or can you do this for me"* (N. 35).

Social Experiences and Learning

At the end of the focus discussions participants were asked to relate an impromptu story about 'something to do with school'. Analysis showed that a significant number of the children's narratives were dominated by social themes. Although it is important to remember that these narratives did not necessarily represent personal experience, the issues expressed have significance because they were salient in memory or imagination and accessible to recollection.

Thirty of the forty-six stories told involved social concerns at school, with fourteen exploring social issues exclusively. Sixteen stories focused solely on academic themes. In six of the stories friendships were portrayed as essential supports for academic success, corroborating with responses to the discussion questions, which linked social experience with task involvement. Descriptions

from nineteen narratives depicted both social and academic situations where individual fictional students overcame adversity. Because these narrative characters experienced success in spite of their difficulties it may be argued that the story authors demonstrate awareness of potential positive outcomes as the following extracts illustrate:

> *A boy came into our classroom. He didn't want to speak at the start of the year. He didn't know much English and was kinda shy and now he can just speak English and is not shy anymore. He's just like everybody else* (T3, p.6).

> *She sings and has fun and then she gets all hyped up. At lunchtime she plays with her friends again. She learns how to share with them and stuff and after school she does in-depth reading. Now that's very interesting cause she's not very good at reading and so she learns lots. After that she goes home and she learns how to share and be positive with her brothers and sisters* (T4, p.14).

> *He was the smallest boy in the school and he was always picked on. This little boy cried and cried and cried, and then he sat down and got all right and changed his name to Strathma and became a ventriloquist with Chuck and Teddy and he's a big hit now* (T2, p.7).

However, in the focus group and interview settings seventy two percent of all participants describe social interactions that engendered negative feelings and affected engagement in classroom learning. These negative emotions were predominantly associated with perceived injustice, social pressure to underachieve, and feelings of humiliation, as evinced by these excerpts:

> *Sometimes if I forget my homework or something and I've been working really hard on it and it's like you've never forgotten your homework before,*

and it is like your first time, she doesn't really listen she'll start shouting at you and make you feel bad (N53).

The teacher makes it harder [to learn] when they are grouchy. They just yell at the class and it makes you feel stressed but they don't yell all the time. Sometimes when you never do anything wrong but the teacher is still grouchy and stuff it makes it harder to learn cause you don't want to do it then (T7, p.5).

Then it's like your friends telling you that you're dumb because you're doing better than them. You feel like you don't want to learn any more cause you think, 'I want to be friends with these people so I'll stop learning so they can be as smart as me and then we can be friends' (N.53).

School [primary] makes it harder for me to learn when my classmates always ask me questions and when some people, who aren't necessarily my friends, think I'm posh and stuff because I come from Wellington. They kind of annoy me when I'm working and keep repeating the fact that I 'm too good at everything (N60).

You go and ask somebody else and maybe they'll know- and if you get rejected then you feel like dumb. You feel rejected. You feel nobody wants you (T2, p.7).

Sometimes when you are getting help from people like, when you are given help you feel real dumb and you need as much help as you can get (T5, p.11).

If you're doing a speech or something they laugh at you if you make a mistake and you're like 'oh I don't want to do it' and run out of the room crying (T2, p4).

The concerns and responses in these descriptive experiences may have been heightened by evaluation apprehension, or by sensitivity to social scrutiny. Although direct reports of special needs students feeling different from the students in mainstream classes were rare in this research, two students made this kind of comment during individual interviews,[2] and four of the narratives characterised feelings of isolation and distinctiveness. The following story extracts describe discomfort and debilitation associated with perceptions of difference. The first story recalls feelings from the past and the second perceptions and concerns that are projected into the future.

> *I remember coming [to school] and every one was staring at me and I found it hard to remember all the names and I didn't know anybody that well. In the first few months I felt a bit lonely, even when people wanted to play with me I didn't necessarily think they were good friends to me. After a while I kind of feel more comfortable... more comfortable being around people* (N5).

> *I am worried when I go to college because I won't know many people. I am very different because I am not good at making friends. I am scared of going to college because I'm scared they're going to make us do work that I can't do, and I will be behind and then I'll be told off. I am worried when I go to college because I'm not that good at physical education because I'm very, very different. I don't really like school cause it's really hard for me* (T5, p.16).

Bullying

Bullying involves intentional physical and/ or psychological cruelty. Research conducted by Maxwell and Carroll-Lind (1996) into children's experience of violence found that most of the cross section of children studied in the New Zealand sample had at sometime been both the victim and the perpetrator of

[2] Quotations from interviews referring to feelings of difference from peers are not included for ethical reasons

bullying. The findings of this study indicate that children who feel they are the victims of bullying also report cognitions and feelings that are perceived to interfere with engagement in learning, for example:

> *But the thing that annoys me most is other people like bullying me around... the guy who has been getting me into trouble the most... He comes and goes off with my friends and then every one's like 'oh gee I'm off that geek'... And he acts like he's a 'Homey'... and it really gets me cheesed off and then when I go back to class I am agitated and I get in trouble as soon as I get inside the room* (T4, p.3).

> *[Bullies] um they keep your head filled with nasty stuff and all while your trying to learn. All you can think about is worrying about what this guy is doing, going to beat you up, or getting beaten up at school* (T4, p.5).

> *You go into the classroom and there's someone who wants to beat you up and you go into the classroom and try to work but you can't stop thinking about it* (T7, p.5).

In addition to these comments, made during focus group discussions, nine recorded stories drew on themes involving aggression and bullying; in most narratives the principal character overcame the bullies and went on to excel in both social and academic domains. The following story however, is based on the experience of the victim.

> *I get bullied a lot. Even though I have a lot of friends I get bullied at my school that I go to at the moment. It's bothering me because I'm too shy to tell anyone. So I've spent years and years being teased and bullied and that's one of the reasons I don't enjoy school much, cause I'm bullied and I can't do anything about it. I have many problems at school because of the first form boys. I can't concentrate (N1).*

Thirty-three of the fifty-three respondents across both groups reported forms of psychological bullying in school that involved teasing and exclusion, both inside and outside the classroom. During lessons, taunts served to incite a response that often brought the victim to the notice of the teacher, and thus appeared to be a deliberate disruption of classroom activity, with the additional intention of causing discomfort to the victim.

> *And like he comes back and starts to talk and annoy you when you're doing your work. And you'll be wanting to walk away and he stays there and annoys you, and then you get told off* (T4, p.5)

> *When someone walks past he'll like start calling them names* (T.4, p.6)

> *When I'm just trying to concentrate on my own, I mean like I'm kind of wimpy, they just come up and annoy me* (N35).

Students in this study suggested that intentional teasing was a common part of school life; recipients of teasing reported feelings of hurt and humiliation:

> *At assemblies, I don't like it when they call people's names out... they make them stand up and say their last names...every time my last name gets called out in assembly I get teased for a whole week and it's really humiliating* (T1, p.6)

Girls are often reported to use social exclusion as a tactic to exert dominance and control over others. This study found that both boys and girls reported feeling rejected and put-down when their requests for help were denied or they were effectively excluded from group work in class.

> *I try to ask people and I say what's the words for these two letters? And they go "I don't know" or say "you ask the teacher" or something like that and I'm trying to learn for myself and everyone keeps saying "I don't know" and "I don't care"* (derogatory emphasis) (T1, p.17).

Kids sometimes say find out and won't help you (T8, p.3).

They just tell you go away if they don't like you, if you wanna know something. They just tell you to go away and then you don't know where to go and that. And like if the teachers are busy or something then you have to wait and wait (T2, p.6).

Preference for Special Classes

Although participants were not asked to compare special needs education with mainstream classes, seventeen of the nineteen extension class respondents spontaneously made statements that conveyed a strong preference for the learning tasks in extension school. Comments indicated that the perceived levels of task difficulty were better matched to participants' self-perceptions of their own skills:

I like extension school because it expands my mind and I never get bored and it's a real cool place (N60).

I think extension school is fun because we learn and I also think it's fun because I like giving my brain some challenges (N60).

Here at extension school it's really work and that's because its really, really difficult but its very, very enjoyable. I enjoy it (N13).

At extension school we do more complex things (N9).

Its more open at extension school, not as strict at extension school and the work is harder to do but it is much more interesting (N9).

And here [at extension school] we do really interesting stuff. You don't get bored like at normal school (N62).

Booster group participants made no commentary on the level of task difficulty in their booster classes; nor did they comment on problems associated with understanding language or task expectations. However, out of the thirty-four respondents twelve students reported appreciation for the lesson content of their booster classes, as illustrated in the sample quotes below:

> *In our school we have this programme called booster. And in our booster group is Alice, Kirk and Martin, and Billy and me and we have fun. We do maths and measurement and English. At the end of term we did shatter pictures like they do on the cartoons* (T7, p. 5).

> *We go to booster. We like it. It's fun. We make things and we learn maths as well, and English and paragraphs and stories and it's real fun, and we go to it twice a week. And we do cool kind of maths and cool kind of English. It's real cool* (T6, p.6).

> *[At school] we learn new skills like how to pass a soccer ball and how to shoot goals and basketball, and we learn how to play rugby and all sorts of games like that. And we have booster and it helps us learn sort of thing. We learn fun stuff in booster* (T4, p.2).

> *And some things are real fun like when you go to all those things in booster, co-ordinates that's fun cause you can make animals* (T7, p.4).

> *And sometimes it's fun to learn like our work in booster is fun* (T1, p.13).

One booster class student recounted the experience of working with a peripatetic special needs teacher at primary school:

> *[At primary level] I had a special teacher that came to help me and we'd go to the, to the staff room and we'd find fun ways of doing our maths so I'd do it. And I had a book for doing my work in and I got stickers for how good I was working, and it made it so easy you know like using a fun way*

to learn like she was using. It was like "now we're going to do this, now we all want a piece of pie so I want you to cut it in half". So I would always get it right cause- and if I didn't she would help me and tell me "now is there another way" and like there might be and we would work out another way (T1, p.14).

This last quote clearly describes a learning situation where the teacher's authority structure enabled the student to experience a certain amount of choice and control over the activity. This heightened perception of academic autonomy and control was clearly appreciated by the respondent, and was achieved by linking cognitive strategies with effort through a reward system that emphasised personal progress rather than outcomes or products "*I got stickers for how good I was working*". Moreover, this student was encouraged to link her prior knowledge to strategies that were understandable and appropriate for the learning task, bringing achievement within the student's control. "*Now we all want a piece of pie so I want you to cut it in half.*" Additionally, this student reported teacher feedback that identified mistakes in strategy choice but focused the students attention on finding a more appropriate strategy to complete the task rather than emphasising the error: "... *and if I didn't [get it right] she would help me and tell me 'now is there another way' and like there might be and we would work out another way*".

In addition to the statements made about learning tasks in extension school, two students believed that the social interactions in extension classes were more constructive than in mainstream classes.

At extension school its good because there's not a lot of people and they're all polite to you, and its more comfortable than normal school, because at normal school some people are a bit rude and the class is big and noisy (N29).

At extension school everybody gets along together. They don't put each other down (T9, p.3).

There were no reports of bullying or put-downs in any of the special classes, and in fact booster classes provided guidelines to assist children to work towards pro-social goals and behaviours. Reminders about social behaviour, in the form of posters displaying adages and poems, were displayed on the walls and supporting information was available in pamphlet form.

PART THREE
Motivational Gains and Benefits of School Learning

Special needs students reported liking school for a range of reasons, including learning academic subjects and sports, having a choice of extra curricular activities and the opportunity to make friends. These views were illustrated in the following examples:

Like the whole school they know heaps, like everybody knows something different, and then if you don't know you can ask somebody else and maybe they'll know (T6, p.5).

When I was five I didn't know any friends and I know lots of friends now because of school (T6, p.4).

My school helps me learn because we all do the same thing. Like there's no TV to distract you. It's not the same at home. Everybody's doing other things (T8, p.3).

[School] has that feel that work-feel because it's at school and not at home and everybody else is doing the same thing so you can ask for advice or you can help them (T10, p.4).

My school helps me to learn because it has things that I have to do. It just like tells me what to learn in a way and it's quite simple in a way quite basic (N42).

When I first started school I was scared like and now I've got friends, like I'm real good. I can actually play more sport. They should learn more about science because that's quite fun to learn (T6, p.5).

When I get a bit lonely writing something, and I look around and there's other children talking to each other and stuff, and I think I am not alone and start writing again quite comfortably (N23).

Working Together

With respect to mainstream classes, eight of the nineteen extension school respondents and twenty-three from the thirty-four booster class respondents reported that working collaboratively with peers assisted their learning. The statements below describe some of the different ways that children collaborate and support each other in their academic tasks:

I reckon it helps when we work together in pairs or in a group and there's a question and like none of us understand it. It's really good because we all kind of help each other. Like one person might suddenly get one part of the question, understand one part of it, and someone else might understand another part. So we kind of put it together kind of thing and so we help each other. Like work out the question and it's really good (T1, p12).

Kids help me with my learning when I get confused with maths (T6, p.3).

[kids] they help me do it and they help me to do it myself (T6, p. 3).

Sometimes it helps when other people are talking around me, talking about something and I think oh, that's a good word I'll use that word in my

story. Sometimes it helps if someone else reads me a bit of say journal writing, or somebody else reads me a bit of their story, and I think that's quite interesting and it springs something up in my mind (N23).

It's quite helpful when other people ask things because it means that I can think about it and I can remind myself of it (N24).

Participants also reported enjoyment and benefit from encouragement they received from teachers and peers in both regular and special classes. This included endorsement of self-perceptions of competence, praise, concrete evidence of achievement, encouragement of effort and persistence, and vicarious persuasion. Fourteen participants from extension classes and seven from booster classes reported that encouragement supported their learning, as described in the contexts below,

Here at extension school and at primary, I was getting encouraged by a lot of my friends when I was doing well. So it was really nice just having them say I was doing well and things like that, so I was more encouraged to learn (N49).

If sometimes I'm not happy and I kinda feel really down she'll [the teacher] encourage me to do more and then she'll say, "ah OK you've done your best and maybe you'll do better next time don't worry about it" (N52).

[At primary school] our principal always comes round our classrooms to check like to see what we are doing and she comments on our work in nice ways and points out things that will help us to learn more (N59).

I actually enjoy, I really like getting encouragement cause if I don't get encouragement I don't feel like I am doing it right, but it actually helps if somebody encourages me and says "I like that", and even if it's constructive criticism it helps (N27).

Our classroom helps me to learn because they encourage you, the kids and everything, and when you finish they say what you need to work on (T2, p.4).

[My classroom helps me with my learning] because we have good stuff on the walls that encourages us and our teacher encourages us (T7, p.4).

Kids help me with my learning because if they understand I can understand too (T9, p3).

Explanation and Clues

When working on challenging tasks in regular classes, sixteen booster class participants and five extension school respondents reported receiving help from their teachers. Fifteen booster class students and the same number of extension class participants also reported looking for clues within the classroom environment, for example in wall displays and in the learning material. One student believed a graded system of clues would help with problem-tasks, while another felt clues and examples were useful, but preferred to solve problem-tasks unaided.

My teacher helps me with my learning when she gives me advice, answers any questions and helps me along when I'm stuck and gives me examples of how to do something (N73).

When I don't know the word and she [the teacher] explains it to me (T8, p.3).

The teacher helps me with my learning when I need help she can explain it to me. We ask her and she comes to us and shows us what to do (T.6, p.5).

I like to have the question in front of me, and a clue how you have to do it (T5, p. 10).

Our classroom helps me learn because it's got things round the walls that help you. It gives you examples (T10, p.4).

If you're given a clue or something like when you've got a problem. Like one of those treasure hunt things and you use a map and that and the teachers give you a clue to the first thing like, then number two (T2, p.5).

When we are given clues or anything sort of that way it makes it easier for me to find the solution, but also I like to do it by myself because it challenges my brain (N73).

Summary

In conclusion, the majority of respondents in this study (fifty out of fifty-three) recognised that a quality education and a well developed ability to learn would be an asset to them in later life, and reported times when they had actively pursued information to assist with learning tasks. Students described asking teachers for explanations, advice and clarification, conferring with classroom peers, and reported other strategic initiatives such as looking for clues in the learning material or in wall displays, books or other environmental sources.

Thus in their regular classrooms the majority of participants attempted to actively engage in learning tasks, and persevere with academic tasks despite perceived difficulties. However, negative thoughts and feelings about task expectations and inadequate personal performance were expressed, especially with regard to problematic aspects of mainstream inclusion. Barriers to learning identified by students in both respondent groups, but particularly those from booster classes, included difficulties with reading, comprehension and processing information related to set work, which limited children's self-perceived ability to participate in learning activities and frustrated task engagement. These obstacles may have exaggerated perceptions of task difficulty. Students reported

the need for more individual attention from their teachers, and believed additional help was restricted because of the numbers of students demanding teacher time.

The majority of participants from extension classes reported mismatch between task difficulty, expectations and self-perceived skill, claiming that this inhibited cognitive engagement and effort as well as the enjoyment derived from learning activities. Problems with task completion led participants from booster classes (and some from extension classes) to compare their own performance with the performance of their peers, resulting in some feelings of inadequacy. The data suggests that participants sometimes try to conceal or avoid anticipated academic failure in order to limit social consequences, a response that may aggravate learning problems by focusing cognitive effort on evasion strategies.

In contrast some participants found classroom tasks were not challenging enough, and were regarded as unproductive and unsatisfying for learners. Thus, learning tasks that were perceived as overly demanding, or alternatively very easy, limited cognitive involvement, resulting in a lack of positive affect. In addition, children from both groups noted that while they were engaged in classroom learning, noise and interruptions disturbed concentration, interfered with task completion and hindered performance. Some extension class participants reported persistent disruption due to demands for peer tutoring.

Furthermore, respondents' interpretations of social experiences at school also clearly affected their self-perceptions, feelings and behaviour, and therefore impacted on task involvement and ability to engage in learning activities. Participants reported residual feelings of negativity associated with perceived injustice, social pressure to underachieve, feelings of humiliation and feeling different from peers, which seemed, for example in narratives, to occupy children's thoughts and divert attention from learning goals. In special needs classes however, children's reports of social and academic experiences tended to reflect more positive thoughts and feelings.

Most students in the study agreed that time spent working in social groups in their regular classes assisted with learning tasks, and children's accounts of group activities described constructive social interaction and collaborative learning in use in the classroom. Children identified encouragement and a sense of belonging to a group of learners as important to positive self-perceptions and task involvement. There were several clear references to enjoyment derived from learning tasks, personal goal achievement and social interactions, and the data revealed that participants tended to cognitively engage in tasks and strategically direct their effort when they were enjoying classroom activities. However, when school tasks were believed to be boring or lacked challenge, or when social experiences were accompanied by negative feelings, children became less involved in learning tasks and expended less effort.

CHAPTER FIVE
DISCUSSION AND CONCLUSIONS

The findings of this thesis represent statements and stories from the sampled students that emerged in response to questions and prompts that sought to elicit beliefs and perceptions relating to learning contexts and the classroom environment. Organisation of the accounts into thematic categories has allowed them to be juxtaposed and analysed in relation to both cognitive-educational and developmental research. The fields that will be discussed in further detail include interaction of 'special needs' students with the mainstream classroom environment, task engagement and self-regulation of behaviour, peer relationships and social interaction, the role of the teacher in special needs learning, emotion and cognitive engagement, similarities and differences in students' perceptions, and classroom goals and student achievement. The chapter is concluded with an outline of the study's limitations and suggestions for further research.

This research highlights factors seen to influence and promote effective learning, and demonstrates ways in which environmental factors interact with individual perceptions of goals and the nature and purpose of learning. It provides support for the contention that children's adjustment and performance in school are not solely attributable to their individual, innate characteristics. Indeed the style and quality of the learning environment is seen from these results to impact deeply on children's immediate and long-term learning goals, skills and accomplishments (Wang, Reynolds & Walberg, 1986).

To achieve academically children need to develop a sense of competence and efficacy, that will derive from realistic, flexible self-concepts and conscious reflection on strategy use and appropriateness. They need to attribute success to suitable strategies and effort and to understand failures as mistakes and

learning tools. It is also important to be able to persist in the face of academic and social difficulties, and to perceive learning as an enjoyable and intrinsically rewarding activity (Borkowsi *et al.* 1992). Research has shown that it is most likely these constructive psychological orientations will develop in classrooms where pro-social, task-oriented goals and behaviours are emphasised, and where students are cognitively engaged in the process of learning (Borkowski *et al.*, 1992; Dweck & Leggett, 1988; Nicholls, 1984, Kupersmidt, Coie, & Dodge, 1990; Skinner & Belmont, 1993; & Wentzel, 1991a,b)

However, these research findings suggest that in some instances, mainstream environments do not facilitate or support special needs students in their desired attempts to attain either relationship-building and friendship goals, or their wish to maintain cognitive engagement and control. The surveyed literature purports that children who cannot access full support for their learning endeavours may demonstrate diminished levels of motivation and performance in response to misinterpreted failure experiences, and 'learned helpless' behaviours which further prejudice learning activities and aims. Self-defeating attitudes can be explained by cognitive judgements about the relative worth of options such as applying increased effort to difficult problems in the face of possible failure (Chapman & Tunmer, 1996; Paris & Winograd, 1990; Pearl, 1982). Unfortunately, children caught in this downward motivational spiral are sometimes classed as inactive, dependent, or lazy (Chapman & Tunmer, 1996) when it is argued that 'learned helpless' avoidance behaviours are caused by the anticipated failure of academic tasks, and an inability to find solutions, rather than innate deficiency of positive traits (Covington & Omelich, 1979; Dweck & Leggett, 1988; Dweck, 1996). In order to overcome these lowered levels of motivation and improve children's metacognitive abilities the literature suggests design of strategies for intervention in children's behaviour based on an understanding of children's fundamental perceptions and goals (Dweck, 1996; Palicsar & Brown, 1984).

Students reported a number of observations about factors that influenced their ability to cognitively engage in classroom learning activities, either by hindering or supporting task engagement. This discussion will compare the findings with salient cognitive-educational and developmental literature and assess the implications for developing classroom practice for a broad array of needs. Participants perceived that their ability to focus on task activity and learning in the classroom was impaired by peer interruptions and classroom noise, particularly disruption that was intermittent or unnecessary, and as such out of the individual's control. Research has shown that in certain conditions noise impairs performance at complex tasks requiring 'total information processing capacity' and suggested that "the deleterious effects of noise appeared in our studies after termination of the stressor when adaptive coping was, presumably, no longer required" (Glass & Singer, 1972, p.44). These findings have serious implications for children already struggling with cognitively complex tasks, as the fluctuating noise levels which are commonly reported within classroom contexts may increase their difficulties, thereby decreasing their sense of control and agency in learning tasks and lowering motivation levels (Glass & Singer, 1972; Pintrich & Schunk, 1996). Because interruptions and noise are largely under the collective control of students, an effective way to combat distractions may be to make the class aware of their ability to improve the situation, thereby encouraging reflective self-regulation and a democratic approach to student learning. This approach is more likely to succeed than a resort to external imposition of rules and standards.

Some students' reported that their ability to focus or engage in classroom academic activity was affected by their inadvertent assumption of the role of teacher aid. These students, usually typified as having special academic abilities, complained that they were often interrupted by peers seeking advice and support, and described the distractions as detrimental to their own learning engagement and ability to focus on task activity. To enable these children to concentrate on their own work, teachers may need to initiate and explicate

changes in classroom behaviour patterns by endorsing alternative behavioural patterns that change the student's role from teacher aid to independently engaged learner. This approach may be applied within a particular group of children or the class in general and is not intended to discourage co-operative behaviours, but to prompt the use of alternative sources of information and instruction and to encourage children to show consideration for one another. In addition, the utilisation of this approach may overcome the problem of misinterpretation of behaviour, for example when peers may read frustration and a wish to concentrate as rejection. Although children up to the cognitive-developmental age of twelve are able to display simple reciprocity, they are often unable to negotiate social intricacies, such as denying peer assistance for valid reasons, or to co-ordinate their own interests or goals with those of another, (Keegan, 1982).

Participants in this study described social interactions that they interpreted as hurtful and that affected their perceived ability to engage with task activity. Negative exchanges typically included psychological and physical bullying, teasing, taunting and group exclusion, and resulted in perceptions of injustice, pressures on performance, such as not wanting to achieve academically, and feelings of difference and personal humiliation. These findings concur with writers documenting that children with special needs experience social difficulties, related to behaviour and acceptance in the context of regular classrooms (Clark, 1992; Pearl, 1992; Tattum & Tattum, 1996). Pearl (1992) has argued that "learning disabled students' social problems may be due as much to the biases of other children as to their own behaviour" (108). It is well documented that children at school need support to co-ordinate social and academic goals and resolve social conflicts. Pro-social behaviours and friendships benefit students in that good peer relationships support motivation and academic achievement (Kuperrrsmidt, Coie, & Dodge, 1990; Connell & Wellborn, 1991). A pro-social classroom climate could be facilitated through teacher modelling of pro-social behaviour and possible conflict resolutions, and

initiation of discourse that explicitly informs children about goals, interpersonal perceptions and the consequences of social strategies and interactions. Discussion breaks the code of secrecy that often surrounds bullying and other forms of antisocial behaviour, and endorses structures whereby each student has the opportunity for respected and meaningful involvement (Birch & Ladd, 1996; Presseisen, Smey-Richman & Beyer, 1997; Tattum & Tattum, 1996, Wentzel; 1996).

Participants also reported their appreciation of the constructive interactions and collaborative learning that they found were taking place at school, noting that group activities were helpful and enjoyable opportunities to interact with peers and exchange information and knowledge. In contrast to perceived antisocial and prejudicial interpersonal transactions, children explained that positive interactions increased their learning opportunities and abilities to cognitively engage. Classwork performed in pairs or groups was described as thought provoking and stimulating, since children sought to help each other to understand task requirements and to develop skills, for example in creative areas such as story writing.

Encouragement from teachers and peers was cited as another positive influence on learning, as students personally enjoyed receiving praise for their efforts or constructive criticism and believed it to assist with task engagement and motivation. Participants described encouragement and positive feedback as endorsements of self-perceptions of competence, tangible evidence of achievement, stimulation of effort and persistence, and forms of vicarious persuasion, such as emulation of success in peers. Thus metacognitive decisions may be prompted by students' responses to encouragement from their teachers or peers. However, teacher feedback needs to account for learners' attribution styles and their developmental and cognitive levels, in order to guard against misinterpretation or distortion of feedback (Phillips, 1984). Chapman (1992) recommends accurate representation of students' achievements, that

incorporates information about processes and strategies used in classroom tasks, rather than conveyance of false praise, arguing that "children can learn from both success and failure" (p.72).

This research found that students who were achieving at different academic levels were more alike than different in terms of their perceptions and concerns. However, the differences that did emerge were typically concerned with levels of task difficulty in the regular classroom. Children from booster classes found the language used in the classroom hard to understand, while participants from extension classes generally believed regular classroom tasks were too easy and therefore uninteresting. Although these perceptions are disparate they both have the potential to lead to maladaptive motivational patterns and decrements in performance (Chapman, 1998; Short & Weissberg-Benchell, 1989). These may be more apparently problematic for booster class students as their frustrated attempts to engage in learning tasks may be interpreted as setbacks and attributed to influences outside of their control. Then, in attempts to avoid further anticipated failures, children may lower self-expectations, give up more easily, or avoid tasks altogether (Chapman & Tunmer, 1996; Borkowski *et al.*, 1992; Dweck & Leggett, 1988; Short & Weissberg-Benchell, 1989). Alternatively, when learners perceive tasks as too easy, they may hesitate to expend effort, making a metacognitive judgement about the worth of achieving or learning from such a task, and dissociating the relationship of effort to outcome. If children do not try hard at school their skills and achievements do not improve in a manner that is commensurate with their ability and they risk developing defensive patterns of behaviour (Rimm, 1996; Short & Weissberg-Benchell, 1989).

However, it is important to note that beliefs about skills may not correspond with actual ability. Underachieving students may enhance their performance, self-perception of ability and self-efficacy by successfully employing strategic approaches to particular tasks. For example, competent use of strategies that break down complicated procedures or problems into smaller, more manageable

units may help students to manage and complete schoolwork within allocated timeframes, thus avoiding anxiety over incomplete tasks (Mulcahy, Marfo, Peat & Andrews, 1987). On the other hand however, the expectation that children who do not possess these abilities carry the same workload as more skilled strategy users may prove counterproductive for the learners perceive tasks to be very difficult. Under such circumstances a compromise may be made by reducing the quantity of homework in the expectation that these learners will employ appropriate task strategies and produce quality of work until they are able to improve their strategy use.

Participants in this research observed that teachers in their regular classrooms sometimes have problems providing special needs students with the level of individual guidance they felt they needed. These instructional difficulties are possibly linked to students' conception of the teacher's role as keeper and provider of information. In the mixed ability classrooms included in the research the teachers were sometimes unable to dispense information and instruction in accordance with high student demands. Comments from booster students about their experiences in mainstream classes also implied that the language used by teachers in some classrooms was insufficiently differentiated to allow full understanding of learning tasks, and that it was frustrating and inhibitory to task involvement. One student was also hindered by reading difficulties. Over time, negative emotional experiences, such as frustration with learning tasks, tend to diminish interest in task activity and enjoyment in learning (Pretty & Seligman, 1983; Reeve, Cole & Olson, 1986; Ryan, 1982).

It has been argued that information rich environments, where a range of appropriate instructional supports are available, enable children to employ independent work habits, and foster motivated learning (Brown, 1991; Pressian, Smey-Richman, & Beyer 1997; Ryba, 1995). This benefits students in multiple ways, since teacher's efforts can be redirected and focused onto facilitation of learning by planning tasks that cater for diverse levels of knowledge and skills,

adaptating educational materials and methods to an appropriate level, and employing metacognitive coaching (Brown, 1991; Paris & Winograd Short; Weissberg-Benchell, 1989).

In addition to traditional instructional aids and resources such as journals, language cards and class text books, computers can now provide instructional support and a research resource that caters for a range of topics and levels of skill and knowledge in the classroom Ryba & Selby (1995). Papert (1982) contends that children can be empowered by knowledge learned through the 'private' experience of interacting with the computer away from competitive pressures and the need for approval. Thus, in the regular classroom computer programmes that provide booster students with appropriate information, such as examples of sound-symbol correspondence, can also sustain student involvement in learning activities.

During the class discussion conducted as part of this research, students used the terms 'boring' and 'fun' frequently. These terms were interpreted to reflect children's affective responses towards perceived experience. Analysis of the data suggested that when positive affect accompanied academic tasks, children reported cognitive engagement and therefore focused effort. Conversely, when school tasks were perceived negatively or when social experiences were accompanied by negative feelings, cognitive involvement and effort diminished.

The range of difficulties described by students in the research sample seem to align with the classic factors known to handicap cognitive engagement in learning tasks. They can be combated by established teaching practices such as promotion of pro-social, non-competitive, information rich environments, which enable individualised learning programmes and independently motivated work. When students perceive learning tasks as fun, their enjoyment promotes task-intrinsic interest in learning tasks (Pretty & Seligman, 1983; Reeve, Cole & Olson, 1986; Ryan, 1982, and the development of metacognitive knowledge and skills

which facilitate further achievement (Borkowski et. al., 1992). It seems that these learning environments must be promoted, to increase the cognitive engagement and motivation of both special needs students and their mainstream peers.

The results from this research indicate that there are areas within the regular school system where support for special needs students may be strengthened. It may be that "mainstreaming means changing the mainstream" (Ballard, 1989, p.54) in which case differentiated curriculum and learning material, together with pro-social climates that foster attitudes towards relationship-building in regular classrooms, should improve the effectiveness of mainstreaming activities. These steps would go some way to providing the individualised, co-operative, non-competitive learning environments recommended by Ames (1992a) and Chapman (1988) for sustaining the motivation of special needs as well as their peers (Wang & Baker, 1985-86). This research supports Ames (1992a) assertion that these kinds of classroom climates support special needs students, by encouraging cognitive engagement and enjoyment of learning. One important finding is that classroom language, learning material and its delivery must be readily accessible and matched to student learning needs.

Limitations of the Study

The intention of this research was to characterise perceptions and feelings that influence children's involvement in classroom tasks. The present study may be limited by the absence of detailed comparative data, for example teachers' reports of students' adjustment, measures of individual academic achievement and data associated with perceptions of regular and special needs in mainstream classes. Despite these limitations of scope, this study illustrates issues that a certain set of individuals may identify with and the findings are therefore transferable to other situations if similarities exist between contexts (Lincoln & Guba, 1990). Comparative information from multiple data sources clearly defines the research outcomes as authentic because converging lines of enquiry and

emergent data strengthen conclusions about of students' perceptual relationship to the environment (Anderson, 1990).

Future Research

Madden and Slavin (1983) contend that when appropriate supports are in place mainstream class placement for students with learning problems is superior to full-time special class placement. While the researcher supports this view in theory, this study adds to a body of evidence indicating that New Zealand schools may not provide the necessary support for mainstreaming initiatives to be successful. It is hoped that these results will improve mainstreaming practice in New Zealand schools by raising awareness of the relationship between the perceptions of special needs children and features of teaching strategy and the learning environment which impact on children's motivation for learning and cognitive and metacognitive awareness.

However, since there has been little research into the learning motivations of special needs students in mainstream New Zealand classrooms, there remains plenty of scope for further inquiry. Research could include the monitoring of differentiated programmes and teaching strategies for factors such as student engagement and interest in learning tasks, individualisation of the quality and quantity of learning programmes, measures of student performance and attentiveness to different attribution styles and goal orientations. Children's and classroom behaviour, social interactions and emotional adjustment to the classroom environment would also be relevant to provision of special needs programmes, since pro-social environments have been found by empirical researchers to impact on learning and academic achievement.

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Appendix A

Guidelines for Student Identification and Selection for Booster Classes

GUIDELINES FOR STUDENT IDENTIFICATION AND SELECTION INTO BOOSTER CLASSES

- Standardised Testing e.g., Progressive Achievement Tests (P.A.T) in reading, mathematics and listening comprehension.

- School devised tests.

- Individual learning profile (comprising school test results and teacher reports overtime).

- Norm-Referenced Achievement (measured against expected achievement at same chronological age).

- Teacher reports from previous schools.

- Student attitudes.

Appendix B

Extension School's Definition of Special Abilities

EXTENSION SCHOOL'S DEFINITION OF SPECIAL ABILITIES.

DEFINITIONS

ONE

A gifted child is one who performs or who has the ability to perform at a level significantly beyond his or her chronologically aged peers and whose unique abilities and characteristics require special provisions and social and emotional support from the family, community and educational context.

TWO

In all humans, innate capacity is transformed into actual performance through its interaction with motivation and commitment, with the child's learning or working environment, and with the opportunity the child has to learn and practice.

Harrison, 1995

Gifted children are those children who possess an innate capacity to perform at an exceptionally high level when such interaction takes place.

They may be found in all races and cultures, in every in every socio-economic group; amongst the disabled, and in both sexes. They appear in every field of human endeavour.

Such children may have the potential to go beyond the known, to extend human knowledge, understanding and achievement.

With acknowledgement to

Marland, Renzulli, Gagne and Parken.

Appendix C

Extension School's Parent Questionnaire

Parent Questionnaire

DO NOT PANIC WHEN YOU SEE THIS DOCUMENT!

It looks huge we know – but you'll find that you generally need only to tick boxes.

As you do, remember:

(a) there are no "right" or "wrong" answers, only statements of fact or belief
(b) no one child will show *all* of the characteristics listed
(c) exceptionally able children are a very diverse group: some have characteristics which are exactly the opposite of those shown by others
(d) some exceptionally able children sometimes are described as being "behavioural problems" by teachers when they manifest their boredom or frustration: we understand this: it will not disadvantage your child to have been so described.

Your answers to this questionnaire will help us to build a profile of how *your* child has developed and how he or she learns and responds.

We have three uses for this information:

(a) The profiles will help us to identify the children likely to benefit the most from participation in the One-Day School.
(b) They will then help us to programme as appropriately as possible for these children.
(c) Treated statistically, they can also contribute to our ongoing search for an improved understanding of the special needs of exceptionally able children.

NB:information used for research purposed *does not identify the individual child*: it is translated into *statistical* statements such as "62.5% of this group were walking by 10 months".
It is important for us to have New Zealand-derived information of this kind to support our work on behalf of exceptionally able children in this country, but if you feel at all concerned about this, please feel free to tick the "Do not use" box overleaf.

A special note for home-schoolers: there is a box overleaf to indicate that you are home-schooling. We understand that you may not be able to answer all of the questions on this or the teacher's questionnaire. Please do what you can and feel free to add any additional information if this would be helpful. We will call you if there is anything we need to clarify.

Lastly, remember that if you have any queries at any stage, you can ring us on **09 638 9010** and we will do our best to help you.

Thankyou!

"The Centre".

PART A: GENERAL INFORMATION

Please print – thank you!

Child's Name: .....
Date of Birth: ..... Current Age: .....
Parents'/Caregivers' Names: .....
Address: .....
.....
..... Phone: .....
Date questionnaire completed (today's date): .....

---

(1) Preferences:

(a) *Groupings:* which of the following groups would best suit your child at this stage?
- ❑ Junior Group: for those still developing some basic skills: **6-7 years.**
- ❑ Middle School: for those who are little more independent: **8-9 years.**
- ❑ Senior Primary: Maths/Science/Technology group: **10 plus.**
- ❑ Senior Primary: Language/Arts/Social Sciences: **10 plus.**

(b) The One Day School runs every day of the week. Is there any day on which it would be impossible for you to to get your child to the One Day School?
❑ Monday ❑ Tuesday ❑ Wednesday ❑ Thursday ❑ Friday

(c) Which venue is most convenient for you?
- ❑ North Shore
- ❑ Central Auckland
- ❑ Henderson
- ❑ Howick/Pakuranga
- ❑ Manurewa
- ❑ Tamaki (please ask us about this venue)

(2) Use of information for research

I understand that information from these questionnaires could be used statistically to assist research and that any such information would not identify the individual child.

- ❑ I am happy for my questionnaire responses to be used in this way.
- ❑ I would prefer my questionnaire *not* to be used in this way.

Signed: _____ .

---

(3) Schooling history.

(a) If your child has attended any type of early childhood education programme, eg play centre or kindergarten, please list here and give the approximate number of years/months involved:

.....
.....
.....
.....
.....

(b) Child is currently

❑ attending _____ School and is in Year _____ class.

❑ home-schooling.

(c) If your child has attended more than one school, did the change(s) of school result entirely or to a significant degree from concern about the way his or her abilities were being catered for?

❑ Yes. ❑ No.

(d) If you are homeschooling,

[i] has the child ever attended school? ❑ Yes, for _____ year. ❑ No.

[ii] did the decision to homeschool result entirely or to a significant degree from concern about his/abilites being catered for?

❑ Yes ❑ No

---

(4) Identification

How did you first come to think that your child might have exceptional ability? Tick any of the following which apply:

❑ he/she was different from other children in the family or at preschool

❑ read an article/saw a TV programme on gifted children and thought he/she matched the description

❑ It was first suggested by:

- ❑ family member
- ❑ doctor
- ❑ Plunket nurse
- ❑ neighbour
- ❑ preschool teacher

❑ school told us when he/she was aged _____ years.

❑ discovered as a result of psychological assessment for behavioural problems

❑ discovered as a result of psychological assessment for learning difficulties

❑ other (please specify)

.....

.....

.....

.....

---

(3) Ability Assessment

If your child has ever had an assessment of his/her ability carried out by the Special Education Service, a psychologist, or any other person qualified to make such an assessment, it would be helpful for us to see a photocopy of that assessment.

❑ Please tick here if you have enclosed such material.

(4) Samples of Work

If it's possible, we would like to see some examples of your child's drawing and creative writing. This is not because we are looking for special skills in drawing or writing, but because such material can tell us a great deal about how a child perceives and understands what he/she experiences. So, if you can, we'd like to ask you to include photocopies of:

(a) no more than 2 drawings from preschool years, and/or
(b) no more than 2 drawings done since starting school, and/or
(c) no more than 3 pages of the the child's creative writing.

NB:

- Please put the child's name and his/her age when the work was done on each piece.
- Please do not include more than the requested number.

All ticks in boxes from now on!!!

PART B: *PRESCHOOL YEAR: CHARACTERISTICS*

From each group of statements tick the one which most accurately describes your child during this period:

1 ❑ woke most nights at least once up to at least age 3
❑ woke most nights at least three or four times or more
❑ work some nights but not regularly
❑ generally slept through the night

2 ❑ continued to take daytime nap till over 2 years
❑ gave up daytime nap between 1-2 years
❑ generally gave up daytime naps between 6 months - 1 year

3 ❑ was very placid, an easy child to deal with
❑ sought attention for needs but was otherwise undemanding
❑ would often demand adults' attention to answer questions or share his/her ideas or interests of the moment
❑ was *very* demanding in this respect

4 ❑ was speaking in sentences and using complex words before the age of 2
❑ was speaking in sentences and using complex words before the age of 3
❑ did not really start to speak well until around age 3 but then showed very rapid speech development

5 ❑ was intensely curious, constantly asking questions about everything under the sun, and persistent in seeking answers
❑ would *at times* show intense interest and ask lots of questions on specific topics
❑ was not an especially curious child

6 ❑ preferred adult help with tasks (eg dressing, feeding)
❑ liked to do things him/herself but readily accepted adult help
❑ was strongly independent, would insist on doing things for him/herself even when not fully capable

7 ❑ showed little interest in stories or books
❑ appeared to like being read to but would not generally actively seek this – usually initiated by parent
❑ showed strong enjoyment in being read to, would demand stories to be read, followed stories closely

8 ❑ showed little interest in learning to read for him/herself before going to school
❑ responded positively to parents' or preschool teachers' attempts to introduce reading skills before starting school and made some progress in mastering these skills
❑ asked to be taught to read
❑ initiated learning to read him/herself, trying to work out individual letters/words/phrases, beginning about age _____ (please complete)

9 ❑ was quickly bored with simple or repetitive games and toys
❑ enjoyed this kind of material – seemed not to lose interest

10❑ was easily distractable, rarely concentrated for more than a few minutes at a time
❑ by 1 ½ - 2 years, could concentrate on activities such as drawing, playing with blocks, for up to 10 minutes by self
❑ by 1 ½ - 2 years, could concentrate on activities which caught his/her attention for 30 minutes or more

11❑ was very sensitive, distressed by hurts experienced by others, including people or animals seen on TV or film
❑ was sensitive to hurts experienced by people or animals in the immediate vicinity
❑ did not seem very aware of others' feelings or concerns at this stage

12❑ in a group, was usually the leader or the "boss"
❑ was usually happier being one of the "followers"
❑ tended to be on the fringe, was often left out

13❑ generally related comfortably to most children of his/her own age
❑ seemed to like playing with younger children, sometimes as "mother" or "boss"
❑ seemed to prefer playing with older children/adults
❑ generally played on his/her own

14❑ was very noticing and extremely observant of detail
❑ was observant of detail in regard to areas of special interests
❑ noticed what was happening around him/her but was not outstandingly observant

15❑ could accurately recall things seen or experienced only once, often after a considerable time lapse
❑ could recall favourite songs, stories etc practically word for word
❑ had a good memory for things learned by rote
❑ all of the above

16❑ was generally obedient in following instructions, family routines, etc
❑ was easy-going, more or less did as told most of the time
❑ had strong individual likes and dislikes and preferred ways of doing things and insisted on these.

17❑ could count to at least 100 by age 4
❑ had grasped the meaning of numbers and was able to do at least simple addition before school entry
❑ enjoyed playing around with numbers and maths ideas
❑ would notice mathematical relationships in ordinary things
❑ all of the above

18 when something he or she wanted to do proved beyond his/her current level of skill accomplishment,
❑ he/she would lose interest and move on to something else
❑ would ask an adult to help to complete the task
❑ would become frustrated, refuse to give up, was likely to end up in a tantrum or outburst

19❑ when playing, especially liked making and building things, often making very inventive or complicated structures, could explain the process and seemed to enjoy it more than playing with the finished article
❑ was very much into fantasy play, inventing long, complicated stories, inventing characters, dressing up, acting out, etc.
❑ especially enjoyed role-play, eg playing house, and would repeatedly choose such an activity.
❑ especially like art activities, would sometimes spend hours absorbed in drawing, painting, modelling etc.

❑ more than one of the above; have ticked those that apply
❑ play varied: mostly played with toys or played games with other children

20❑ taught self to use computer by around age _____
❑ responded to instructions in using computer and acquired some basic skills
❑ did not have the opportunity as no computer available
❑ taught self to use video or other similar equipment
❑ did not display special interest in using such technology

21 Any other strong characteristics not mentioned above?

.....

.....

.....

.....

PART C: *SCHOOL YEARS TO PRESENT TIME*

In each group of statements, *tick those* which *most accurately* describe your child. Note than in *this* section you can tick *MORE THAN ONE* statement in each group.

(1) Learning, Opportunity and Achievement

❑ Has consistently achieved at a high level compared to rest of class in most subjects
❑ Has consistently achieved at a high level compared to rest of class in one or two subjects (please specify):

.....

.....

.....

❑ Has not achieved at a consistently high level at school despite ability
❑ Current school has acknowledged him/her as an exceptionally able child
❑ Has consistently been given genuinely challenging work in the classroom
❑ Has at times been given genuinely challenging work in the classroom
❑ Has never been given genuinely challenging work in the classroom
❑ Has regularly been involved in enrichment/extension activities or groups
❑ Has occasionally been involved in enrichment/extension activities or groups
❑ Has never been involved in enrichment/extension activities or groups
❑ Has generally found the work offered in such programmes exciting/rewarding/ satisfying
❑ Has generally been disappointed by the work offered in such programmes
❑ Has been denied entry to such programmes on the grounds of behaviour (eg said to be disruptive, attention-seeking, etc)

❑ Has been denied entry on the grounds of untidy, incomplete or inadequate work in the normal classroom programme
❑ Has been accelerated and placed in an older class
❑ Has been accelerated in some areas, eg reading or maths
❑ Currently has dual enrolment with Correspondence School in: (please state subjects):

.....

.....

.....

❑ Had previously had dual enrolment with Correspondence School in: (please state subjects):

.....

.....

.....

❑ Has had the following special achievements in learning (eg Distinction in Australian Maths Competition):

.....

.....

.....

.....

(2) Feelings about school

❑ Before school, he/she was eagerly looking forward to starting school
❑ Enjoys school and looks forward to going each day
❑ Response varies depending on teacher and class
❑ Hates school – does not want to be there
❑ Frequently says that school is "boring" and/or "too easy"
❑ Has episodes of unexplained stomach pains, headaches, "not feeling well", etc, which you suspect represent a psychological response to school rather than a physical illness
❑ Is critical of teachers
❑ Has been described by teachers as disruptive or "attention-seeking", or a "behaviour problem"
❑ Likes current teacher, enjoys working with him/her, often reports or comments on things teacher has said
❑ Is philosophical about school not meeting his or her needs
❑ Says very little about school, does not seem to want to talk about it

(3) Approach to schoolwork (as seen at home)

❑ Likes independent projects etc – seems to find it satisfying to work on a whole topic
❑ Likes research work – enjoys both the gathering of all possible information and the information itself – often wants to share it with anyone who will listen

❑ Enjoys work which involves some form of active enquiry eg doing an experiment, carrying out an observation
❑ Is very slow to get started on homework – needs many reminders and much urging, will often leave it until the last minute and do it in a rush
❑ Is inclined to start projects etc with great enthusiasm but then subsequently lose interest – really difficult to get him/her to finish the work
❑ Is extremely well-organised, highly self-motivated, a meticulous worker, work usually more than meets the teacher's requirements
❑ Is a steady, methodical worker; always tries hard to do the best he/she can
❑ Often responds in imaginative or unexpected ways to teacher's requirements – eg will dream up a novel form of presentation or on own will carry out an experiment or other task to demonstrate a point
❑ Seems especially keen when teacher provides choices – can choose own topic, own form of presentation, etc
❑ Can be overwhelmed by large projects etc: sees too *many* possibilities: needs help in organising the task into manageable steps
❑ Is not comfortable with too much choice – responds better in more structured situations
❑ Shows strong perfectionist tendencies – things must be *exactly right*
❑ Actively dislikes written work, seems to find it difficult and/or boring to write things out
❑ Actively dislikes repetitive work or work that he/she can't see the point of
❑ Seems to have very little school work to do at home – there is not much opportunity to observe his/her reactions

(4) Personal Characteristics

❑ Always wants to know the reasons for things, the how and the why
❑ Has a highly developed sense of humour – can be quick and witty, has a keen eye for the ridiculous, enjoys word play
❑ Has a wide range of interests, often shortlived but intense
❑ Has developed an intense, continuing interest in _____
❑ Is a daydreamer
❑ Is persistent, determined, sticks to task
❑ Is disorganised, untidy, forgetful, too wrapped up in what he/she is doing to be aware of other things
❑ Is generally a relaxed, easy-going person
❑ Is generally obedient, cooperative, not inclined to argue the point
❑ Reads voraciously, mostly story or "chapter" books
❑ Reads extensively in relation to special interest areas – technical and reference books and magazines
❑ Rarely reads for pleasure or interest
❑ Is always experimenting, designing, drawing, making things etc:
❑ Makes up long, complex games for self, and/or friends, family
❑ Has very detailed, often highly technical knowledge in own special interest

area – a "mini-expert"
❑ Seems to have a very broad general knowledge, and a very retentive memory – comes out with all sorts of information, from goodness knows where!
❑ Is attracted to the unusual, the novel or different – eg, may be intrigued by stories of ancient civilisations
❑ Has a passion for collecting things
❑ With construction kits, art materials, etc, gets much satisfaction from accurately and successfully following instructions to produce designs shown
❑ With construction kits, art materials etc, tends to ignore designs shown and create according to own ideas
❑ Really enjoys intellectual problem solving, discussion and debate
❑ Worries about and often discusses social and moral issues
❑ Has a strongly developed sense of justice and fair play
❑ Sets a very high performance standards for self, becomes distressed if unable to reach these
❑ Seems to have a fairly low self-esteem
❑ Is not a risk taker, is reluctant to try things in case of failure
❑ Does not seems to be aware of or is not concerned about reactions of others
❑ Is confident, positive, has a secure self-esteem
❑ Has a lot to say, lots of ideas, definite opinions
❑ Is a rather quiet child, but what he/she does say shows he/she has been very aware of things
❑ Often comes up with very unexpected, highly original ideas, comments and questions
❑ Often makes very shrewd and perceptive comments about people and their behaviour
❑ Can be infuriating but is always interesting to be around

(5) Relationships with others

❑ Is self-sufficient: likes to be on his/her own for long periods of time
❑ Becomes impatient with peers or adults who do not think or work as quickly as he/she does; tends to demand high standards of others as well as self
❑ Is lonely, always on the fringe, does not seem to know how to make friends with other children
❑ Has just one or two friends who tend to be very close
❑ Friends tend to be older than self
❑ Has lots of friends and fits well into his/her group
❑ Other children seek his/her friendship, he/she responds, is often the leader but at times pulls back or stands apart – seems to need to to distance self at times
❑ Is very popular, usually the leader in any group
❑ Can be manipulative of others
❑ Is frequently teased by other children
❑ Is very patient, very caring especially with younger or disabled children

(6) Other

Are there any other outstanding characteristics or attributes your child has which have not been mentioned? Please feel free to list them here or a separate sheet of paper.

YOU HAVE NOW COMPLETED THE PARENT QUESTIONNAIRE. THANKYOU! PLEASE PLACE IT IN A LARGE ENVELOPE AND POST IT BACK TO

PO BOX

AUCKLAND

REMEMBER TO INCLUDE THE PHOTOCOPIES OF ANY ASSESSMENTS OF SAMPLES OF WORK YOU ARE SENDING US.

Appendix D

Extension School's Teacher Questionnaire

ANY FURTHER INFORMATION YOU FEEL WOULD BE HELPFUL?

Thank you!

Teacher's Questionnaire

Your Name:

School:

Child's Name:

Date questionnaire completed:

Child's Age at date of completion:

SECTION A

1 Reading level at most recent assessment: form of assessment used and result:

2 Maths level at most recent assessment: form of assessment used and result:

3 Most recent PAT results (where appropriate): age percentiles:

LEARNING SKILLS

	Rarely	Sometimes	Often	A strong characteristic
• good at organising self and work	☐	☐	☐	☐
• manages time effectively	☐	☐	☐	☐
• works with minimal supervision	☐	☐	☐	☐
• has ability to seek help in appropriate ways and at appropriate times	☐	☐	☐	☐
• contributes effectively to group discussion and debate	☐	☐	☐	☐
• can communicate ideas effectively				
- orally	☐	☐	☐	☐
- in written form	☐	☐	☐	☐
- in another media such as art or music	☐	☐	☐	☐
• listens effectively	☐	☐	☐	☐
• demonstrates command of research skills	☐	☐	☐	☐
• demonstrates command of study skills	☐	☐	☐	☐
• demonstrates highly developed technical skills in areas of specific interest and/or ability	☐	☐	☐	☐
• acutely observant	☐	☐	☐	☐
• uses observation skills effectively				
- to generate questions	☐	☐	☐	☐
- as a tool for seeking answers	☐	☐	☐	☐

Any further comment?

INTELLECTUAL DEVELOPMENT

	Rarely	Sometimes	Often	A strong characteristic
• reasons logically and analytically	☐	☐	☐	☐
• pursues topics as far as they can be taken	☐	☐	☐	☐
• displays wide general knowledge	☐	☐	☐	☐
• demonstrates detailed knowledge in areas of special interest	☐	☐	☐	☐
• is curious, seeks to know the why and how of things	☐	☐	☐	☐
• seeks further and better solutions – not satisfied with easy or obvious answers	☐	☐	☐	☐
• interest when aroused is intense, highly focused	☐	☐	☐	☐
• grasps concepts quickly	☐	☐	☐	☐
• works comfortably with abstract ideas	☐	☐	☐	☐
• shows ability to problem-find as well as problem-solve	☐	☐	☐	☐
• is quick to see relationships, draw inferences, perceive cause and effect	☐	☐	☐	☐
• asks insightful, often unexpected questions; good at constructing "what if" questions	☐	☐	☐	☐
• is sceptical, quick to spot inconsistencies; can be very critical	☐	☐	☐	☐
• likes to reason things out for self	☐	☐	☐	☐
• finds intellectual activity pleasurable	☐	☐	☐	☐
• has ability to predict outcomes	☐	☐	☐	☐
• has a sophisticated sense of humour, can be very witty	☐	☐	☐	☐

Any further comment?

CREATIVITY

	Rarely	Sometimes	Often	A strong characteristic
• displays a high level of originality in ideas and expression	☐	☐	☐	☐
• makes creative use of materials and concepts	☐	☐	☐	☐
• sees unusual and diverse relationships and patterns	☐	☐	☐	☐
• generates many solutions	☐	☐	☐	☐
• responds strongly to the new, the different, the unusual	☐	☐	☐	☐
• displays lateral thinking ability	☐	☐	☐	☐
• shows awareness of aesthetic qualities	☐	☐	☐	☐
• is highly imaginative, enjoys fantasy	☐	☐	☐	☐
• likes to speculate about possibilities	☐	☐	☐	☐
• continuously invents, builds, makes	☐	☐	☐	☐
• makes up games, often very complex	☐	☐	☐	☐
• enjoys playacting and/or story telling	☐	☐	☐	☐
• prolific in writing stories or poems or doing artwork in own time	☐	☐	☐	☐
• is very interested in people and their relationships	☐	☐	☐	☐
• sees the humour in situations, has a keen sense of the absurd	☐	☐	☐	☐
• has a sharp eye for detail	☐	☐	☐	☐
• is not afraid of being unconventional or different from others in behaviour or beliefs	☐	☐	☐	☐

Any further comments?

ATTITUDES TO LEARNING

	Rarely	Sometimes	Often	A strong characteristic
• uses initiative	☐	☐	☐	☐
• carries tasks through to completion	☐	☐	☐	☐
• can sustain concentration for long periods	☐	☐	☐	☐
• is willing to try difficult or unfamiliar tasks	☐	☐	☐	☐
• has very high expectations for self	☐	☐	☐	☐
• shows enthusiasm for learning and "finding out"	☐	☐	☐	☐
• goes beyond the required minimum	☐	☐	☐	☐
• is persistent in seeking answers	☐	☐	☐	☐
• is self motivated: works because of own interest rather than to meet others' expectations	☐	☐	☐	☐
• can become deeply absorbed in a topic	☐	☐	☐	☐
• resents interruptions, reluctant to stop when interest is caught	☐	☐	☐	☐
• actively dislikes repetitive or routine work	☐	☐	☐	☐
• likes working independently	☐	☐	☐	☐

Any further comment?

SECTION B

This section covers several major areas of learning and development. Under each heading there is a list of various skills, abilities and characteristics. Please rate the child on ***as many of these characteristics as you can.*** *(Don't worry if you cannot do them all – no one child will display all these qualities). Please also feel free to add any extra comments in the space provided if you wish, under each list or at the back.*

PERSONAL AND SOCIAL DEVELOPMENT

	Rarely	Sometimes	Often	A strong characteristic
• has a realistic knowledge of own strengths or weaknesses	☐	☐	☐	☐
• uses his/her abilities freely & with confidence	☐	☐	☐	☐
• has a positive sense of self esteem	☐	☐	☐	☐
• is able to monitor own behaviour	☐	☐	☐	☐
• possesses emotional depth & sensitivity	☐	☐	☐	☐
• has a strongly developed sense of justice & fair play	☐	☐	☐	☐
• is idealistic	☐	☐	☐	☐
• is concerned about social, moral &/or environmental issues	☐	☐	☐	☐
• has strongly held views & will vigorously defend them with logic & example	☐	☐	☐	☐
• is willing to challenge others, including authority figures	☐	☐	☐	☐
• shows understanding of others' feelings & behaviour	☐	☐	☐	☐
• is tolerant of others	☐	☐	☐	☐
• is proactive in helping others: shows kindness & thoughtfulness	☐	☐	☐	☐
• is able to work co-operatively with others	☐	☐	☐	☐
• is popular with other children	☐	☐	☐	☐
• prefers the company of older children & adults	☐	☐	☐	☐
• frequently acts as a leader in group situations	☐	☐	☐	☐
• is confident in expressing own ideas & opinions in group situations	☐	☐	☐	☐
• is self-contained; appears to have little need for the approval of others	☐	☐	☐	☐

Any further comment?

Appendix E

Focus Group Question Schedule

Children's Experiences of Learning at School.

Human Ethics Approval – MUAHEC 99/023

Focus Group Questions

1. Why do you have to go to school?
Brief responses are expected.

2. What sort of things do you learn at school?
Answers are expected to include major subject areas.

3. Are there other sorts of things that you learn at school (e.g., games, music, cultural group, acting, about people in social studies, about people in the playground, different sports, about computers.)?

4. Do you use the things you learn at school? When and where would you use them?

5. What things are hard to learn?

6. Are these things important to learn? Why?

7. What hobbies and interests do you have outside of school?
(e.g., skateboarding, prayers, words for songs, computer, making friends, playing music, sport, pleasing your family, playstation).

8. How do you go about learning these things?

9. Is this the same way that you learn things at school?

10. If not what is different?

11. *Finish the following sentences.*

Kids help me with my learning when.....
Kids get in the way of my learning when .....

The teacher helps me with my learning when .....
The teacher makes it harder for me to learn when.....

When we are given ..... it makes it easier for me to learn.
When we are given..... it makes it harder for me to learn.

Our classroom helps me with my learning because .....

Our classroom makes it harder to learn because .....

My school helps me to learn because.....

My school makes it harder for me to learn because .....

Stories

Write or tell a short story based on a memorable, learning experience ***from school*** *(cassette recorders will be available for this purpose).*

Appendix F

Diagram from Bronfenbrenner's (1979) Ecological Model of Human Development

From Bronfenbrenner's (1979) Ecological Model of Human Development

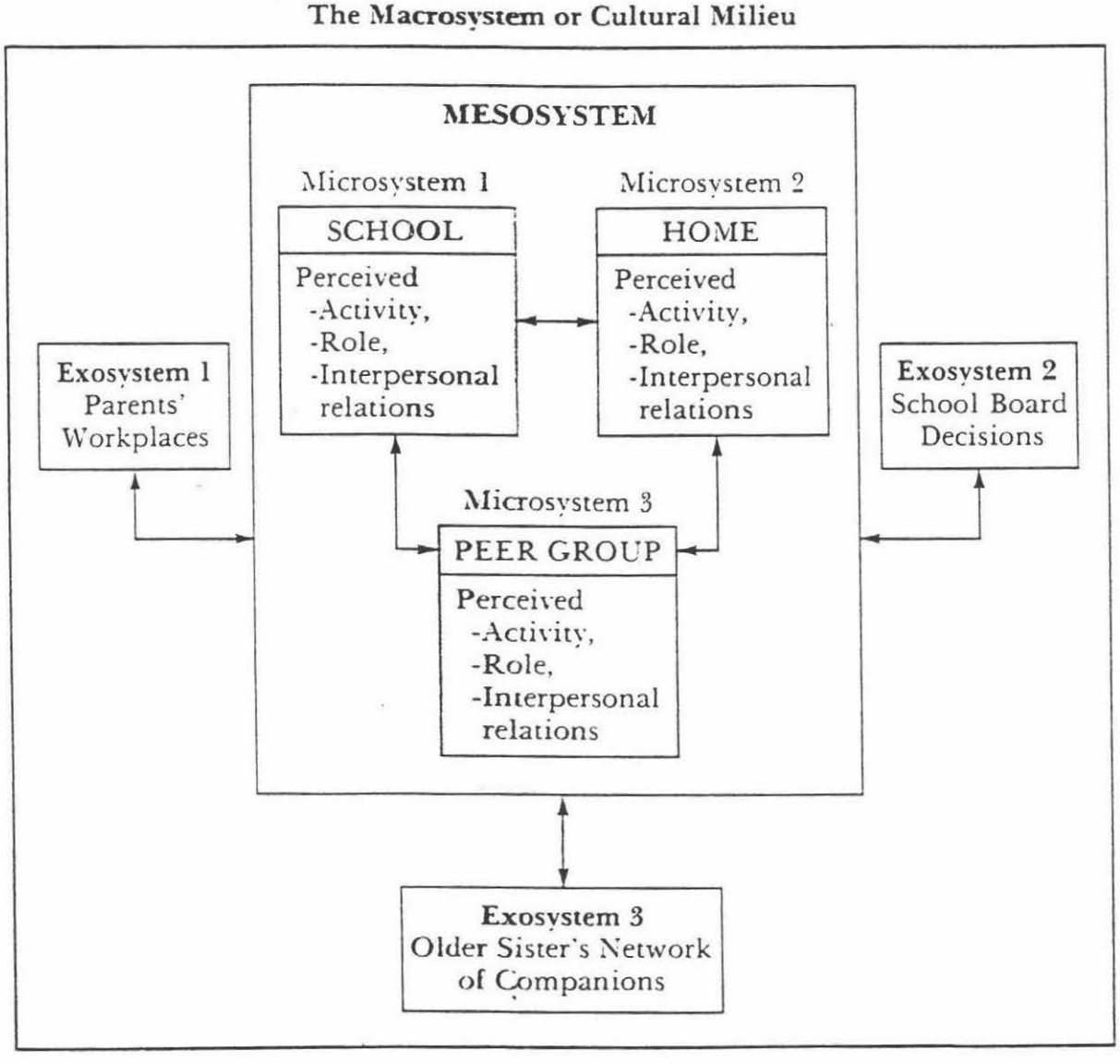

Figure 14.2 Embedded Systems of Children's Environmental Experiences

Appendix G

Scale Description and Sample Items for The Learning Environment Inventory

Figure 5.2: Scale description and sample items for the learning environment inventory

Scale	Scale Description	Sample Item
Cohesiveness	Extent to which students, know, help and are friendly toward each other.	All students know each other very well. (+)
Diversity	Extent to which differences in students' interests exist and are provided for.	The class has students with many different interests. (+)
Formality	Extent to which behavior within the class is guided by formal rules.	The class is rather informal and few rules are imposed. (−)
Speed	Extent to which class work is covered quickly.	Students do not have to hurry to finish their work. (−)
Material Environment	Availability of adequate books, equipment, space and lighting.	The books and equipment students need or want are easily available to them in the classroom. (+)
Friction	Amount of tension and quarreling among students.	Certain students in the class are responsible for petty quarrels. (+)
Goal Direction	Degree of goal clarity in the class.	The class knows exactly what it has to get done. (+)
Favoritism	Extent to which the teacher treats certain students more favorably	Every member of the class enjoys the same privileges. (−)
Difficulty	Extent to which students find difficulty with the work of the class.	Students in the class tend to find the work hard to do. (+)
Apathy	Extent to which students feel no affinity with the class activities.	Members of the class don't care what the class does. (+)
Democracy	Extent to which students share equally in decision-making related to the class.	Class decisions tend to be made by all the students. (+)
Cliqueness	Extent to which students refuse to mix with the rest of the class.	Certain students work only with their close friends. (+)
Satisfaction	Extent of enjoyment of the class.	There is considerable dissatisfaction with the work of the class. (−)
Disorganization	Extent to which classroom activities are confusing and poorly organized.	The class is well organized and efficient. (−)
Competitiveness	Emphasis on students competing with each other.	Students seldom compete with one another. (−)

Notes: a) Items designated (+) are scored 1, 2, 3, and 4, respectively, for the responses Strongly Disagree, Disagree, Agree and Strongly Agree. Items designated (−) are scored in the reverse way.
b) From Fraser, Anderson and Walberg (1982. p. 5).

Appendix H

Letter To School Principals

21.7.99

Marion

Dear Marion

Further to our telephone conversation about the educational research project entitled *Children's Experiences of Learning at School*, this letter formally invites Primary School to take part.

The study is intended to be an exploration of the perceptions that children with special educational needs (defined broadly) have about themselves and the social processes they are involved in at school. The aim is to investigate the range and variety of perceptions, and to discover what children believe either assists or inhibits their learning.

It is hoped that patterns of preference will emerge and this information will prove useful in the planning of educational programmes. It is also hoped that students who participate will benefit from a guided process of exploration and reflection and will discover useful additional approaches to learning.

The information will be gathered through focus group discussions and stories told or written. I expect these activities to be completed within an hour. Individual interviews may be conducted in order to clarify aspects of the discussion or stories that I do not understand. I expect these to take fifteen to twenty minutes. Teachers will be asked about school issues including, curriculum, policies and physical environments etc, however, they will not be asked questions about individual children. Private records such as student files will <u>not</u> be required as data for this research, but statistical information may be requested.

I will be seeking guidance from community groups on matters of cultural and community significance in relation to this research. I will seek clarification and opinion regarding themes that appear to have cultural reference.

I understand that participating in such a project may be difficult within a demanding timetable, however, the activities have been designed to complement language based learning, so ought not to waste time that is usually spent school work.

I hope you find this research interesting and will be able to fit it into your busy schedule.

Yours sincerely

Pamela M. Billington

Appendix I

Information Sheets for Parents or Caregivers and Students

Information Sheet for Parents and Caregivers.

Children's Experiences of Learning at School.

Human Ethics Approval – MUAHEC 99/023

My name is Pam Billington. I am an experienced teacher and graduate student enrolled in a Master of Education Degree at Massey University.

As part of this study I am researching into students' understanding about what is expected from them at school and what they think either helps or hinders their learning. I would also like to know how events inside and outside of school work together and affect learning in school. I hope this information will be helpful in future planning of educational programmes. I also hope that the students taking part will benefit and will discover useful additional approaches to their learning.

Several schools will take part in this study from August through to the end of the school year. Students will be asked if they wish to be part of a discussion with six or seven other children from The for Gifted Education, and then each student will tell (or write if preferred) a short story about a school learning experience. These tasks will take place at school and are expected to take about an hour. A follow-up interview may be needed if there are points that need explaining. This will not take long.

Teachers will also be taking part in this study. Teachers will be asked questions about such matters as the curriculum, the school's physical environment, teaching methods, and school policies. Teachers will not be asked about individual students. I will not need to see private information like student records.

I will be seeking guidance from community groups on matters of cultural and community significance in relation to this research. I will seek clarification and opinion regarding themes that appear to have cultural reference.

I would like to record the discussion, storytelling and interviews on audiotape. This would be with the written consent of students and parents and/or caregivers. The audiotapes will be transcribed by myself and destroyed once the research is completed. The information will be

kept private and confidential. However, group members will know about the ideas of other members and this will need to be considered before consent to take part is given. The names of students, teachers and schools will not be used in association with this research and will not appear in any written reports. The stories provided will not be marked and will not be thought of as class work.

Involvement in this study is voluntary and students may withdraw from the project at any time. Any written material or interviews that have been recorded privately will be destroyed at the time the student withdraws from the project (the group tapes will be destroyed at the end of the research). Students have the right to ask questions about the research at any time and call for the tape recorder to be switched off at any time. Participants and their families have access to a summary of the research report, which will be given to the school.

Thank you for considering taking part in this research. If you have any questions about this study please contact my supervisor at the following addresses or contact me by phone or fax on the following numbers.

James W. Chapman
Professor and Head
Department of Learning and Teaching
Palmerston North
Phone 64 6 356 9099
Fax 64 6 351 3383

Pam Billington
Phone
Fax

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

Department of
Learning & Teaching
Albany Campus
Private Bag 102 904,
North Shore MSC
Auckland,
New Zealand
Telephone: 64 9 443 9688
Facsimile: 64 9 443 9717

Information Sheet for Students

Children's experiences of learning at School

My name is Pam Billington and I am a student at university. I am also a teacher.

I am doing some research on what children at school think about learning. I want to ask you what you think. I will also ask children from different schools what they think about learning.

I hope some of you will want to talk about your ideas on learning. I am going to ask if you would like to talk in a group of children from this class. The talking will take about one hour.

I will be talking as well, but not as much as you. I would like to tape record the talking but I won't if you don't want me to.

The other children in the group will get to know some of the things that you think about learning at school. It is important that you think about this before you choose to take part.

If you choose not to take part it is OK.

After the talk I would like you to tell a story about learning at school. The story can be short, or long. I would like to tape record your story or you may choose to write down your story.

I may have to ask some questions about things I don't understand in your talk or your story. I will come back at another time to do this. It won't take very long.

I will ask the teachers about some things to do with school, like the books or the classroom. I will not ask them anything about you.

You can ask me about what is happening as we go along together with this research.

The stories you tell or write will not be shown to anyone else. Your teacher will not see them and they will not be marked.

It is OK for you to change your mind about things. You may answer yes to my questions and later you may want to change your mind. It is OK to change your mind. You can choose to stop taking part at any time.

When I have finished doing all of this I will not keep the tape recordings of the talking or the stories. I will wipe them off the tapes.

Your ideas will be kept private. I won't use your name or the name of the school.

All the ideas and stories will help me to know how children at school think and feel about learning. You may find out some things that will help you too.

If you choose to take part I hope you will have fun.

If you want to know more please phone me or ask your teacher to phone me. My number is (09)

Information Sheet for Students
Children's experiences of learning at School

My name is Pam Billington and I am a student of education at university. I am also a teacher.

As part of my studies I am researching into what students at school think about learning. Especially what helps learning and what gets in the way of learning. I would also like to know how things inside and outside of school work together and affect learning in school. I hope this information will be helpful in future planning of educational programmes. I also hope that students taking part will discover some different and useful approaches to learning.

Several schools will take part in this study from August through to the end of the school year. Taking part in this research will involve being part of a discussion about school learning with six or seven other students from School, and then telling (or writing if preferred) a short story about a school learning experience. These tasks will take place at school and are expected to last for about an hour. There may be some things that I do not understand. If this happens I will come back at another time and ask individual students to explain these things to me in an interview. This will not take long.

Teachers will also be taking part in this study. Teachers will be asked questions about such matters as teaching methods. They will not be asked about individual students. I will not want to look at student's records.

I would like to record the discussion, storytelling and follow-up interviews on tape. All this would be with written permission from students and parents or caregivers. I will transcribe the information from the tapes myself, and the

tapes will be destroyed once the study is finished. I will not use student names or the name of the school on any written information. I will keep all the information private, however, students involved in the group discussion will be aware of each other's ideas and this must be considered before agreeing to take part. The names of students, teachers and schools will not be used in association with this study. The stories will not be thought of as class work and will not be marked.

Involvement is voluntary, students may choose to stop taking part in the research project at any time. Any written information about students and interviews recorded in private will be destroyed at that time of withdrawal (the group tapes will be destroyed at the end of the research). Students are encouraged to ask questions about the research and may ask for the audiotape to be switched off at any time. An outline of the research report will be given to the school.

Thank you for considering taking part in this research. If you have any questions about this study please telephone me. My telephone number is (09)

Appendix J

Parental Consent Form and Student Consent Form

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

Department of
Learning & Teaching
Albany Campus
Private Bag 102 904,
North Shore MSC
Auckland,
New Zealand
Telephone: 64 9 443 9688
Facsimile: 64 9 443 9717

Consent Form for Parents/ and or Caregivers.
Children's Experiences of Learning at School.

Human Ethics Approval – MUAHEC 99/023

I have been given information about the purpose of the study.

I know I have the opportunity to ask questions about this research and have them answered by the researcher.

I understand that I may withdraw my child from participation in the research project at any time, without having to give reasons.

I agree/ do not agree to the discussion, story and interview being audiotaped.
(Delete as necessary.)

I also understand that my child has the right to ask for the audiotape to be turned off at any time during the discussion, story telling and interview.

I give consent for my child to take part in this research under the conditions set out in the information sheet.

Name of Student:.....

I give consent for my child to participate in this research study.

Signed:.....

Name of Parent / Caregiver:.....

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

Department of
Learning & Teaching
Albany Campus
Private Bag 102 904,
North Shore MSC
Auckland,
New Zealand
Telephone: 64 9 443 9688
Facsimile: 64 9 443 9717

Consent Form for Students.

Children's Experiences of Learning at School.

Please put a circle around your answers.

I have been told about the study. YES NO

I know I can ask questions about the study. YES NO

I know that the researcher will answer my questions. YES NO

I know that I can stop taking part in the research whenever I want to.
YES NO

I am happy for the talking to be tape recorded.
YES NO

I am happy for the stories to be tape recorded.
YES NO

I am happy to answer the researcher's questions and for my answers to be tape recorded.
YES NO

I know that I can ask the researcher to turn the tape recorder off at any time.
YES NO

I am happy to take part in the study in the way it is put down on the information sheet.

YES NO

Signed:.....

Name of student.....

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

Department of
Learning & Teaching
Albany Campus
Private Bag 102 904,
North Shore MSC
Auckland,
New Zealand
Telephone: 64 9 443 9688
Facsimile: 64 9 443 9717

Consent Form for students.

Children's Experiences of Learning at School.

Please put a circle around your answers.

I have been told about the reasons for this research.
YES NO

I know I can ask questions about this research and have them answered by the researcher.
YES NO

I understand that I may stop taking part in the research project at any time, and without having to give reasons.
YES NO

I agree to the discussion, story and interview being recorded on audiotape.
YES NO

I know that I can have the audiotape turned off at any time during the discussion, story telling or interview.
YES NO

I agree to take part in this research under the conditions set out on the student information sheet.
YES NO

Signed:.....

Student Name:.....

Sunday . 28th July . cancelled ↙
3rd interview .

Ben – MATT . Sun 18th July 1999 .

Forthcoming ; Able to anticipate questions so they could be condensed .

Cards not used this made categorisation more difficult .

Room 10. Booster class , 1999 .

Classroom . Thursday 29th July Teacher Julie & Jan Wendy E.S.L

Welcome to Booster and ESOL & sign .

metaphors . eg.

you don't have to blow out my candle to make yours shine brighter .

Person who stand on he hill mouth open will wait a long time for a roast duck to fly in .

It's only from the valley that mountains look high .

Pictures and a lot of writing on the walls eg.

Also .

- Student Artwork .

Pockets containing information for children to take .

My personal decision Tree'

What are pressures -

Special People

What behaviours would you like in a friend .

Sayings on wall

Once you learn to quit it becomes a habit .

T ogether
E veryone
A chieves
M ore .

Poem

The more you read
The more you know
The smarter you grow
The stronger the voice
When speaking your mind
or making your choice

9/8/99.
Miss

School · Week five

4. 30 am . lesson graphs

Maths M1 Week. Worksheets. { Puzzle plot coordinates and find picture
class size approx 11.
mostly European

comment on organisational skills (today).
Use ruler.
Show exchange for equipment. four students without equipment

In the Classroom on the wall

Rules
No teasing or put down
No Swearing
No Vandalising or stealing
Work quietly
No fiddling.

Teacher owns mistake.

Asks are you happy? about work. Makes sense?

On the Wall

on the wall.

Personal proofreading

Read aloud (softly)
Listen can you hear places that need changes
Look any doubtful spelling Underline and correct.

on the wall.

paragraphs

Punctuation
Missed out words.

Writing on the board.

- remember to write all your thou and ideas down first. At this stage don't worry about the proof reading errors
- Have you asked yourself if you ha covered who, what, where, when, wh and how in your writing.
- Underline all your guesses with pen using a ruler.
- check correct the errors on your own see me (teacher).
- When ready to publish bring it down ove mat for sharing.

[have you used your new Vocab word.]

- Children Spend time in the booster class but are participants in ~~[illegible]~~ regular classes.
- Examples of work include descriptive writing.

Lesson in Progress

Lessons and material observed in one hour ~~session~~ 40 minute session focused on some mechanics of writing and Maths.

Setting out and completing written exercise

Subtraction in Maths.

Maths -

Directions and discussion before maths starts.

- It's easy don't be fooled by it. Why is it easy?

Child answers.

- What is the difference between set one and set two?

Child answers.

- Why do you think we do all of the child answers.

Expectations described

Date, name neatness, Look at examp in the book. Setting out.

Merit Points, for settled organised wo. (on task).

Comments from teacher

Children have fallen through cracks. System. There are some major gaps for reasons of, trauma, mov Schools, medical ADHD. Most ha been through reading recover

- 78 children in Booster programm the school.

Interviewer notes teacher reminds ch of behaviour. Reinforcement of on task behaviour. Also expectat ~~and of~~ approach, eg. neat tidy types of setting out.

MEMORY, LISTENING SKILLS AND FOCUSING ATTENTION.

Working in pairs together to correct and mount or see work.

On the wall (Advice) that learner looks up and poses concentration

Discussion Rules

- always co operate with each other
- let everyone participate
- Be respectful as a group member
- Share each others ideas
- Speak quietly and clearly
- Be considerate
- Always stop and listen when someone else is talking
- Make sure everyone has contributed
- Be aware of others around you.

Focus fun in Maths.

Scaling up / measuring · multiply a picture

After graphs and introduced and worked on formally this section allows more flexibility and ownership. also incentive to finish other work.

Mr. _____ said in a school like this most children are compliant,

Appendix K

Research Journal

Appendix L

Letters of Thanks to School Principals

Children's Experiences of Learning at School.

10.9.99

Marion

Auckland

Dear Marion

I would like to thank you for allowing me the opportunity of working with your students and staff. In addition I would like to thank Dianne, and Jodi for their help. I thoroughly enjoyed meeting and observing the class and found a stimulating and warm atmosphere. I also enjoyed listening to the ideas of the children who participated. Although the volunteers were not children with special learning needs, their contribution was valued and may be used in the study to provide comparative views and feelings about learning.

Towards the middle of next year I will forward a report of the findings. Again many thanks.

Yours Sincerely

Pam Billington.

Children's Experiences of Learning at School.

10.9.99

The Principal

Auckland

Dear Mr.

I would like to thank you for allowing me the opportunity of working with your students and staff. In particular I owe much gratitude to Julie who was exceptionally helpful and efficient in organising classes and information for me. All the teachers in Booster made me feel most welcome and I enjoyed working with them and the children in the stimulating and friendly atmosphere of room 10.

Towards the middle of next year I will forward a report of the findings. Again many thanks.

Yours Sincerely

Pam Billington.

I will be seeking guidance from community groups on matters of cultural and community significance in relation to this research. I will seek clarification and opinion regarding themes that appear to have cultural reference.

I understand that participating in such a project may be difficult within a demanding timetable, however, the activities have been designed to complement language based learning, so ought not to waste time that is usually spent school work.

I hope you find this research interesting and will be able to fit it into your busy schedule.

Yours sincerely

Pamela M. Billington