Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
Teacher Talk about Student Characteristics and Patterns of Behaviour

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Arts
in
Psychology

at Massey University, Albany Campus, Auckland
New Zealand

Vasti Bester
2007
Declaration

I declare that this thesis represents my own work except where due acknowledgement is made and that this material has not been included in a thesis or report submitted to Massey University or any other university for a degree or other qualification.

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

Vasti Bester
Candidate for Masters of Arts (Psychology)
Abstract

This thesis reports on the discourse analysis of two groups of secondary school teachers' conversation about student behaviour. The study involved a two stage analysis. The teachers' conversation was first analysed according to its reflection of teachers' views of students and the environment on continua from active to passive. Main themes emerging across the conversations were then identified with links between the themes established through understanding of the teachers' views on the active to passive continua. This method of analysis generated a theory of behaviour management for the teachers who took part in the study. It provided in-depth understanding of the relationship between the teachers' sense of agency at the time and the forms of interventions they implemented to address student behaviour. This theory identified contextual factors that affected teachers' choices of action in relation to student behaviour and indicated pivotal points for intervention to foster shared student-teacher problem solving.
I would like to acknowledge the many people who supported me throughout this study. I express my appreciation to my supervisor, Dr. Jean Annan, who constantly provided ideas, encouragement and guidance. My thanks also go to Dr. Kerry Gibson for her feedback and further constructive suggestions.

I extend my special thanks to the teachers who volunteered to participate in this study. These teachers gave so willingly of their time and thoughts and I really cannot thank them enough.

To my parents, I express gratitude for their support, encouragement and patience throughout the year.

Most importantly, thank you Lord for this opportunity. You provided reason.
Table of Contents

Title Page ................................................................. i
Declarations ..................................................................... ii

Abstract ........................................................................ iii
Acknowledgements ........................................................... iv
Table of Contents ............................................................. v
List of Figures .................................................................... ix
List of Tables ..................................................................... x

Chapter 1: Introduction ......................................................... 1
1.1 Background: Historical views of the learner ......................... 1
1.2 The teacher's belief system ................................................ 2
1.3 Organisation of the thesis ............................................... 3

Chapter 2: Literature Review .................................................. 6
2.1 Social Constructionist Theory ........................................... 6
2.2 Language and meaning .................................................. 8
2.3 Ecological Theory ....................................................... 10
2.4 Locating problems and solutions: A matrix of perspectives ... 12
2.5 Problem solving ......................................................... 16
2.6 Summary ................................................................ 18

Chapter 3: An Introduction to the Methodology ......................... 19
3.1 Introduction ................................................................ 19
3.2 Discourse Analysis ..................................................... 19
3.3 The ten stages of discourse analysis ................................ 21
   3.3.1 Stage 1: Clarifying the research question focus in the light of the role of discourse ... 21
   3.3.2 Stage 2: Selecting an appropriate sample .......................... 22
   3.3.3 Stage 3: Collection of data in the form of documents or transcribed interviews ...... 22
   3.3.4 Stage 4: Carrying out the interviews .................................. 23
   3.3.5 Stage 5: Transcription of interviews ................................... 24
   3.3.6 Stage 6: Coding of the data ............................................. 24
Chapter 4: The Research Design ................................................................. 28

4.1. Introduction ......................................................................................... 28

4.2. Procedures .......................................................................................... 28
  4.2.1 Stage 1: Clarifying the research focus ........................................... 28
  4.2.2 Stage 2: Selection of the sample .................................................. 29
  4.2.3 Stage 3: Collection of data/interviews ........................................... 30
  4.2.4 Stage 4: Carrying out the interviews ............................................. 33
  4.2.5 Stage 5: Transcription of interviews ............................................. 35
  4.2.6 Stage 6: Coding ............................................................................. 36
  4.2.7 Stage 7: The analysis of transcripts ............................................. 36
  4.2.8 Stage 8: Validation ........................................................................ 37
  4.2.9 Stage 9: Writing the report ........................................................... 39
  4.2.10 Stage 10: The application ............................................................ 40

4.3. Ethical aspects of discourse analysis .................................................. 40

Chapter 5: Results: Discourse .................................................................... 44

School A: Results ...................................................................................... 44

5.1. Question One: Ice breaker ............................................................... 44
5.2. Question Two: Challenging situation ............................................... 46
5.3. Question Three: Time of day ............................................................ 47
5.4. Question Four: General solutions ..................................................... 49
5.5. Question Five: Satisfying situations .................................................. 50
5.6. Undefined comment category ......................................................... 51

School B: Results ...................................................................................... 52

5.7. Question One: Ice breaker ............................................................... 52
5.8. Question Two: Challenging situation ............................................... 54
5.9. Question Three: Time of day ............................................................ 56
5.10. Question Four: General solutions ..................................................... 58
Chapter 6: Results: Consultation and Co-construction

6.1. Introduction
6.2. The consultation and co-construction process
6.3. Results: Co-construction - School A
6.4. Results: Co-construction - School B

Chapter 7: Discussion and Conclusion

7.1. Overview of chapter seven
7.2. Teacher perspectives
7.3. Dominant perspectives
7.3.1 Student active/environment passive (Quadrant 3)
7.3.2 Environment active/student passive (Quadrant 2)
7.4. Less dominant perspectives
7.4.1 Student active/environment active (Quadrant 1)
7.4.2 Environment passive/student passive (Quadrant 4)
7.5. Discourses
7.5.1 Need to assign responsibility
7.5.2 Personal agency
7.5.3 Trying to understand
7.5.4 Reflective practitioner
7.5.5 Access to solutions
7.5.6 School rules
7.5.7 Students' disconnection from curriculum
7.5.8 Defensive reasoning
7.5.9 Isolation
7.6. A struggle for power (undefined comment category)
7.7. The usefulness of the Matrix of Perspectives
7.7.1 The usefulness of the Matrix of Perspectives: Teacher understanding
7.7.2 The usefulness of the Matrix of Perspectives: Teaching profession
7.7.3 The usefulness of the Matrix of Perspectives: Research and educational psychology
7.8. Limitations .................................................................................................................. 91
7.9. Future Research ........................................................................................................... 92
7.10. Conclusion ................................................................................................................ 93

References .......................................................................................................................... 95

Appendices .......................................................................................................................... 103
  Appendix A Approval letter from Massey University Human Ethics Committee ............ 104
  Appendix B Consent form for participants ........................................................................ 105
  Appendix C Information sheet for participants ................................................................. 106
  Appendix D Feedback Questionnaire .............................................................................. 108
  Appendix E Interrater-reliability tally chart .................................................................... 110
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.</td>
<td>Bronfenbrenner's Bio-Ecological Perspective Model</td>
<td>11</td>
</tr>
<tr>
<td>Figure 2.</td>
<td>A matrix for conceptualising the relationship of the learner and environment as they function within specific contexts</td>
<td>13</td>
</tr>
<tr>
<td>Figure 3.</td>
<td>Individual differences conceptualised within the Matrix of Perspectives: Perceptions of problems and solutions</td>
<td>15</td>
</tr>
<tr>
<td>Figure 4.</td>
<td>Perceptions of the location of problems and solutions: Introductory question – School A</td>
<td>45</td>
</tr>
<tr>
<td>Figure 5.</td>
<td>Perceptions of the location of problems and solutions: Challenging situation – School A</td>
<td>46</td>
</tr>
<tr>
<td>Figure 6.</td>
<td>Perceptions of the location of problems and solutions: Time of day - School A</td>
<td>48</td>
</tr>
<tr>
<td>Figure 7.</td>
<td>Perceptions of the location of problems and solutions: General solutions – School A</td>
<td>49</td>
</tr>
<tr>
<td>Figure 8.</td>
<td>Perceptions of the location of problems and solutions: Satisfying question – School A</td>
<td>50</td>
</tr>
<tr>
<td>Figure 9.</td>
<td>Perceptions of the location of problems and solutions: Introductory question – School B</td>
<td>52</td>
</tr>
<tr>
<td>Figure 10.</td>
<td>Perceptions of the location of problems and solutions: Challenging situation – School B</td>
<td>55</td>
</tr>
<tr>
<td>Figure 11.</td>
<td>Perceptions of the location of problems and solutions: Time of day - School B</td>
<td>57</td>
</tr>
<tr>
<td>Figure 12.</td>
<td>Perceptions of the location of problems and solutions: General solutions – School B</td>
<td>58</td>
</tr>
<tr>
<td>Figure 13.</td>
<td>Perceptions of the location of problems and solutions: Satisfying question – School B</td>
<td>59</td>
</tr>
<tr>
<td>Figure 14.</td>
<td>An illustration of T5’s indicated perspective of the proposed solution to the situation described involving a student misbehaving (Quadrant 2)</td>
<td>72</td>
</tr>
<tr>
<td>Figure 15.</td>
<td>An illustration of T5’s indicated perspective of the situation described involving a student misbehaving (Quadrant 4)</td>
<td>75</td>
</tr>
<tr>
<td>Figure 16.</td>
<td>A modified version of Bronfenbrenner’s Bio-Ecological Perspective Model illustrating T5’s indicated perspective of the situation described (Quadrant 4)</td>
<td>76</td>
</tr>
<tr>
<td>Figure 17.</td>
<td>An illustration of T6’s indicated perspective of the situation described</td>
<td>79</td>
</tr>
<tr>
<td>Figure 18.</td>
<td>Illustration of T5’s indicated perspective of the situation described</td>
<td>80</td>
</tr>
<tr>
<td>Figure 19.</td>
<td>A diagram showing relationships among the discourses illustrated in the teachers’ conversations</td>
<td>94</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1. The interview schedule</td>
<td>31</td>
</tr>
</tbody>
</table>
Chapter One
Introduction

This thesis is a study of teacher talk about student characteristics and patterns of behaviour. The study intended to serve two purposes. The first was to examine two groups of teachers' perceptions of the location of problems and solutions of student behaviour. The study also looked at the contextual validity of the Matrix of Perspectives (Bowler, Annan & Mentis, 2007) (based on a concept described by Dent-Read and Zukow-Goldring, 1997) to understand these teachers' points of view. It specifically aimed to investigate the language teachers used when talking about student behaviour and the perspectives illustrated by teacher conversations. In addition, this study investigated the usefulness of the matrix of perspectives for teachers, in relation to their work and whether it reflected their thinking.

The study has been approached from a social constructionist perspective, carrying the assumption that understanding was socially constructed in the interaction between people. Understanding was seen as negotiable. Discourse analysis, as conceptualised by Potter and Wetherell (1987) was used to examine the understandings indicated by teachers' conversations.

1.1 Background: Historical Views of the Learner
Theories of learning and development suggest a number of ideas about what it means to be human. Bowler et al. (2007) observed that learners have been viewed in a number of ways throughout history. For example, they noted that in 500 BC Heraclitus, the first Greek philosopher to explore human nature, described learning as dynamic and interactive, as an 'attunement of opposite tensions'. The authors noted that Comenius, a Renaissance educator, also presented a developmental perspective of learning as a person-environment interaction. Other theories located learning in innate human capabilities or in the actions of the environment. Bowler et al.(ibid) discussed the impact of 19th century genome discoveries and the associated use of the term organism, a description that has been revived in recent times, and the work of Locke who described the neonate as tabula rasa, a blank slate awaiting
Chapter One: Introduction

the imprint of the environment in 1753.

It appears that educational theory has turned a full cycle. Bronfenbrenner (1979), whose theory of ecological development holds favour in educational psychology today (Annan, 2005; Sheridan & Gutkin, 2000), proposed a theory of learning that involved bi-directionality of the influences of the individual and the world. Learning was not an individual matter. It involved the dynamic interaction of the social ecology. Bronfenbrenner proposed that “if one member of a dyad undergoes developmental change, the other is also likely to do so” (p. 65). Bowler et al. (2007) noted that the significance of Bronfenbrenner’s work was related to his emphasis on “the significance of the human dyad as a context ‘not merely of reciprocal interaction but of reciprocal development’ (Bowler et al., 2007, p. 389).

1.2 The Teacher’s Belief System

Teacher beliefs about students will colour everything that happens in the classroom, both educationally and in terms of student discipline. Nespor (1987, p.323) suggested that in order “to understand teaching from teachers’ perspectives, we have to understand the beliefs with which they define their work”. The way in which teachers believe their role should be fulfilled; their underlying philosophies and their implicit theories about teaching and learning can guide their behaviour in the classroom (Brophy, 1982; Clark & Lampert, 1986; Shavelson, 1983). Teacher beliefs affect the way in which information about learners is encoded, how that information is remembered and used, when making instructional decisions (Dusek, 1985).

A teacher’s approach to control and discipline is linked to that teacher’s belief system of teaching. A belief system is the “set of values and beliefs about how students learn, the aims of education, and the best approach to teaching which every teacher develops” (Barry & King, 1998, p.558). Knowingly or unknowingly, the teacher’s belief system drives the teacher’s classroom decision-making and behaviours and this is especially evident in the case of control and discipline. For example, teachers may adopt a behaviourist position with behaviour modification as a key strategy, or a humanistic position with the teacher taking on
a low level form of counselling role. Teachers may behave differently towards different learners depending on the beliefs and expectations they have for their learning.

Teachers' belief systems greatly influence the way teachers function in the classroom (Anderson, 1996; Quinn-Leering, 2000; Richardson, 1996 cited in Maslovaty, 2003). Empirical studies have generated two consistent findings. First, teachers' beliefs appear to be relatively stable and resistant to change (see Brousseau, Book, & Byers, 1988; Herrmann & Duffy, 1989; Maslovaty, 2003). Secondly, teacher’s beliefs tend to be associated with a congruent style of teaching that is often evident across different classes and grade levels (Evertson & Weade, 1989; Martin, 1989 cited in Kagan, 1992). Much about what teachers know or believe about their skills are implicit (see Kagan, 1992). Kagan (1992) found that teachers’ reliance on their own experiences and prior beliefs suggests that “teacher beliefs functions like any other form of personal knowledge, the implicitly held assumptions about people and events that individuals bring to a particular knowledge domain” (Kagan, 1992, p. 79).

Research on teacher belief suggests that the most significant characteristic of classroom teaching is its many uncertainties. A teacher cannot continue to organise instruction and maintain control in the highly unpredictable environment of the classroom without knowing whether things are going well. Kagan (1992) argues that a teacher must be able to identify, label, solve, and evaluate the solutions to problems and argues that “in a landscape without bearings, teachers create and internalize their own maps” (Kagan, 1992, p. 80).

1.3 Organisation of the Thesis

The thesis began with an introduction and background to the study. This is followed by six chapters, structured to match the research method. A brief description of the contents of each chapter is presented below.

Chapter 1: Introduction

Chapter 1 introduces the study, provides a background and explains the rationale for embarking on this study and for the particular focus selected.
Chapter 2: Literature Review
Chapter 2 discuss the theoretical basis of this study.

Chapter 3: Methodology – An Introduction to the Methodology
Chapter 3 describes the research method selected for the study. This particular study uses discourse analysis, focusing particularly on the model of discourse analysis as proposed by Potter and Wetherell (1987).

Chapter 4: Methodology – The Research Design
Chapter 4 discusses critical features of the approach taken in the research. It contains the specific aims and research questions for the study, a description of the way information was gathered and processed. It also provides information regarding the involvement of participants.

Chapter 5: Results
This chapter presents the analysis of ten secondary school teachers’ conversation.

Chapter 6: Consultation and Co-construction
Chapter 6 presented the findings, feedback and usefulness of the matrix of perspectives obtained from the reporting and feedback sessions. Furthermore, it outlined the consultation and co-construction process and results.

Chapter 7: Discussion and Conclusion
The final chapter describes the results in more detail, presents the conclusions drawn in this research and discusses the implications of the study. The implications of the study are identified in addition to several suggestions for further research.

If psychologists understand the way teachers perceive problematic behavioural situations, they will be in a better position to develop better collaborative relationships with teachers. Psychologists require tools to discern discourses in schools around behavioural problems and
Chapter One: Introduction

can support effective interventions by recognising, understanding and utilising the diverse views of people involved in their consultation work. I believe that it is important to understand our own perspectives and that of others as this will enhance our communication with people, our understanding of one another, and our ability to create solutions together. This chapter outlined the background and organisation of the thesis. The following chapter discusses the theoretical basis for this study.
Chapter Two

Literature Review

2.1 Social Constructionist Theory

This thesis study assumes that knowledge is socially constructed and suggests that we live in a socially constructed world that acknowledges the historical, social and contextual location of knowledge. Social constructionism is an epistemological position, which maintains that knowledge is unstable, constructed and intimately entangled with social processes and social structure. Crotty (1998) defines social constructionism as "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty, 1998, p. 42). Gergen (1985) states that social constructionism is "principally concerned with explicating the processes by which people come to describe, explain, or otherwise account for the world (including themselves) in which they live" (Gergen, 1985, p. 266).

Social constructionism suggests that people create meaning through the use of their language, thought, and daily interactions. It acknowledges the historical and contextual location of knowledge (Burr, 2003). Language is seen as a tool. Burr (2003) also identifies language as a form of social action. So while "talk is simply packaged as describing the situation" (Wetherell & Potter, 1988, p. 170) language is functional and has an 'action orientation' in that people use language to do different things in different situations (Coyle, 1995; Wheterell & Potter, 1988). Social constructionists believe that when people interact, they are involved in creating and constructing versions of reality, and that "when people talk to each other, the world gets constructed" (Burr, 1995, p. 7).

Burr (1995) promotes this epistemological stance, and how language is the key to understanding this idea. Language is therefore seen as shaping our reality and our thoughts as "the way people think, the very categories and concepts that provide a framework of meaning for them are provided by the language that they use. Language therefore is a necessary pre-
condition for thought as we know it" (Burr, 1995, p. 6). Burr questioning our taken-for-granted ideas, as he explains that our feelings and emotions, our attitudes and thoughts are constructed through the language we use.

A key theorist in the area of cognitive development, Vygotsky (1978), proposed his dialectical theory. Whereas Piaget viewed the individual as striving to adapt to the world around her/him, Vygotsky believed that cognitive development was socially based, developing primarily through the use of language, especially in the context of interactions with other people. That is, the social world provides the basis for cognitive development. Vygotsky (1978) believed that language and development build on each other. He believed that interaction between two people contributes to the construction of knowledge and in turn, this contributes to learning. Furthermore, he believed that language presents the shared experience necessary for building cognitive development and that talking is necessary to clarify important points, but also that talking with others helps us to learn more about communication.

Language is used to do things. Both Sarbin (1986) and Gergen (1989) recognise that language and social construction rely on collaboration with others. We are dependant upon the willingness of others in the construction of our language and our stories. Discourses are therefore subject to negotiation. Potter and Wetherell (1987) talked about people having at their disposal sets of linguistic devices, 'interpretive repertoires' that they draw upon in constructing their accounts of events. These theorists suggest that language users have a measure of control over their use of language for various and particular functions within various and particular contexts. Discourse-users have at their disposal the means to manipulate discourse and use it for their own ends. The act of construction is therefore a powerful act. Furthermore, we do not construct our interpretations in isolation but against a backdrop of shared understanding, practices, language and so forth (Gergen, 1989).

Discourse analysis is an effective method for researchers to examine the actions and consequences of discourse (Wetherell & Potter, 1988). The analytic unit in a discourse analysis following the methodology of Wetherell & Potter (1988; Potter & Wetherell, 1987),
is the interpretative repertoire. Burr (2003, p. 60) describes the interpretative repertoire as “a kind of culturally shared tool kit of resources for people to use for their own purposes”.

In this research, I will examine the way teachers think and talk about student characteristics and patterns of behaviour in terms of their professional space of teaching and school discourses. In analysing the discourse, this study does not discern whether naming is perceived as “good” or “bad”, but rather as a social production of identities reflected in everyday language used by teachers.

2.2 Language and Meaning

Research in psychology until recent times, has taken a rather traditional view of ‘language’. Much of the research into language has come from a variety of disciplines such as social psychology, sociology, philosophy and literary theory on language function. In Mist’s (1998) research, he referred to the work of Wetherell and Potter (1988; 1992) and the work of by Edwards and Potter (1992). It was assumed that “language acts as a neutral, transparent medium between the social actor and the world, so that normally discourse can be taken at face value as a simple description of mental states or events” (Wetherell & Potter, 1988, p. 168).

However, in recent times, researchers have approached this topic quite differently. Language is now viewed as a social practice in itself, in that, it is ‘functional’ and ‘action orientated’. Social psychology has seen the importance of studying language because most forms of social interaction involve people talking together or reading each other’s transcripts (see Mist, 1998). Furthermore, language is important as it orders our views and shows us how it can be used to create and construct social interaction and diverse social worlds. Analysis of discourse from the perspective of social psychology has been termed by Edwards & Potter (1992 cited in Mist, 1998) as a functionally oriented approach to the analysis of talk and text.

Edwards (1997) indicated that his approach is one where ‘the primary and defining thing about language is how it works as a kind of activity, as discourse’ (Edwards, 1997, p. 1).
Chapter Two: Literature Review

Potter (1996) asks how descriptions are produced so that they will be regarded as ‘factual’ and how these descriptions then enable particular actions to be carried out. Our talk has specific functions and achieves purposes for us in our interactions with each other. The function of a person’s talk is therefore ‘action oriented’. Burr (2003) also identifies language as a form of social action.

Mist’s (1998) research revealed that language has been influenced by the sub-discipline of ethnomethodology. This is the study of ordinary people’s methods; the methods in question being those used for producing and making sense of everyday social life. In the study of language, this method enables us to look at how language is used in everyday situations (Potter & Wetherell, 1992). Discourse analysis can best be understood by “introducing the interconnection concepts of function, construction variation and the analytic unit: the interpretative repertoire” (Wetherell & Potter, 1998, p.169).

In his research, Mist’s (1998) revealed that ethnomethodology emphasised the ‘action orientation’ of language use. It was suggested that people not only use language to communicate, but they did things with their discourse. In these cases, ethnomethodologists suggested that when people use discourse it has repercussions of its own which may not have been formulated or even understood by the speaker or writer (Wetherell & Potter, 1988). For this reason, discourse can be viewed as a social practice in itself, and this has been greatly influenced by studies in ethnomethodology. However, while ethnomethodology is primarily concerned with research methods, it has no official manual of research procedures. Practitioners are encouraged to utilise whatever procedures they can find or develop to make sense of the taken-for-granted organisational ‘work’ of everyday life (Flynn, 1991).

Language is at the heart of this construction process. We think of language as a bag of labels which we can choose from in trying to describe our internal states such as thoughts and feelings. People and the language they use are therefore closely linked with each other. In addition, the way that language is structured, determines the way that we experience and perceive the world. People use language to express the things that already exist in themselves or in the world, but the two are themselves essentially independent things (Burr, 2003).
2.3 Ecological Theory

In the past 15 or 20 years, there has been a strong push to widen the scope of research, to consider the ecology, or context, in which a child develops. Urie Bronfenbrenner, one of the key figures in this area of study (1979, 1989), emphasizes that each child grows up in a complex social environment (a social ecology) with a variety of people around them, including brothers, sisters, one or both parents, grandparents, baby-sitters, pets, teachers and friends. These people in turn, are embedded within a larger social system. Bronfenbrenner viewed the environment or context as not just a single setting but one that was shaped by the influences of systems outside the immediate setting. Annan (2005) refers to the work of John Dewey (1938) as he suggested that “control of individual actions is effected by the whole situation in which individuals are involved, in which they share and of which they are cooperative or interacting parts” (cited in Annan, 2005, p. 53).

Bronfenbrenner’s approach can be applied to understand the dynamic nature of student-teacher relations. He argues that the interaction of all components of this complex system (see Figure 1) affects the development of an individual child. His theory consists of five overlapping ecological levels operating as ‘nested systems’ to explain human development. According to Bronfenbrenner, the interactions taking place affects the individual, who is at the center of the model. The five systems of interaction are outlined below.
Urie Bronfenbrenner’s ecological model of development emphasises the many ways the environment affects family life. The microsystem consists of the child’s immediate setting they develop in. Their daily activities and/or interactions occur within these settings as they learn about the world (Swick & Williams, 2006). The second system (mesosystem) can be described as the interrelationship between parents and other people who care for the child. Examples include social institutions such as education settings, early childhood centres, schools and classrooms (Podmore, 2006). The exosystem is a system in the environment, that influences a child but with which the child does not directly interact. It can be described as “an external system that connects micro- and mesosytems and affects children indirectly.”

1 Modified diagram from Bee & Boyd (2004)
Chapter Two: Literature Review

(Swick & Williams, 2006, p. 376), for example, the parents’ workplace. The fourth system (macrosystem) can be described as a system that influences what, how, when, and where we carry out our relations (Bronfenbrenner, 2005). It is a larger system of cultural beliefs, societal values, political trends, and ‘community happenings’. The final system (chronosystem) can be understood as a system that changes and continues to do so over time, influencing a person’s development. Together, these systems are termed the ‘social context of human development’.

Finally, Bronfenbrenner’s theory has influenced a number of approaches in New Zealand in a major way. One of these is the Te Whāriki, the New Zealand early childhood curriculum (Ministry of Education, 1996), and associates observation and assessment processes. Another is the Ministry of Education’s attention to family. This is evident, for example, in the strategic plan’s goal to “promote collaborative relationships”:

“A child’s learning and development depends not only on the ECE environment they experience, but also on their home and wider social environment. The coming together of children and families in ECE services provides greater opportunities for addressing health and social issues”. (Ministry of Education, 2002, p. 16)

2.4 Locating problems and solutions: A Matrix of Perspectives

To understand the perspectives taken by the participants, Bowler, Annan & Mentis (2007) developed a matrix based on Dent-Read and Zukow-Goldring’s (1997) reflection on the range of views presented in their account of ecological realism (see Figure 2). The matrix can be understood in terms of a continuum, ranging from active to passive on two dimensions, the learner and the environment. The Collins dictionary was used to describe the concepts of active and passive. To be active is to be both moving and effecting, “having a causal role, causing the event or process” (Collins dictionary, 1993, p. 12 cited in Bowler et al., 2007). Passive implies submission, “not active” or “not participating”, to be “unresisting and receptive of external forces” (Collins dictionary, 1993, p. 976 cited in Bowler et al., 2007). It has been suggested that it is either the environment or the learner who submits to events,
Chapter Two: Literature Review

situations and/or processes, and that the degree of activity and passivity on the continuum will vary, depending on the context (Bowler et al., 2007).

Figure 2: A matrix for conceptualising the relationship of the learner and environment as they function within specific contexts.

Figure 2 indicates the various perspectives that participants such as teachers may take when locating problems. Some may perceive the problem to be primarily located within the active child (Quadrant 3), while others may view the active environment as being the dominant influence (Quadrant 2). Teachers perceiving a situation from a Quadrant 1 perspective would indicate that both the learner and the environment are active, “involving reciprocal interaction” and perceiving “a dynamic of circular causation” (Annan et al., 2007, p. 6). In cases where the learner and the environment are both viewed as passive, the cause is attributed and considered to be beyond the control of the child or environment (Quadrant 4) (Bowler et al., 2007).

22 From Bowler et al. (2007, p.391) based on a concept described by Dent-read & Zukow Goldring).
Chapter Two: Literature Review

The location of the problem may be influenced by participants’ views of human development. Figure 2 displays the names of various theorists and/or writers who are predominantly aligned with particular views of the location of problems and solutions. For example, the works of Pavlov and Skinner have supported a view that the learner responds to an active environment and that the learner is a passive recipient of this action (Quadrant 2). On the other hand, Piaget explained that children actively construct their development as they act on their environment (Quadrant 3).

Teacher indicated perceptions of the location of problems, will influence the types of interventions/solutions to be used to address the students’ behavioural and learning problems. For example, “a child may not complete her school work, move about the classroom when she is expected to remain seated, prevent others from having turns at play and often fail to follow instructions” (Annan, Bowler, Mentis, & Phillipson, 2007, p.6). The authors suggest that teachers positioning on the matrix will depend on the teacher’s interpretation of the student’s behaviour and in turn, this perception will be reflected in the nature of the intervention or solution to be used.

In Quadrant 1, Annan et al. (2007, p. 6) states that “the interpretation would focus on the interplay between the child factors and the educational environment and interventions would aim to achieve greater correspondence between the child’s actions and the systems that influence, and are influenced by, the child’s development”. In Quadrant 2, reasons for the students’ behaviour will be interpreted in terms of environmental problems and the interventions will involve modifications for the environment, for example, changing classroom routines, rewarding acceptable behaviour. Behaviour interpreted from the perspective of the third quadrant assumes that the child selects his/her actions and manipulates a passive environment. The fourth quadrant considers the student’s behaviour to be beyond the control of the child or environment. The behaviour may receive a diagnosis as, in the case discussed, ADHD, and the child may be medicated. Figure 3 illustrates the different interpretations of the same behaviour with corresponding variation in the nature of solutions.
Annan et al. (2007) explains that that this model appears to provide a fixed description of each quadrant; however it has only been presented in this way for clarification purposes. It must be noted that people’s views of the situation will not always fit neatly into one quadrant but will shift within and between quadrants. Views of behaviour on the active-passive continuum will vary across settings and time. Annan et al. (2007) suggests that our beliefs about human development will influence the way we view our role and that of others in a particular situations. The authors provided the following example to support their argument.

“For example, a teacher may view a student in her class as responsible for causing the disruption and believe that she is choosing to act this way. She is therefore ‘misbehaving’, a view presented in the third quadrant. However, this same teacher, who is also a parent, may place more responsibility for the disruptive behaviour on

---
3 From Bowler et al. (2007, p.395) based on concept described by Dent-Read & Zukow-Goldring.
the educational environment when her own child's actions come into question. Her view, on the latter occasion may fall into the second quadrant” (Annan et al., 2007, p. 7).

It is therefore important to understand that our views are likely to change and our perspectives will possibly move around all four of the quadrants, depending on the context of the situation we are faced with.

**The fluid Matrix of Perspectives in practice**

Annan et al. (2007) suggests that this matrix allows educational psychologists to develop understanding of the way in which participants were viewing problems and solutions at a certain point in time. They argue that this knowledge could assist them when working with others in creating suitable intervention plans. Furthermore, the authors highlighted the importance of not placing participants 'in a box’ or to make any judgements on the participants’ perspectives. This matrix proposes a guide to help understand “the ever-shifting context” (Annan et al., 2007, p. 9). The authors stress the point that participants’ views must be recognised as fluid, respected and acknowledged as current reality. In order to do so, Annan et al. (2007) highlights the importance of acknowledging ones own view on this matrix and to consider the implications of our views as we work with others.

**2.5 Problem Solving**

Problem solving is generally regarded as the most important cognitive activity in everyday and professional contexts. Most people are required to, and rewarded for, solving problems (Jonassen, 2000). Gagné believed that “the central point of education is to teach people to think, to use their rational powers, to become better problem solvers” (1980, p. 85). Like Gagné, most psychologists and educators regard problem solving as the most important learning outcome for life. The reason for this is that nearly everyone, in their everyday and professional lives, regularly solves problems.
We are constantly presented with various kinds of problems in our everyday activities. One only needs to briefly consider their life to realize the pervasive occurrence of problems across time and situations. Problems, differing in nature and severity, domains or contexts exist for humans in areas such as education, research, work place, home, leisure activities, and social relationships. In more demanding cases, problems may tax our abilities to handle the cognitive, emotional, and social demands required in our response to a situation, necessitating reliance on coping activities (Cassidy, 1999; Lazarus & Folkman, 1987). In her research, Walker (1994) referred to the work of D’Zurilla & Nezu (1982; 1990). Her research suggests that a situation becomes problematic when no effective response alternatives are immediately available to the individual (D’Zurilla & Nezu, 1982). D’Zurilla and Nezu (1990) characterise problem solving as a complex process incorporating cognition, affect and behaviour.

**What is a problem?**

According to Jonassen (2000), there are only two critical attributes of a problem. First, a problem is an unknown entity in some situations. Those situations vary from algorithmic math problems to troublesome and complex social problems, such as violence in schools. Second, finding or solving for the unknown must have some social, cultural, or intellectual value. That is, someone believes that it is worth finding the unknown. If no one perceives an unknown or need to determine an unknown, there is no perceived problem (whether the problem exists independent of any perception is an ontological issue that will not be discussed in this study). Finding the unknown is the process of problem solving (Jonassen, 2000). Problem solving is said to be “any goal-directed sequence of cognitive operations” (Anderson, 1980, p. 257).

Mayer (1992) also suggested that problem solving is a necessary component in negotiating our daily lives. Solving these problems requires adequate understanding of what the problem situation involves, what steps must be taken to solve the problems, and knowledge of what strategies one may use to reach the goal of solution, as well as the ability to execute strategies to this end. Furthermore, Mayer (1992) suggests that our beliefs about problems and problem
solving generally, together with our beliefs about our own competencies and abilities, may influence the course of our solution efforts (Mayer, 1992).

Finally, a problem exists for a person when “he wants something and does not know immediately what series of actions he can perform to get it” (Newell & Simon, 1972, p. 72). Solutions to problems are often characterized by a period when the solver has no idea or direction of how to proceed. Typically, this attributed either to the “prior generation of an inappropriate representation of the problem or to an inability to generate potential strategies” (Weisberg & Alba, 1981, p. 169). The solver may realise that existing representations or strategies are not working, but be unable to produce any other useful ideas (Weisberg & Alba, 1981).

2.6 Summary
This chapter outlined the theoretical basis for this study as it was approached from a social constructionist perspective. This perspective suggests that we live in a socially constructed world that acknowledges the historical, social and contextual location of knowledge. Furthermore, it argues that we create knowledge through solving perceived problems and that our perceptions of problems and solutions are related to the context we live and work in. In addition, this study intended to briefly outline the ecological perspective and a Matrix of Perspectives for locating problems and solutions. Finally, the chapter concluded with a brief overview of problems solving in order to set the background for the study of teacher talk about student characteristics and patterns of behaviour as we investigate teacher perceptions of the location of problems and solutions.
Chapter Three
An Introduction to the Methodology

3.1 Introduction
This study involved two case studies. Participants were two focus groups of secondary school teachers who discussed their views of student behaviour. The focus group conversation was analysed to identify the locus of perceived causal factors in student behaviour. Each group’s discussion was examined in relation to a matrix that placed the learner (student) and the environment on two intersecting continua from active to passive. Problems and solutions could be located in individuals, in the environment or in the interaction between the two dimensions. The purpose of the analysis was to identify the positions the teachers held about the locus of student behaviour at the time of the interview.

This chapter describes the research method of discourse analysis that was used in the study. Ten stages of discourse analysis as developed by Potter and Wetherell (1987) are outlined.

3.2 Discourse analysis
The research method selected for this study was discourse analysis. Based on the assumption that meaning is embedded in language, it presented as a method that had the capability to identify and explore the different beliefs and values underlying the topic under discussion. Potter and Wetherell’s substantial text has been used as a central source for the methodological aspect of this study as it contains thorough accounts of both the theory and practical application of this approach (Potter & Wetherell, 1987).

Discourse analysis focuses upon people’s talk and text as the analytic unit. It has been viewed as an effective method for researchers to examine the actions and consequences of discourse it serves as an interpretative repertoire (Wetherell & Potter, 1988). Burr (2003) described the interpretative repertoire as “a kind of culturally shared tool kit of resources for people to use for their own purposes” (Burr, 2003, p. 60). Cohen and Manion (1991, p. 253)
argued that “its primary concern is with the ways in which different types of actions are produced and managed”.

Potter and Wetherell (1987) pointed out that the traditional social psychological approach to language treated discourse in a straightforward way as a “relatively unambiguous pathway to actions, beliefs or actual events” (Potter and Wetherell, 1987, p. 34), or as something which merely reflected or mirrored objects and events. Wiggins (2001) highlighted the limitations of questionnaire type methodologies in understanding the negotiations that occur in everyday language, and suggested discursive methodologies as appropriate to this area of research. As discussed in Chapter 1, these more recent approaches to language suggest that people’s discourse must be examined in terms of the context in which it is spoken. This context necessarily includes the speaker’s values and conceptions in relation to the topic being discussed. Research employing discourse analysis recognises that a person’s description of something is closely tied to their evaluations of it (Potter & Wetherell, 1987, p. 6). There are no value-free statements.

[Discourse analysis] takes discourse as a research topic in its own right rather than treating it as a transparent medium through which the ‘real facts’ of attitudes, events or behaviours can be recovered. Moreover, it takes a social perspective which focuses on the role of discourse in interaction and sense making rather than being concerned with, for example, abstract questions of semantics, text coherence or aesthetics. (Potter and Wetherell, 1987, p. 184)

The purpose of discourse analysis is to reveal or make visible socially determined ways of speaking and to make clear what social effects are associated with these ways of speaking. Discourse analysis examines the way in which language is constructed and what is achieved by this construction. Consequently, the methodology leads to two central questions:

1. How is the particular language constructed?
2. What are the consequences or implications of different types of construction? (Potter & Wetherell, 1987, p. 55).
These two questions can be applied effectively to the current study. It will be illustrated how the language used to talk about student characteristics and patterns of behaviour, is constructed in a particular way, drawing on particular discourses representing wider sets of meanings, and how these discourses have particular consequences for both students and teachers.

3.3 The ten stages of discourse analysis

Potter and Wetherell (1987) recommended ten basic stages for the researcher to follow with various considerations to be taken into account at each stage.

"It is important to re-emphasise that there is no method to discourse analysis in the way we traditionally think of an experimental method or content analysis method. What we have is a broad theoretical framework concerning the nature of discourse and its role in social life, along with a set of suggestions about how discourse can best be studied and how others can be convinced findings are genuine. The ten stages we outlined are intended as a springboard rather than a template". (Potter & Wetherell, 1987, p. 175)

Coding was conducted in such a way to retain what was said by participants in the context it was stated in. Each segment of conversation constituted as one unit of analysis. Where statements were to brief to determine the context, for example, “hmm” or “too the supermarket”, no attempt was made to analyse these unless they related directly to a statement before or after it.

The stages outlined are:

3.3.1 Clarifying the research question focus in the light of the role of discourse analysis

As discussed, Potter and Wetherell (1987), and other researchers in discourse analysis (Mercer, 1991; Parker, 1992; & Van Dijk, 1985) have argued that the focus of research using discourse analysis must be broadly related to the construction and function of the
discourse itself, and not the things 'beyond' such as attitudes. The focus is on how the discourse is put together and what is gained by this construction.

3.3.2 Selecting an appropriate sample

Size of sample
Potter and Wetherell (1987) stress that a small sample is usually adequate for the discourse analysis approach because a large number of patterns are likely to emerge, and also because the researcher is primarily interested in the use of language rather than in the people generating the language. Suggestions for group sizes in the literature ranged from three to twelve (Deatrick & Faux, 1991; Krueger & Casey, 2000; Scott, 2000). As an inexperienced facilitator, I chose to restrict group sizes to the lower end of the scale. The focus groups were therefore made up of five secondary school teachers in each group. This number would allow each participant to contribute to the conversation in a way that would develop the topic in the timeframe available for teachers to attend.

3.3.3 Collection of data in the form of documents or transcribed interviews

Potter and Wetherell (1987) indicate that using interviews for data collection with discourse analysis has both problems and advantages. Problems include the technical challenges of setting up recording equipment as well as the ethical issues of ways to sensitively explore the issues, which with discourse analysis are likely to be connected with prejudicial belief systems, which are likely to be controversial.

One advantage of interviews according to Potter and Wetherell (1987) is that they allow the researcher room for active intervention. It allows the researcher to ask similar questions to each participant, providing greater comparability and increased simplicity in the coding process. Furthermore, variations in responses can be drawn out and fully explored. Potter and Wetherell (1987) pointed out that interviews are used differently in discourse analysis to how they are traditionally used. The traditional approach is to gain consistency in responses and use this as evidence of a corresponding set of actions or beliefs.
For discourse analysis, consistency is important in a different way. The researcher is aiming to "identify regular patterns in language use" (Potter and Wetherell, 1987, p. 164). The focus is on how the discourse is constructed and what it achieves rather than whether it is an accurate description of the participant's internal state. Variations are more useful than consistency in discourse analysis because they give the researcher a full range of resources that people use when constructing the meaning of their social world, and clearly reveal the function of these practices. Therefore it was important for me to generate, rather than restrict, the diversity of the participants' accounts in the study. Potter and Wetherell (1987) recommended a number of ways to do this. The interviewer can tackle the issue more than once in the interview in the course of different topics. Another way is to adopt follow up questions to responses which pose alternatives or problematic views. Both of these strategies are included in my approach.

Furthermore, the interviews allowed for collaborative co-construction of the meaning of the topics discussed. We were able to exchange ideas on the specific topic of student behaviour by collaboratively creating new knowledge and understanding of this concept. In order to maximise validity, I ensured that my participant status contributed positively to the research process. I made attempts share the construction of meaning, and in turn to minimise threats to the validity of the data (see Schwandt, 1994). The participants own terms and interpretations were considered to be most central information. I considered meaning to be socially and historically relative and remained aware that I could not, and should not, become disengaged from the activity observed (Lincoln and Guba, 1985). In this way, the construction of student behaviour became a shared endeavour (see Sofaer, 1999; Saratakos, 1998).

### 3.3.4 Carrying out the interviews

The intention of discourse analysis is not to prove or disprove whether a speaker has a particular 'attitude' at the time of the interview. The notion of holding a consistent attitude has been challenged by the literature (Potter & Wetherell, 1987, p. 34). The discourse itself is both the data and the source of validation. Validation is found by
searching for contradictions and verifications of the speaker’s own discourse. It would also be equally valid to assume that the speaker’s view will not essentially change during or after an interview of this kind.

3.3.5 Transcription of the interviews

Potter and Wetherell (1987) recommended that the entire interview be transcribed including the interviewer’s questions as these questions set some of the functional context for the discourse. They are “active and constructive, not passive and neutral” (1987, p. 165). Interviewers are more than just ‘speaking’ questionnaires, they are active participants. However, Potter and Wetherell acknowledge that for many sorts of research questions transcribing the fine details of intonation and timing is not crucial (1987, p. 166). Before returning copies of the transcript to participants for their verification of the content, I edited out many of the ‘ums’ and ‘ahhs’ as they were not necessary for the analysis in this study. Potter and Wetherell (1992, p. 165) stated that “a good transcript is essential for a form of analysis which involves repeated readings of sections of data”. However, they go on to write, “for many sorts of research questions, the fine details of timing and intonation are not crucial, and indeed they can interfere with the readability of the transcript” (Potter and Wetherell, 1992, p. 166).

3.3.6 Coding of the data

A Potter & Wetherell (1987) point out that coding is not analysis. It is a process of sorting the data into manageable pieces (1987, p. 167). However, they acknowledge that the process of identifying categories may well shift the researcher into aspects of analysis, so the process might be cyclical, moving between coding and analysis. Other qualitative researchers have made this point about the shifting process in qualitative study. O’Connor & Elkins (1991, p. 9) cite Miles & Huberman (1984) stating “data collection and data analysis are mutually interactive processes, each informing the others direction”.

Chapter Three: An Introduction to Methodology

Coding was conducted in such a way as to retain what was said by participants in the context in which it was stated. The segments of conversation were coded by assigning each segment to one of four quadrants of the four-by-four matrix proposed by Bowler et al. (2007) (based on a concept described by Dent-read and Zukow-Goldring, 1997). These quadrants are outlined in Chapter Two of this study.

3.3.7 Analysis

The basic theoretical thrust of discourse analysis is the argument that peoples’ talk fulfils many functions and has varying effects (Potter & Wetherell, 1987, p. 168). Potter and Wetherell point out two main aspects of the analysis phase of discourse analysis. As well as looking for patterns of variability and consistency, the researcher must form a hypothesis about the possible functions and effects of aspects of the discourse and search for linguistic evidence of these. Discourse analysis moves away then from the grounded theory approach of constant comparison (Glaser & Strauss, 1967) as an analysis technique. With discourse analysis, rather than beginning by making comparisons between accounts, each interview is separately and comprehensively analysed to find patterns of meaning, contradictions and inconsistencies in explanations or justifications within each account. The analysis has to attend to both the language detail and to the wider social context of the discourse. It has been explained how important it is that any explanation of discourse should remain linked to its context. This does not only apply to the phrases in each segment of conversation but it is also important to stress the importance of reading the segments of conversation in the context of the whole transcript.

3.3.8 Validation of results

Potter and Wetherell (1987) stated that the validation of discourse analysis methodology lies within the data itself, within the contradictions and statements that analysis reveals in the discourse. They argued against triangulation as this “compounds rather than reduces the variability between participants’ claims and descriptions” (Potter and Wetherell, 1987, p. 64). Discourse analysis does not try to resolve variations between different
Chapter Three: An Introduction to Methodology

Validation within discourse analysis involves ensuring coherence, ensuring that there are no loose ends or exceptions which remain unexplained in terms of the analysis. It also involves assessing ‘fruitfulness’ or “the scope of an analytic scheme to make sense of new kinds of discourse and to generate novel explanations” (Potter & Wetherell, 1987, p. 171). It is these factors of coherence and fruitfulness which are essential in assessing validity within discourse analysis, rather than, as previously discussed, the traditional notion of proving generalisability.

Furthermore, the validation of the data involved the active participation of meaning-making from those participating in the interviews. In addition, teachers were given the opportunity to check and respond to the data collected and the findings of the study. As with much qualitative research, the reader of the study assesses the importance and validity of the results by the way they are presented, and their perceived applicability to a wider group.

3.3.9 Writing the report

A report on discourse analysis is more than a presentation of findings. As Potter & Wetherell (1987) point out, the report constitutes part of the confirmation and validation of the procedure itself: “The goal is to present analysis and conclusions in such a way that the reader is able to assess the researcher’s interpretations” (Potter & Wetherell, 1987, p. 173). Furthermore, an effective report requires a representative set of examples and detailed interpretation which links the claims of the analysis with the extracts.

3.3.10 Application or use of the study

The application stage of discourse analysis should make clear the usefulness of the study (Potter & Wetherell, 1987, p. 174). A central use of discourse analysis is to promote an
informed critical attitude to discourse material of this kind. It is also to promote an awareness of the “constructive nature of discourse and the close connection between the way textual versions of the world are put together and specific policies and evaluations are pushed” (Potter & Wetherell, 1987, p. 174).

3.4 Summary

This chapter described and explained why discourse analysis was an appropriate methodology for this particular research study. The following chapter presents the research design and details procedures at each of the ten stages. Ethical considerations applicable to this study are also discussed.
Chapter Four

The Research Design

4.1 Introduction

The aim of the study was twofold. This particular study aimed to examine two groups of teachers’ perceptions of the location of problems and solutions of student behaviour. Furthermore, this study aimed to examine the contextual validity of the “Matrix of Perspectives” to understand these teachers’ points of view.

The study was specifically designed to answer the following research questions:

1) What do these teachers say about student behaviour?
2) What perspectives are illustrated by the teacher conversations?
3) Do the teachers consider that the use of the matrix of perspectives provides understanding that reflects their thinking?
4) How useful do the teachers consider the matrix would be in their work?

The design of the study was aligned with Potter and Wetherell’s (1987) ten stages of research. The procedures and decision-making for each section are discussed below.

4.2 Procedures

4.2.1 Stage 1: Clarifying the research focus

The intention of the study was to examine the language used by two groups of secondary school teachers in relation to student behaviour. In the focus groups, the teachers discussed student characteristics and patterns of behaviour. Their discourse was analysed to locate the causal assumptions on a two-by-two matrix constructed from two intersecting continua representing two dimensions of learner-environment and passive-active.
4.2.2 Stage 2: Selection of the sample

Participants

The participants in this study were groups of volunteer secondary school teachers at two large secondary schools. Each group included five participants. The selected schools (both with socio-economic ranking Decile 10/10) were two out of 13 schools that volunteered to participate. These particular schools were selected due to their proximity and availability to me.

As teachers' views will necessarily reflect diverse experiences, the selection procedure was designed to provide access to a range of teacher perceptions of student behaviour. To foster the diversity in the two schools, those who were selected to participate included both males and females of a variety of ethnic backgrounds, ages and teaching experience. The purpose of this selection process was to make the sample representative of the specific context of study rather than of the population generally. The analysis is restricted to the beliefs this particular sample of people had access to and what they were able to, or decided to, reproduce in the focus group interview. The discourses of these teachers have generality only, as Wetherell and Potter (1987) stated, “to the extent that they are recognisable as having a much broader currency” (Wetherell and Potter, 1987, p. 61). In other words, the generality of the results of the analysis depends on the reader of the research assessing the importance and interest of the effect described and deciding whether it has wider application.

As a researcher, I was a participant in the professional community participating in the study. I am also teaching in the secondary school environment, working with small groups of students with learning disabilities. Secondary school teachers' perceptions of student behaviour were the focus of this study. It was for this reason, I believe, that I was accepted and trusted as a “colleague”, who would understand their perspectives and points of view with regard to student behaviour, rather than a “researcher” with unknown, or suspicious motives.
Chapter Four: The Research Design

Sampling procedure

To obtain the names of likely participants, I asked the principals of each school to provide me with a list of names of five volunteer teachers. An information sheet was sent to all the teaching staff at each school via email. I was then handed a list of five volunteers with whom I liaised through a key contact person at each school (the principal’s secretary and deputy principal). The principal ensured that the five participants represented a range of ages, ethnicities and teaching experience by extending an email invitation to all the teaching staff (with a variety of ages, ethnicities and teaching experiences) to volunteer for the study.

The non-random sampling procedure of purposive sampling was suitable for this study (Dixon, Bouma & Atkinson, 1987; Sarantakos, 1993) as it was important to ensure that salient demographic factors were consciously considered. Randomisation was not necessary as the study did not seek to obtain broad representation (Bogdan & Knopp Biklen, 1982). This study was largely open-ended, designed to explore rather than to prove a hypothesis.

4.2.3 Stage 3: Collection of data/interviews

Potter and Wetherell (1992) suggest that when conducting interviews, a detailed schedule which sets out the questions to be asked, or topics to be discussed, should be used to ensure consistency for each participant. The schedule aimed to focus on specific questions regarding student behaviour. The intention was to draw out teacher perception of student behaviour with regard to challenging and satisfying situations; the general solutions teachers used to address difficult situations; student behaviour at different times of the day; and general teacher beliefs of student behaviour. After lengthy discussions with my supervisor, the questions to be included in the focus group interview were selected. I was aware that the questions could not be entirely free of bias, however we worked to minimize this, by keeping the questions as open as possible. The interview schedule was trialled and back-up questions were prepared. The interview schedule is outlined in Table 1 below.
Chapter Four: The Research Design

Introductory Question:
Open topic to be discussed is classroom management. In pairs (and in three's), share an experience or describe a situation that involved classroom management. This can be about anything related to classroom management. Tell me what happened.

Question 1:
Can you think of a situation in the class that was challenging? Please describe.

Question 2:
What happens when these problems occur? (if not answered in question above)

Question 3:
How was it solved?

Question 4:
Does the time of the day make a difference?

Question 5:
What general solutions have been developed to address difficult situations?

Question 6:
Can you think of a situation in the class that was satisfying? Please describe.

Table 1 The Interview Schedule

The role of the interviewer in discourse analysis is complex and challenging in comparison to the traditional role where the interviewer does his or her best to remain neutral and to ask very consistent questions. All researchers are positioned, to an extent, in the social phenomena that are objects of inquiry and are therefore enmeshed in their interactions with participants (Middleton, 1993). I was a participant researcher, and therefore I could not assert complete objectivity. However, I considered the effect that my position as a participant researcher could have on the participants and the study in general, as an advantage. Being in this position had the potential to enrich the data collection process and interpretations, as I was able to interpret the observed actions in the focus group interview discussion. It was important to plan the interview schedule and process very carefully.
Focus Group Interviews

Focus groups were used to discuss the topic, as they have been advised to provide an effective and appropriate means of collecting discursive data (Deatrick & Fawx, 1991). A focus group is a specific tool for capturing the synergy of group discussion. It is more than just a group discussion. The focus group formation allows participants to concentrate on particular topics related to the research objectives. They provide a powerful technique for gaining insight into the opinions, beliefs, and values of a particular segment of the population (Davidson & Tolich, 2003). They provide "a way of listening to people and learning from them" (Morgan, 1988), allowing access to research participants who may find one-on-one, face-to-face interactions uncomfortable. By creating multiple lines of communication, the group interview offers participants a safe environment where they can share ideas, beliefs, and attitudes in the company of people with a similar background. Members of a focus group are usually similar to each other in some way (Crowl, 1996). In this study, each focus group consisted of volunteers who were members of the same profession - teaching. Studies conducted on focus groups show that group participants find the experience more gratifying and stimulating than individual interviews (Morgan, 1993; Wilkinson, 1998). The researcher working with a focus group has a large measure of control over the topics that are discussed, and also the order of these topics, determines the structure of a focus group.

Focus group discussions have advantages over other qualitative instruments. They are efficient in terms of time and money, and the group dynamics encourage participants to be prompted to contribute by others in the group. There is time for clarification of questions, which further improves the group discussion, and topics selected by the researcher can be discussed openly using the natural language of the group members.

Their strength also lies in the relative freedom that the group situation gives participants to discuss issues of concern (Davidson & Tolich, 2003). Furthermore, focus groups enable the researcher "to capture a richer interpretation of participant's perspectives" (Janesick, 1994, p. 211) and "allows the researcher not only to identify issues and attitudes but also see how various people from the group respond to the positions taken by others" (Bouma, 1996, p. 179). In addition, Anderson (1998) noted that, "They [focus group] are particularly useful in
Chapter Four: The Research Design

helping develop specific research questions and issues for further exploration” (Anderson, 1998, p. 201).

The pilot interviews

A pilot interview schedule was developed and trialled for two main reasons. Firstly, I wanted to make sure that the questions developed would draw out language that would illustrate the beliefs and views of teachers about student characteristics and patterns of behaviour. Secondly, I wanted to practice my interviewing approach. The pilot schedule was developed from discussion with supervisors.

Evaluation of the pilot interview schedule

I interviewed a group of five teachers using the pilot schedule. This was followed by a transcription and analysis of the interview. I found that the schedule succeeded in drawing out beliefs of teachers and that segments of conversation would be most meaningful when assigning text to one of the four quadrants of the matrix proposed by Bowler et al. (2007) (based on a concept described by Dent-read and Zukow-Goldring, 1997). No changes were made to the interview schedule.

4.2.4 Stage 4: Carrying out the interviews

The principal of each school provided me with their consent for the interviews to be conducted within the school. No major ethical concerns were raised and notification of Low Risk research/evaluation involving human participants was submitted to Massey University Human Ethics Committee.

Meetings were set up with a number of principals to request permission and involvement within the school. Once permission was gained, an email was sent to each principal with an information sheet attached (see Appendix B for information sheet). This email was then circulated to teachers within the school. Those who expressed interest, volunteered to take part in the study. The principal of each school selected five candidates. This method was selected as it seemed the most appropriate method allowing all teaching staff an opportunity
Chapter Four: The Research Design

to participate. Furthermore, principals were not in the position to give out staff contact details such as e-mail addresses in order to control access to the selected personnel.

After conducting a pilot test, examining the interview approach and interview schedule, I started to arrange meeting times for the focus group interviews. I liaised with a key contact person at each school (principal’s personal assistant or deputy principal). All interviews were held immediately after school in the meeting or boardroom. The timing and location of the interviews ensured no disruption of class time (Borg, 1998). These rooms had comfortable seating and were adequate in size to contain six people. An e-mail reminder was sent to all teachers attending the interview three days prior to the interview taking place. This deemed to be an effective tool to maximise participation.

The group met for an hour, with an additional 15 minutes at the start to allow people to arrive and have some afternoon tea. I provided afternoon tea as teachers attended the group immediately after school and were likely to be hungry. The afternoon tea had additional benefits of creating an opportunity to build rapport, and providing an opening for conversation. The climate was relaxed and a number of teachers joked that the afternoon tea was a primary motivator for attending the interview.

Participants were seated and continued enjoying the afternoon tea. They were again welcomed and thanked for their participation. Reasons for conducting this research were given and participants were told of the importance of their contribution and reasons for their nomination. They were told that the session would be confidential and that there was no right or wrong answer. The importance of recording the conversation was explained, and participants were informed that the tapes would be erased after transcription and that there would be an opportunity for them to verify the transcripts. Furthermore, handwritten notes were taken as a back-up method. These notes were used to clarify some of the teacher’s comments that were initially difficult to decipher from the audiotape. The ground rules were outlined (for example, turn taking, open session – everyone’s views are welcomed, wanting to hear from all participants) and the format of the focus group was explained. Participants were also informed that any identifying characteristics, actual names, or place would be
Chapter Four: The Research Design

edited out during the transcription process ensure confidentiality. Any quotation or information which might reveal the identity of any participant, student or other staff members has been excluded from the study. Finally group members recorded their names and subject teaching areas on the audiotape for voice recognition, questions were answered and consent forms (see Appendix C for consent form) were signed.

The interview usually began with an introductory question. Teachers were asked to discuss (in pairs) a classroom management situation. They were to share an experience or describe a situation that involved classroom management. This could have been about anything related to classroom management. The participants were then given an opportunity to report back. When the conversation got off topic, or stopped, participants were prompted and earlier comments from the participants were used to generate questions. This ensured that I prioritised the teacher’s topics over my own thinking. Referring back to the participant’s comments is an effective way of building and maintaining rapport throughout the interview as this is one way of showing that you listen to what was said.

At the conclusion of the interview, all participants indicated that they found the interview experience helpful and enjoyed hearing what strategies were used by other teachers to manage student behaviour. Some participants reported that this session helped them in the sense of not feeling like the only ones dealing with difficult situations in the class.

4.2.5 Stage 5: Transcription of interviews

This study focused on the words spoken and not so much the tone, gesture etc. that was used. I acknowledged that these all contributed to the means of communication; however, this study did not attempt to do that. I found as I read through the transcription, the readability was the most important aspect, not how long each pause lasted, for example. The focus of this research was to understand how teachers viewed behaviour, and their indication of whether they believed student behaviour emanated from the individual, the environment, an interaction between both or neither of these. In this sense, what they said was more important
than how they said it. Even though the transcripts had been edited in this way, several
participants requested me to edit them further when they had a chance to verify and return
them, saying that it was interesting to see how unstructured their spoken discourse appeared
in the transcript.

4.2.6 Stage 6: Coding

The coding process commenced with a careful reading of each transcript, followed by an
identification of perspectives for each segment of conversation. Coding was conducted in
such a way as to retain what was said by participants in the context in which it was stated. I
looked at each segment of conversation and highlighted any phrases which illustrated and
supported the positioning of the assigned quadrants in the four-by-four matrix (Bowler et al.
(2007) (based on a concept described by Dent-read and Zukow-Goldring, 1997). Each
dimension of the matrix was assigned a different colour to make analysis easier later on.

The coded data was then sorted into NVIVO (version 2), a computer package and a tool for
managing large volumes of data. NVivo stores first ideas, concepts and categories generated
by the researcher in rich text documents, and let you edit them as they change. Furthermore,
it allows you to link research with other files as you go. Ideas can be explored in a visual
model. It is especially useful for those working with complex data, such as multimedia and
who want to conduct deep levels of analysis. Researchers may create data documents and
edit them during a project (e.g. diary entries or field notes) or import documents already
typed up (interviews, focus groups, etc.). Documents can be edited or imported by the NVivo
project in rich text format. This software programme was not used as a method of analysis
but merely operated as a storage device of the data collected in this study.

4.2.7 Stage 7: The analysis of the transcripts

As explained in the previous stage, the segments of conversation were coded by being
assigned to one of the four quadrants and the phrases illustrating and supporting the positions
were highlighted. Searching for the phrases provided me with another opportunity to check
that I assigned the segment of conversation to its corresponding quadrant. My supervisor and
I calculated inter-observer reliability by counting up the number of times we agreed upon the
position of each segment of conversation. A tally chart was created and a tick was placed in
either the ‘agreed’ or the ‘disagreed’ column (see Appendix E for interrater-reliability tally
chart). The coding was carried out independently at first. We then compared our positioning
of the segments of conversations and a tick was placed on the tally chart. Where statements
were too brief to determine the context, for example, “hmm” or “to the supermarket”, no
attempt was made to analyse these unless they related directly to a statement before or after
it.

4.2.8 Stage 8: Validation

As described in the earlier stage, interrater-reliability was assessed for this study. Interrater-
reliability is the “degree to which one coder agrees on the coding of the same data” (Whitley,
2002, p. 335). One can therefore assess the degree to which one coder is consistent over time.
This study assessed reliability in terms of the percentage of times the raters (supervisor and I)
agreed upon the category in which each segment of conversation fell. The consistency
among items can be used as an indicator of reliability when a measuring instrument uses
multiple items or questions to assess conversation, with the sum of a person’s scores on the
items being the total score for the measure (Whitley, 2002).

A simple way to accomplish this is to split the items into two parts and compute the
correlation between the respondents’ total scores on the two parts. My supervisor and I had a
total agreed score ($N^1$) of 154 segments of conversations and total disagreed score ($N^2$) of 9
segments of conversation. The total number of conversation segments was 163. A percentage
of consistency was then calculated. The following formula was used to accomplish this:
Chapter Four: The Research Design

Therefore,

\[
\frac{N^1 - N^2}{\text{No. of observations}} \times \frac{100}{1} = 88.957\% = 89\%
\]

The total percentage of consistency was 89 per cent. My supervisor and I dialogued about the segments we did not agree upon. We came to an arrangement on what quadrant we would assign these particular segments of conversation to and proceeded in this manner.

The internal validity (or credibility or trustworthiness (Guba & Lincoln, 1994)) of this study is presented in its structure. There is evidence that indicates the quality measure in the openness of this study. By presenting the research design results and conclusion openly, and moreover declaring the rationale for decisions made during the project, as well as describing the research carefully, readers are able to judge the credibility of all phases of the project, from data collection to conclusions. A follow-up interview was conducted with both participant groups. This granted me with an opportunity to report on the findings and provide feedback. Furthermore, it provided the teachers with an opportunity to ask questions and confer or refute any of the findings that were generalised to the groups with whom they are involved. Interviews commenced with a recap of the aims of the study, an explanation of the four-by-four matrix (see Chapter Two - Literature Review), a discussion of summary results of the study and an opportunity to discuss findings and comment on the summary document. Finally, teachers were encouraged to suggest any modifications regarding the interpretation and analysis of the findings. A follow-up questionnaire was left with the teachers present at the feedback session. This questionnaire further encouraged teachers to provide information
regarding the usefulness of the matrix and allowed teachers a further opportunity to suggest modifications (see Appendix D for feedback questionnaire).

This study neither claims to generalise its findings to the entire teaching profession nor to all schools, but rather, suggests that the findings are only useful and generalisable to the certain context the study was conducted in. The external validity (or transferability) (Guba & Lincoln, 1994) relates to how generalisable the study results and conclusions are to other situations. The concept of generalisability derives initially from quantitative positivist paradigms, which is not a high priority in qualitative studies (Bell, 1993) in comparison with its importance in quantitative studies. The position of the teachers in this study related to a particular time and place and no assumptions were made that the same teachers would respond similarly in other situations or that all teachers shared their views.

4.2.9 Stage 9: Writing the report

The purpose of this written report was for submission for my master's paper. The results of this research were reported with appropriate examples and interpretive discussion. The methodology and process followed has been fully described and explained to enable the reader to assess the validity of the study.

In addition, this report was written for the purpose of informing the participants about the findings of the study. At all times during the study, I took care when reporting data to ensure that teachers and schools contributing information were not identifiable unless express permission had been given. Throughout the report, specific procedures were thoroughly detailed and discussed. Furthermore, I only drew conclusions as far as the research allowed me to do so. As explained before, I am not generalising to all teachers but only to the two focus group schools.

This report has been organised in way that is easy to understand. In addition, I attempted to adhere to a conventional way, specifically for those who are interested in and familiar with the style of journal articles, to find information with ease and in expected places.
4.2.10 Stage 10: The application

This study may be useful in that it makes the public more aware of and educated about the workings of these discussions, in order for them to respond in a more critical manner. Furthermore, it may open up a dialogue with the participants who have been researched, which may lead to further exploration and clarification of issues (Potter & Wetherell, 1987, p. 175). It will be argued that this study has both these applications. In addition, this study will also provide the developers of the Matrix of Perspectives with a better understanding of teacher perspectives in terms of the usefulness of this tool in relation to their teaching practices and teaching profession. A further application is that this study highlights the areas of the matrix which teachers found difficult to understand, and the suggestions made by teachers to increase the validity of the tool. This information could be valuable to the developers of the matrix. Finally, teachers can use the Matrix of Perspectives outlined in this study as a tool, to reflect on their work by evaluating their perspectives when dealing with school situations.

4.3 Ethical aspects of discourse analysis

Qualitative studies in Education usually deal with human participants, and are thus likely to involve ethical issues. The researcher has the responsibly of making sure that the rights of all participants in the study are preserved. Participants need to be protected from harm, not have their time wasted, and be treated sensitively. Bouma (1996:197) sums up the issues for qualitative researchers when he says:

"For social scientists the major ethical issues centre around gaining an appropriate form of informed consent, respecting individual privacy and confidentiality, being aware of the power dimension of the relationship between the researcher and the subject of research, and ensuring that the research procedures (variables selected, measured used, sample selected, and design employed) are adequate to answer the questions being asked".
This research project complied with the ethical standards of the ‘Code of Ethical Conduct for Research, Teaching and Evaluations Involving Human Participants’ (Massey University, 2006). Following a process of peer review, notification of Low Risk research/evaluation involving human participants was sought from and granted by Massey University (see Appendix A for letter of approval). The following ethical issues related specifically to the present study.

Permission to conduct the study within an organisation
Approval was sought from and granted by the principals of the two North Shore secondary schools to conduct the study at their schools.

Workplace functioning
Care was taken in this study to ensure the project did not disrupt regular functioning of school and teaching time, particularly as this school had been involved in several research projects in recent years. The study was therefore conducted as unobtrusively as possible, ensuring that scheduling of the focus groups considered participant timetables. I attempted to make the best use of participant time through efficiency of interviews conducted after school.

Informed consent
Participants were informed about the purpose of the research and the method of analysis. Informed written consent was obtained from all participants and principals before the data was collected (see Appendix B for a copy of the consent form). The participants were given information sheets before the interview which were developed within the guidelines of the Massey University Code of Ethical Conduct (2006) (see Appendix C for information sheet). The information sheets were distributed to prospective participants one month prior to the collection of informed consent sheets to allow participants sufficient time to reconsider the implications of their participation and to discuss any concerns with the researcher.

Interviewee rights
The study involved focus group interviews. All participants were assured anonymity and confidentiality. In addition, participants were informed that they had the right to:
• Decline to participate without penalty.
• Refuse to answer any particular questions.
• Withdraw from the study at any time before the data had been analysed and integrated.
• Ask questions about the study at any time during participation.
• Provide information on the understanding that participants, students and teachers' names would not be used unless permission had been given to the researcher.
• Access a summary of findings of the study.

Confidentiality
At all times during the study, I took care when reporting data to ensure that teachers and schools contributing information were not identifiable unless express permission had been given. The focus group interviews were handled in a way that ensured confidentiality of participants. Participants within each focus group were aware of the contributions of others in their group. Confidentiality of material from the focus group used in the thesis is ensured by concealing firstly the identity of the school and secondly the individuals taking part in the research.

Harm to participants
It was not anticipated that the study would cause harm to the participants. The qualitative methodology with its flexible semi-structured focus group interview format was chosen partly to provide the opportunity for participants to tell their story in a non-threatening environment. When reporting back on the findings of the study, it was important to give teachers a clear understanding of what the findings suggested. It was important to explain to the teachers that the quadrants were not to be presented as one quadrant having more value than another. I had to be aware that participants will and do bring their own perspectives to the situation. Participants might see that one perspective is valued more in their profession and this perception might leave participants feeling embarrassed. My supervisor and I were aware of this at the early stages of the research but this did not pose a problem because this concern was dealt with when we reported our findings. I helped the teachers to understand
the context they might take and suggested that any perspective they did not take, is not static and that it is inevitable to change in different times and situations.
Chapter Five
Results: Discourse

This chapter presents the discourse analysis of two groups of secondary school teacher conversation about student characteristics and patterns of behaviour. Conversation segments were assigned to one of four quadrants that represented the location of problems and solutions in the individual, the environment, the interaction between the individual and the environment or neither.

The results in this section represent the researcher's interpretations of the discourse. Codes (T1, T2, T3 etc.) have been allocated to teachers when they were quoted directly to secure anonymity. A summary statement is provided with examples to illustrate the interpretations. This chapter concludes with an overall summary of the findings.

Results: School A

5.1 Question One: Introductory Question

The interview commenced with the following introductory question: “In pair’s, I would like you to discuss a classroom situation. Share an experience or describe a situation that involved classroom management. Tell me what happened”.

The conversation was examined in segments of conversation, the unit of analysis being one turn of conversation per speaker. Figure 4 indicates the frequency of conversation segments assigned to the identified quadrants at each school. The table is a visual representation that provides an indication of the positioning of teacher’s beliefs on this occasion, in relation to the location and origins of the problems they discussed.
In general, teachers in School A initially indicated in their responses to the introductory question that they viewed the student as active and teachers as more passive. They considered that the student actively selected their actions (Quadrant 3). The predominant discourse of school rules became evident as the teachers believed that all students should know the school rules and follow them. Additionally, the students were seen to be responsible as they actively selected not to follow the rules. Comments from teachers included:

- ...he knew he was going to get picked up on the third occasion. (line 12:T3)
- I actually had to explain why...there is no logical reason in his mind why I would ask him to do it, so he would require an answer an explanation and umm when it comes to things like uniform...we are finding ourselves having to explain why certain things need to be done. (line 12:T3)
- They always want to know “why?”...challenge you on ‘why’ all the time...because they should now by the time they come to... (line 31:T2)

Figure 4  Perceptions of the location of problems and solutions⁴: Introductory question - School A.

⁴ Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
5.2 Question Two: Challenging Situation

The teachers were asked to think of a situation in class that they found to be challenging and to describe this situation. Figure 5 indicates the frequency of conversation segments assigned to the identified quadrants at each school.

![Figure 5](image)

From Figure 5, the data indicates that the comments of the teachers interviewed (School A and B) predominantly fell into quadrant three (student active). A major challenge for teachers at School A (an emerging theme) was the concept of social climate, where the students were reported to frequently refuse to do what was asked of them. One of the teachers (T5) described a situation where "a boy was misbehaving in class calling out constantly" (line 52:T5) and "the rest of the boys looks at you to see" (line 56:T5). The teacher explained that "he [the student] is challenging you to do something, and the only thing that you are left with is a physical man handling to get him out and he knows that you can’t do that and so its almost like a standoff and it can be quite a challenge" (line 60:T5). He responded to the student that "I am dealing with your disruption in class...I’m dealing with not only your

---

5 Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
disruption in class but your defiance and refusal to follow my instruction” (line 86:T3). This particular teacher found that “when they do that verbal defiance thing without actually going beyond it, I find that a big challenge and you know, I find that hard” (line 78:T3). Another situation described in the interview, was of a student “flaunting the fact he was [wearing]...heavy eye make-up and earrings and stuff...” (line 233:T4). This teacher explained how they asked the student to remove the make-up and earrings. The student was reported to have refused to do so and this was described as a challenging situation as “they [students] love the attention of their mates” (line 237:T4) and refused to do what was asked of them.

When teachers were faced with a challenging situation, a strategy used to diffuse the conflict was to provide the students with a choice, “either you and I will deal with this now and you will sit down and do what I’ve told you to do... and so the choice went back on the boy” (line 96:T3). Teacher T3 found that “students will push teachers” (line 112:T3) but that choice was a successful strategy: “It helps giving the boys the choice...that’s what I find really successful with boys while we are in this situation we can either or we can...there’s your choice, you choose, and I give them that power of there’s going to be that consequence to this, its either this or...” (line 107:T4).

A number of strategies (potential solutions) were discussed. In most of the proposed solutions, teachers’ perceptions were located in quadrant two (teacher active, student passive). Teachers were selecting and applying behaviour management strategies. One teacher commented that “...sometimes you need to work on the actual student and sometimes you have to threaten their lunch and they’ll never do it again, and others you need to work on a thing” (line 255:T3).

5.3 Question Three: Time of Day

The third question prompted teachers to discuss whether the time of the day made a difference to student characteristics and their patterns of behaviour. Figure 6 below indicates the frequency of conversation segments assigned to the identified quadrants at each school.
There was agreement between all participants that the time of day was a function of student behaviour. This became evident as both groups provided similar examples when this question was discussed during the interview. Teachers gave specific examples where a change in student behaviour occurred. Some examples included, during periods five and six, Friday afternoons, mufti days, windy days and/or when there was a physical assault during lunch time. Teachers commented that during "windy lunch times and windy afternoons, the boys are quite bad – wet and windy obviously, after lunch if they have been drinking coke and things like that, and they do - a lot of sweet things umm obviously the start of day they're tired etc. but after lunch especially, but mufti day especially (line 272: T5).

The importance of having some kind of routine established was also discussed. Teachers suggested that "boys like routine, they like everything that has got routines as well. As much as we, we want to, you know, explore the creative side of things, there’s got to be certain routines and things and you take them out of those routines then they lose control" (line 275: T3).

---

6 Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
Proposed solutions from School A seemed to fit well into Quadrant one where teachers were trying to understand the students and the reasons for their specific behaviour. A teacher from School A (T3) suggested that "they need that chance to actually talk it through because a lot of boys' ideas comes through and they throw them in the pot and you actually get some interesting concepts of what they see as right and what's not right...young people have got a real sense of justice and fairness and if you don't follow that through..." (line 353: T3).

5.4 Question Four: General solutions

Question four investigated teacher beliefs on the general solutions that have been developed to manage difficult situations. Figure 7 indicates the frequency of conversation segments assigned to the identified quadrants at each school.

![Quadrant Diagram](image)

Figure 7  Perceptions of the location of problems and solutions\(^7\): General solutions – School A.

Figure 7 indicates that teachers in School A predominantly discussed situations where interactions occurred between teachers and students, when teachers discussed the general solutions used to diffuse situations. They worked with the students and tried to understand the students and their view of a particular situation (Quadrant 1). For example, "...again we

\(^7\) Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
are dealing with boys here and they react in the instant, everything is here and now, let's get it sorted out and let's move on. If you leave it too long you add all sorts of other things” (line 380: T3) and “sometimes they calm down, they need that calming down phase. In the heat of the moment” (line 383: T4). This is an example of where a teacher is interacting with a student, trying to understand the students’ position and working together to solve a problem. This interaction is represented in Quadrant 1.

5.5 Question Five: Satisfying Situation

Question five investigated teacher thoughts on satisfying situations that they have experienced at school. Figure 8 indicates the frequency of conversation segments assigned to the identified quadrants at each school.

Teachers found situations to be satisfying when less conflictual interaction between students and teachers took place. Teacher beliefs about satisfying situations were also located in Quadrant 3 where the students were the active participants in the situation. Comments from teachers include:

---

8 Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
• "I never told the class anything, because he is really a difficult boy, he is very difficult to deal with" (line 504:T2)... and he "thanked me for not putting it out in the class and he said: "Mrs. I am so sorry, I was wrong" and I tell you that boy has changed" (line 509:T2).

• "You’ve really earned his respect haven’t you?" (line 512:T4).

5.6 Undefined comment category

There were a number of segments of conversation (13 in total) that were more difficult to assign to any of the four quadrants. In these conversation segments the problem was located not in the reciprocal interaction between the student and the environment, but in both the student and the environment. In such cases, solutions were located within the environment, implying a perceived problem within the environment and within the learner. These comments were assigned to Quadrant I. This phenomenon will be discussed in more detail in the next chapter. Comments from teachers included:

• "...of course {T3} had to do the hard part you know but... he has changed a lot he is still difficult but there is so much good for trying" (line 513:T2).

• "Get him away from his mates, from his peers. That way you take out a lot of the male showing off – gotta get them out of that (T2: hmm) because they will say things they won’t. I remove them to my office, I have a sofa, I say: “come be a guest on my sofa, come and join me... I close the doors and we just have a chat and I tell him we’ve got a problem, you know we’ve got a problem, okay how are we going to solve it and I ask him you know to come up with the ideas. How can I help you to solve it? So we and usually it’s a heart to heart, a one-on-one after the event, calm, is more effective than trying to punish him in front of the class and then you know work out okay but for that there will be a punishment and trying to give them a choice there, there are consequences, you understand that, you understand that” (line 365:T3).
Results: School B

5.7 Question One: Introductory Question

The interview commenced with the following introductory question: “In pair’s, I would like you to discuss a classroom situation. Share an experience or describe a situation that involved classroom management. Tell me what happened”.

The conversation was examined in segments of conversation, the unit of analysis being one turn of conversation per speaker. Figure 9 indicates the frequencies of conversation segments assigned to the identified quadrants at each school. The table is a visual representation that provides an indication of the positioning of teacher’s beliefs on this occasion, in relation to the location of the problems they discussed.

![Figure 9](image)

Figure 9 Perceptions of the location of problems and solutions\(^9\): Introductory question – School B.

Teachers in School B indicated in their responses to the introductory question, that their position fell into a variety of quadrants, locating problems and solutions in both students and

---

\(^9\) Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
the environment. They considered that the student actively selected their actions (Quadrant 3). The predominant discourse of school rules became evident as the teachers believed that all students should know the school rules and follow them. Additionally, the students were seen to be at fault as they deliberately chose not to follow the rules. Comments from teachers included:

- ...the students were swearing. Particularly one student who probably shouldn’t be here anymore because she doesn’t really want to do what is asked of her, but instead is just stuffing around. (line 27: T_{10})
- My one yesterday, was a student who asked me to go to the toilet for the sixth period in a row...she said that it wasn’t fair and so on and so on...she went and sat down, got her phone out and texted someone...when I turned around, she was gone! She had gone to the toilet without my permission. (line 32: T_7)
- I’ve had some top stream students who are incredibly exuberant and dangerous in the classroom because they don’t listen to instructions. They think they know what they are doing and then they just go and do it all wrong. Get it all wrong and crash and burn and then they find out they don’t know everything yet. (line 55: T_6)

Furthermore, teachers from School B (Figure 9) indicated that a dominant influence in this part of the conversation was the active environment (Quadrant 2). Teachers indicated that problems were located in the students and solutions to these problems in the environment (for example, in the systems including teachers). Comments from these teachers included:

- ...we as teachers have to deal with it ourselves rather than having too much support from other centres in the class... (line 3: T_9)
- I’m talking about intervention that preventive strategies comes in to a point, and I can sort of make my lesson plans quite structured and individualised for certain students. (line 5: T_9)
- ... So it’s all sort of preventative rather than dealing with it when it actually occurs. (line 13: T_9)
- ...we do have some systems in place. (line 47: T_9)
...should keep these children at school. We had directives from both the school and ministry, we've got support systems in this school whose personnel's job themselves are dependant upon keeping them in school and also we don't want them out there committing any crimes and going to jail which not all, but some of them do. (line 48:T6)

One teacher in School B (Figure 9) considered the improvement of behaviour to be beyond the child or the immediate environment (Quadrant D). They explained that:

...we have here a state system. These kids just stay in the system and eventually they come out the other end and move on, but whatever interventions we think we are putting into place when they are here, in my humble opinion, have no impact...it makes no difference, you end up dealing with these kids and eventually they reach an age to go, or something drastic happens, and they go. (line 21:T8)

5.8 Question Two: Challenging Situation

The teachers were asked to think of a situation in class that they found to be challenging and to describe this situation. Figure 10 indicates the frequency of conversation segments assigned to the identified quadrants at each school.
Another important theme which emerged from the data was the concept of choice. Teachers believed that everything "is a choice, everything is an option" (line 146: T₈) for students. They choose to listen or attend class, they choose how to wear their uniform or the parts of the NCEA unit standard they want to do. The students 'choose' not to follow the school rules. Furthermore, teachers suggested that we live in a complex world that is challenging for students as "there are all these things interrupting them and it's a much more complex environment, and they are almost forced to make these choices" (line 266: T₈). Furthermore, other teachers mentioned that the biggest challenge is not to control the behaviour of the students, but rather motivating them to do the work. They indicated that no matter how interactive or interesting their lessons are, ultimately it is the students who decide whether they want to do the work or not. In addition, teachers suggested that students "don't actually want to do what they are asked to do and that's what it boils down to with all of them" (line 74: T₈). It is not "on their agenda" (line 79: T₈) to do what the school and education system requires them to do at school and that "they don't actually come here to do what we say they need to do and that's the bottom line, what the reasons are, what the symptoms are, what the causes are, I don't really know" (line 77: T₈).

**Figure 10** Perceptions of the location of problems and solutions: Challenging situation – School B.

---

10 Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
A number of strategies (potential solutions) were discussed. In most of the proposed solutions, teachers’ perceptions were located in quadrant two (teacher active, student passive). Teachers were selecting and applying behaviour management strategies. A comment from a teacher included:

- "his tactic that he is involved in, he almost manages them minute by minute to the point of – if you can’t answer this question or don’t attempting it, you will remain minutes after the bell. But its kind of like the only way you get them focused and he carries through the consequences and he gets good results" (line 140:T8).

Finally, some of the teachers believed that "whatever issues we have, are part of a much bigger picture than that. We are dealing with a society where...we are the authority figures, we are just someone else to deal with, like dealing with the guy who sells you petrol or dealing with the guy who you buy cd’s from, that’s who we are” (line 156:T6). One teacher (T6) acknowledged that "I think it’s a societal thing” (line 208:T6). They continued in saying that "you can’t blame schools for society’s issues and that schools such as ours and his [referring to a principal from another North Shore school] are powerless, therefore we are blameless. We don’t have any power” (line 172:T8). This view is represented in Quadrant 4. It was suggested by T8 that "society is dumping its issues on us” (line 172:T8) and that teachers “need more support” (line 250:T6).

5.9 Question Three: Time of Day

The third question prompted teachers to discuss whether the time of the day made a difference to student characteristics and their patterns of behaviour. Figure 11 below indicates the frequency of conversation segments assigned to the identified quadrants at each school.
There seemed to be some agreement between all participants that the time of day affected student behaviour. This became evident as both groups provided similar examples when this question was discussed during the interview. Teachers gave specific examples where a change in student behaviour occurred. Some examples include, during periods five and six, Friday afternoons, mufti days, windy days and/or when there was a physical assault during lunch time. Teachers explained that “every teacher will tell you that a class can be completely different depending on the time of the day and we do get them at different times because that’s how our system works” (line 276: Ts). Another teacher commented that “If the kids are on daily report, that changes behaviour and makes a difference too (line 295: Ts).

The importance of having some kind of routine established was also discussed. One teacher commented that “children like things to be the same” (line 296: T6).

Furthermore, their comments indicated that teachers believed students were given an unmanageable range of choices in a complex environment. One teacher commented that “they [students] have all these choices thrown at them, the kids actually decide how its going to be” (line 305: T8) where the “kids misbehaving because they can’t actually cope with the

Figure 11 Perceptions of the location of problems and solutions\textsuperscript{11}: Time of day – School B.

\textsuperscript{11} Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
complexity of it all" (line 311: $T_b$). The predominant belief emerging from the data was that both the environment and the learner were involved in bringing about change in the learner's behaviour.

5.10 Question Four: General solutions

Question four investigated teacher beliefs on the general solutions that have been developed to manage difficult situations. Figure 12 indicates the frequency of conversation segments assigned to the identified quadrants at each school.

<table>
<thead>
<tr>
<th>Quadrant 3</th>
<th>Quadrant 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Environment Passive</td>
<td>Environment Active</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quadrant 4</th>
<th>Quadrant 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Learner Passive</td>
<td>Learner Active</td>
</tr>
</tbody>
</table>

Figure 12 Perceptions of the location of problems and solutions$^{12}$: General solutions – School B.

Teachers in School B mainly located the problems in the students’ actions and behaviours (Quadrant 3). To diffuse these types of situations, teachers used behavioural strategies and solutions (Quadrant 2). One of the teachers shared an experience where he took a student’s cell phone in class when the student was texting (Quadrant 3). Afterwards, this girl stood in the hallway blocking the teacher’s path so that he could not get pass her. The teacher then telephoned the girl’s mother - “I rang her mum...that’s the other thing that works. Best thing we can do is ringing the parents” (line 555: $T_b$) (solution located in Quadrant 2).

$^{12}$ Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
Another interesting finding was that some of the teachers located the problems in Quadrant 4. These teachers indicated that the problems were located in society, beyond their direct influences “That is a societal problem (everyone agrees) (T₉: I agree, I agree but we end up living with it)” (line 624: T₉) and that they were beyond their immediate control.

### 5.11 Question Five: Satisfying Situation

Question five investigated teacher thoughts on satisfying situations that they have experienced at school. Figure 13 indicates the frequency of conversation segments assigned to the identified quadrants at each school.

![Diagram of quadrants](image)

**Figure 13** Perceptions of the location of problems and solutions: General solutions – School B.

Teachers found situations to be satisfying when less conflictual interaction between students and teachers took place. An interactive satisfying situation for T₉ was “when a series of lessons just click and the kids get it and stuff like that or when you’ve set up sort of activities and stuff and all the kids get into it and they are all helping each other out or with senior students... I’ve got some kids and stuff like that and we’ve got the second part of the test and

---

13 Methodology for data presentation as used by from Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
Chapter Five: Results - Discourse

I've got them volunteering coming lunchtimes everyday for a week and we did all the work and stuff like that - there were no complaints and they were still quite appreciative, they said: “Thanks for the help sir, you know, sorry we didn’t pass the test” (line 712: T9).

Teacher beliefs about satisfying situations were also located in Quadrant 3 where the students were the active participants in the situation. Comments from teachers include:

- “...the kids are working really hard” (line 695: T8).
- “I had this Asian girl at the end of the year and she wanted to give me a hug” (line 699: T8).
- “a lovely bunch of kids...they are basically boy racers” (line 705: T8).
- “I recon it’s great when you’ve got a kid who are actually working and they suddenly get something and they have one of those light bulb moments and they suddenly understand it” (line 709: T10).
- “one of the girls came up and gave me a big hug and said “oh it’s lovely to see you, haven’t seen you for ages” and she meant it...(T8: yea its nice eh?) and that was nice (line 729: T6).
- “I also had a student, few students who were very difficult at school. One was working at a post office and he came out from behind the counter, so we ended up talking and he said that he was sorry for being such a little creep at school (everyone laughs) and I said, “you weren’t so bad” and he said, “aww I was pretty bad” and I said no, compared to what I have now, you were an angel (everyone laughs). He was quite difficult at school and yeah, those sorts of things are lovely and hearing of students who are doing well (line 733: T8).

5.12 Undefined comment category

There were a number of segments of conversation (13 in total) that were difficult to assign to any of the four quadrants. In these conversation segments, the problem was located not in the reciprocal interaction between the student and the environment, but in both the student and the environment. In such cases, solutions were located within the environment, implying a perceived problem within the environment and within the learner. These comments were
assigned to Quadrant 1. This phenomenon will be discussed in more detail in the next chapter. Comments from teachers included:

- "all of that stuff though, come back to the teachers so they get away with it, because I'm so busy, I've got full days, I don't have time to write down, follow it up and if you don't do that..., its like and if lose someone's cell phone, I'm [in trouble] too" (line 489:T9).
- "It doesn't actually ever happen like that. I mean, I literally caught a kid the other day, I was walking behind him and he throws this orange peel and I said come with me, "why?"... okay and that's a problem for us. These stories that you hear from police on a Saturday night (everyone: yeah) they are exactly in the same position so umm, in terms of a school system, we've had, we went to, when I first came, we'd go to the dean with such issues but yeah I agree it doesn't really work and now I try to keep all the issues on my part...okay...and I will deal with them first and if it gets out of hand they go to the deans, but typically these days they don't get out of hand, occasionally teachers will want to go up the hierarchy because they are not supporting them, I suppose they then rush up here. I am trying to stop all that...and it typically works (line 535:T8).

5.13 Summary

A number of discourses were identified in the study. Some of these include, school rules, social climate, choices and routines. The following summary presents the major findings of each question as discussed by the participants in the research.

SCHOOL A:

The introductory question suggested that teachers in School A indicated that they viewed the student as active and teachers as more passive. They considered that the student actively selected their actions (Quadrant 3).

The results indicate that teachers predominantly positioned and located their experiences in Quadrant three (student active) when discussing challenging scenarios. Furthermore,
teachers in School A located the problems and their solutions in Quadrant one and two. Evidence indicates that teachers experienced a sense of feeling that things were out of their control when it came to locating problems and finding solutions as they discussed challenging situation.

When teachers discussed whether the time of the day made a difference to student behaviour, there seemed to be some agreement between all participants that the time of day is definitely a function of student behaviour. Environmental factors also had a significant influence on student behaviour. There was sufficient evidence that teachers are trying to understand student behaviour and in fact, diffusing situations from an understanding point of view.

In the general solutions question, the predominant belief which emerged from the data seemed to be that problems and solutions emanated from both the environment and the learner. Teacher comments indicated that teachers were trying to understand the students and the reasons for their behaviour.

When teachers discussed the topic - satisfying situations, the predominant belief held by teachers in School A suggested that both the student and teacher were active in the scenarios described. Finally, examples were given of conversation segments located in the undefined category, where conversation segments could not be clearly assigned to one of the four quadrants. This category is discussed in more depth in the following chapter.

SCHOOL B:

Teachers indicated in their responses to the introductory question that they viewed the student as active and teachers as more passive. They considered that the student actively selected their actions (Quadrant 3). Additionally, teachers indicated that the active environment was a dominant influence (Quadrant 2). Finally, one teacher in School B considered the behaviour to be beyond the child or the environment (Quadrant 4).

The results indicate that teachers predominantly positioned and located their experiences in Quadrant three (student active, environment passive) when discussing challenging scenarios.
When teachers proposed solutions to these challenging situations, their perceptions were located in Quadrant two (environment active, student passive). Finally evidence suggested that a couple of teachers considered the behaviour to be beyond the child or the environment (Quadrant 4).

When teachers discussed whether the *time of the day* made a difference to student behaviour, there seemed to be some agreement between all participants that the time of day is definitely a function of student behaviour. Environmental factors also had a significant influence on student behaviour. The predominant belief which emerged from the data seemed to be placing responsibility on both the environment and the learner for causing a change in the learner's behaviour.

Teachers in School B mainly located the problems in the students' actions and behaviours (Quadrant 3) when discussion took place around the topic of *general solutions*. To diffuse these types of situations, teachers used behavioural strategies and solutions (Quadrant 2). Some evidence indicated that teachers experienced situations beyond their immediate control (Quadrant 4).

When teachers discussed the topic - *satisfying situations*, the predominant belief held by teachers in School B suggested that the students were the active participants in the scenario (Quadrant 3). Finally, examples were given of conversation segments located in the undefined category, where conversation segments could not be clearly assigned to one of the four quadrants. This category is discussed in more depth in the following chapter.
Chapter Six

Results: Consultation and Co-construction

6.1 Introduction

This chapter presents the feedback obtained from the reporting and feedback sessions where the findings and usefulness of the matrix of perspectives were discussed. It describes the consultation and co-construction process from the feedback interview and the results of two groups of secondary school teacher conversations about student characteristics and patterns of behaviour. The results, comments and general feedback from the teachers are outlined below.

6.2 The consultation and co-construction process

After the data was analysed, I started to arrange meeting times for the reporting of the results and feedback session. I liaised with a key contact person at each school (principal’s personal assistant or deputy principal) to arrange these meetings. Both interviews were held during lunchtime in the meeting or boardroom. The timing and location of the interviews considered participants’ schedules and ensured no disruption of class time (Borg, 1998). An e-mail reminder was sent to all teachers attending the feedback session three days prior to the interview taking place maximising participation. Furthermore, an email outlining the theoretical basis of the study (the matrix of perspectives) was sent to participants prior to the session. Teachers were asked to read this brief explanation before attending the meeting.

The groups met for approximately 40 minutes, with an additional 10 minutes at the start to allow teachers to arrive and have some lunch. I provided some snacks as teachers attended the group during lunch time and were likely to be hungry. Three teachers from each school attended the feedback session. Three teachers sent their apologies due to prior commitments and meetings and one no longer worked at the school. Participants were again welcomed and thanked for their participation. My supervisor attended this meeting. She explained her role in the study and the application of the matrix of perspective to educational psychologists.
The aims of the study were reviewed to ensure that the discussion focused on relevant aspects. I then gave a brief presentation explaining the matrix of perspectives (theoretical basis for this study), displaying two enlarged A3 illustrations of Figures 1 and 3 from the article by Bowler et al. (2007). The first figure illustrated the four quadrants and the learner/environment continuum. The second figure illustrated examples of problems and solutions located within the different quadrants. Participants had the opportunity to ask questions regarding the matrix of perspectives and had a further opportunity to comment throughout my explanation. In addition, I explained that people are fluid in terms of their perspectives and that they can, and do, shift around the matrix quadrants, depending on context. I provided the following examples from a conference paper by Annan (2007, p.7):

"A teacher may view a child in her class as responsible for causing disruption and believe that she is choosing to act this way. She is 'misbehaving', a view represented in the third quadrant. However, this same teacher, who is also a parent, may place more responsibility for the disruptive behaviour on the educational environment when her own child's actions come into question. Her view, on the latter occasion may fall into the second quadrant."

Teachers were then handed an envelope with a summary of the findings, a feedback questionnaire and a stamped-addressed envelope. I discussed the major findings of the study and selected a few examples to demonstrate the major themes that emerged from the data. I then asked the participants to comment on the findings (the comments are discussed below). We then examined the feedback questionnaire to make sure that everyone understood what was required from them at each question (see Appendix D for feedback questionnaire). Teachers were asked to take the summary document away with them, to read it at their leisure, to complete the feedback questions and to mail this form to me upon completion. This process allowed for the co-construction of meaning about our conversation. Teachers had the opportunity to verify the summary documents, comment and reflect on the matrix of perspectives. Furthermore, teachers had the opportunity to clarify and provide explanations for previous statements made if they chose to do so.
6.3 Results: Co-construction - School A

Evidence from the feedback session and questionnaire indicated a moderate to strong fit of data consistency with regard to teachers’ views of behaviour at the time of the initial interview.

In terms of the usefulness of the matrix, to assist in understanding one’s own position, or that of others when seeking solutions in school situations, teachers in School A indicated “some relevance to limited fit” as one teacher doubted that she would use it in a ‘real life’ situation. Teachers indicated that it is a useful tool to reflect on, however commented that it is “too general”, “airy-fairy” and that teachers’ views would not always fit “nicely into a box”. In terms of using this matrix to understand the positions of other teachers and parents, teachers from School A indicated that the matrix of perspectives had some relevance and could be used as a tool of communication. They noted that the subjectivity of the user would influence the assignment to quadrants.

One of the participants suggested that the matrix of perspectives needed to be clearly understood in order for it to be effectively applied in schools. In hindsight, teachers should have been given more time to study the matrix of perspective before attending the feedback session. It is a complex theory and teachers would have benefited more from the experience if they had sufficient time to get their ‘head around’ the matrix of perspectives.

The feedback session revealed that teachers quickly grasped the concept of fluidity within the matrix – the idea that one’s perception of where the problem or solution lies will change depending on one’s perception and the specific context. Furthermore, one teacher mentioned that School A is well resourced, decile-10 school that is a well-supported, backed by parents and the community, with fewer challenges in comparison to other schools. They also noted that being a parent as well as a teacher, made it easier for the teacher to come up with solutions to different problems. This comment was interesting as it was consistent with the findings in the previous chapter when teachers were asked about satisfying situations. Results indicated that it was easier to think of teachers and students as joint problem solvers when the
circumstances were less challenging. It was mentioned that “the better your environment, it's going to be easier to put yourself in that frame of mind”.

An interesting suggestion was made that the matrix of perspectives could be useful for not only teachers and psychologists, but also for students. Understanding the perspectives students hold can provide teachers with an indication of how to work with students, and solving problems together.

Finally, teachers commented that they “don't see staff actually stopping to apply these concepts in 'real life', however it is very good for everyone to reflect on”. One teacher indicated that teachers are “unique” and that they do have their “own view on things and sometimes if you realize what zone/quadrant you are in, sometimes you can say: “Well, that's why” and think about and reflect on it”. Another teacher indicated that they need “more of this kind of stuff”, but acknowledged that “it’s just so hard to stop and get time to [reflect]”. She suggested that “teachers are often so focussed on their students, programmes and teaching that they do not always take enough time to “step away”, “to stop” and explore philosophical ideas, sharing those ideas with others”. A final comment suggested that it is “vitally important for teachers to have an understanding of student characteristics and patterns of behaviour in order to create an environment of teach and learning”.

6.4 Results: Co-construction - School B

Evidence from the feedback session and questionnaire suggested that there were some relevance in the consistency of the data, in terms of how the group viewed school behaviour at the time of the initial interview.

In terms of the usefulness of the matrix to assist in understanding one's own position or that of others when seeking solutions in school situations, teachers in School B indicated that it possessed 'some relevance'. In terms of using this matrix to understand the positions of other teacher and parents, teachers from School B indicated that the matrix of perspectives had some relevance.
One teacher suggested that the matrix of perspectives will be useful for her personal use. The statement made was quite reflective. It was interesting to note that before the session commenced, this particular teacher, in discussion about a school event, located the responsibility for student behaviour in the student. As the session progressed this particular teacher’s perception moved toward quadrant one (environment active, student active) as she placed some of the responsibility on the student/environment interaction, moving away from placing all responsibility on the student. This teacher understood that this tool is helpful in revealing one’s own perceptions, “catching yourself” from thinking a certain way in a particular situation, and becoming a reflective practitioner. At the conclusion of the interviews, all participants indicated that they found this whole experience helpful as they reflected on their own teaching practice.

The response rate of the feedback questionnaire was very low. Only one teacher from School B filled out the questionnaire and mailed it back to me. A follow-up email was sent to all teachers, thanking them for attending the feedback session and encouraging them to return the questionnaire as soon as possible. Apart from the valuable data collected at the feedback session, it would have been beneficial for this study if we had a higher questionnaire return rate.

This chapter presented the findings, feedback and usefulness of the matrix of perspectives obtained from the reporting and feedback sessions. Furthermore, it outlined the consultation and co-construction process and results. The final chapter presents the conclusions drawn in this research and discusses the implications of the study. In addition, several suggestions for further research are made, concluding this thesis.
Chapter Seven
Discussion and Conclusion

7.1 Overview of Chapter Seven
This chapter begins with a discussion of the teachers’ perspectives on the agency of students and the environment in relation to school behaviour. The second section discusses the main themes, or discourses, that emerged from the data. This is followed by reflective comment about the application of the matrix in the educational setting. The chapter finishes with some concluding remarks about the theory generated through the application of the matrix and future directions for research.

7.2 Teacher Perspectives
The teachers views, expressed at the time of the focus group conversation, were represented in all quadrants. The predominant belief emerging from the data was that both the environment and the learner were involved in bringing about change in the learner’s behaviour, although the relationship between teacher and student was somewhat opposed rather than reciprocal. In School A, the teachers indicated that predominantly they viewed the students as being responsible for their active participation in the situations described (Quadrant 3 – student active, environment passive). In most of the proposed solutions, teachers’ perceptions were located in Quadrant 2 (teacher active, student passive). Teachers were selecting and applying behaviour management strategies, working with students to diffuse situations. They indicated that, in some situations, they were interacting with students, trying to understand the students’ position and working together to solve a problem (Quadrant 1 – both student and environment active).

Teachers in School B mainly located the problems in the students’ actions and behaviours (Quadrant 3). To diffuse these types of situations, teachers used behavioural modification strategies and solutions (Quadrant 2). Furthermore, teachers in School B indicated that, in relation to the most difficult situations, problems were also located in society, beyond their direct influence and control (Quadrant 4).
7.3 Dominant Perspectives

Analysis of the conversation suggested that teachers in Schools A and B predominantly located their perspectives of student behaviour in Quadrant 2 (environment active, student passive) and Quadrant 3 (student active, environment passive). However, the teachers indicated that their position fell into all of quadrants at some time, locating problems and solutions in students, in the environment and the interactions between them. In a few instances, they also indicated that they viewed the influences on student behaviour, and on their own actions, as being outside their control.

7.3.1 Student active/environment passive (Quadrant 3)

Analysis of the conversation suggested that teachers in Schools A and B predominantly located problems in the students’ actions and behaviours, illustrating the belief that the students were responsible for their active participation in the situations described. Teachers mostly indicated that problems were located in the students (Quadrant 3) although solutions to these problems were in the environment (Quadrant 2).

For example, during the conversations, teachers described situations where students were “calling out constantly” (line 52: T5) in class, while others “were belting each other” (line 352: T5). Other unwelcome behaviours the teachers described included swearing, texting, exuberant and dangerous behaviour. T10 described a particular situation in which a student has been swearing. One teacher said that they did not expect students to swear at them and suggested that, in the main, they selected to act this way. Teachers in one school talked about the students as being deliberately ‘naughty’, ‘causing’ the behaviour in the situation.

The teachers sometimes made reference to specific qualities inherent in the students. Understanding of these constructs were shared by the teachers although the descriptions were offered by individual teachers. Some of these were desirable attributes, others not. For example, students were described as “slightly borderline characters” (line 560: T4), and a group “an interesting class” (line 94: T3). The teachers sometimes described students as ‘difficult’ or ‘problem students’, even ‘arrogant’ and ‘confrontational’. Desirable
descriptions were also offered about 'a lovely bunch of kids', 'top stream students' and 'those bright students'.

7.3.2 Environment Active/Student Passive (Quadrant 2)

In most of the proposed solutions, teachers' indicated that their actions assumed an environment active, student passive perspective. Teachers were selecting and applying behaviour management strategies to control student behaviour and diffuse challenging situations. Currently teachers are encouraged to engage in problem-based learning with students and to engage in their struggles to grow (Sungur & Tekkaya, 2006). They are encouraged to see students as active learners with their role as an active facilitator of learning through dialogue. However, when the teachers discussed situations in which solutions were not readily available, they indicated a teacher active/student passive approach to address problems utilising behaviour modification strategies.

A number of examples were identified. One teacher (T5) explained that on one specific day a week the students at the school had a study break. When the teacher considered that a student had misbehaved, they were denied this break and had to stay with the teacher. The teacher considered this approach to be effective. The students on the other hand, did not like it.

Figure 14 below is a visual illustration of T5's indicated perspective of the solution proposed.
Behaviourism suggests a paradigm or perspective in which the control is with the teacher, and compliance is with the student. Freiberg (1999) argues that this approach does not always bring about desirable or lasting change. Behavioural interventions often place greater emphasis on performance of skills than on their acquisition. They were not always conducted under conditions that would utilise, enhance or maintain strong and positive interpersonal networks. Freiberg also noted that there could be ethical problems associated with them as they have so often involved the delivery of punishment to reduce unwanted behaviours.

Behaviour modification remains the most common approach to classroom management in many schools. Rules, consequences, and rewards seem to be the foundation of most teacher repertoires for student discipline. Wang, Haerel, and Walberg (in Freiberg, 1999) noted that a meta-analysis of variables that influence school learning indicated that one of the greatest influences on school learning was classroom management. They found that the most successful teachers approached classroom management as a process of establishing and maintaining effective learning environments. Less successful teachers approached it with emphasis on their roles as authority figures or disciplinarians.

---

14 Methodology for data presentation as used by Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring.
According to Freiberg (1999) views on good teaching and learning have shifted from transmission views toward social construction or learning community views. Freiberg (1999, p. 49) suggested that “when knowledge is socially constructed, classroom discourse emphasizes reflective discussion of networks of connected content”. One further problem with behavioural approaches is that the behavioural theory assumes and promotes the view that all behaviour is based on self-interest and, therefore, individuals will seek to maximize their rewards and minimise their punishments. This assumption can become a self-fulfilling prophecy for schools. If schools act as if all students are selfish and self-centered, Freiburg (1999) argues that they implicitly teach students to be that way.

7.4 Less Dominant Perspectives

The data indicated that teachers in Schools A and B located their perspectives of student behaviour in two, less dominant perspective quadrants. These were student active, environment active (Quadrant 1) and student passive, environment passive (Quadrant 4).

7.4.1 Student Active/Environment Active (Quadrant 1)

A number of examples were identified where teachers were interacting with students, trying to understand the students’ positions and working together to solve problems. In these situations, the teacher recognised both the students’ and their own reactions. They indicated that they took an active role in addressing the issue, by becoming joint problem solvers with the student, working out the problems and the solutions together. In most occasions, there was evidence of a reciprocal understanding of both parties. It is important to note that the interactive view is not represented by two opposing sides, but rather a reciprocal relationship between the two. Teachers who see both the learner and the environment as active, involving reciprocal interactions perceived a ‘dynamic of circular causation’ (Annan, 2007, p. 6).

An example demonstrating the interaction and understanding between a teacher and students was where T3 commented on an experience described by T5. T5 discussed a situation where a physical fight took place at school between two students during lunch time. He explained that he had to ‘throw his lesson plans out the window’ as the students came into class discussing
the fight saying, “so and so had a fight sir, you should have seen it, they were belting each other” (line 351:T3). T3 commented that “they [students] need that chance to actually talk it through because a lot of boys’ ideas come through and they throw them in the pot and you actually get some interesting concepts of what they see as right and what’s not right...young people have got a real sense of justice and fairness ...” (line 353:T3).

The generation of solutions and shared directions were associated with the student active/environment, active perspective (Quadrant 1). Teachers found situations to be satisfying when less conflictual interactions between students and teachers took place. In favourable circumstances they could more readily consider the students view and work with them to solve problems.

7.4.2 Student Passive/Environment Passive (Quadrant 4)

Teachers in School B indicated, at one point, that they believed that some problems were also located deep in society, beyond their direct influence and control (Quadrant 4). In cases where both the learner and the environment were viewed as passive, the cause was attributed to a predetermined unfolding of events and development. The behaviour was experienced as beyond the control of either the student or the environment.

The teachers noted that students were given an unmanageable range of choices in a complex environment. During the conversation, teachers indicated “it’s a societal thing” (line 208:T6). It was suggested that “society is dumping its issues on us” (line 172:T8) and that teachers “need more support” (line 250:T6). The teachers, at this point, considered the improvement of behaviour to be beyond the student or the learning environment. Students were passive, in a passive environment with “kids misbehaving because they can’t actually cope with the complexity of it all” (line 311:T8).

Figure 15 is a visual illustration of T8’s perception on the situation described above.
Teachers located responsibility in a broad unspecified system (Quadrant 4), indicating that they were presented with situations beyond their control. Teachers also indicated that at times they viewed themselves as passive recipients of events. For example, "we are just someone else to deal with, like dealing with the guy who sells you petrol or dealing with the guy who you buy cd’s from, that’s who we are" (line 166:T₈). They felt as if they have no influence and that "you can’t blame schools for society’s issues and that schools such as ours and his are powerless therefore we are blameless. We don’t have any power" (line 172:T₈).

Figure 16 illustrates a modified version of Bronfenbrenner’s Bio-Ecological Perspective Model to illustrate the perception of the situation discussed by T₈.

---

15 Methodology for data presentation as used by Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring.
Interestingly, McLean (1995) suggested that complex issues of school management and the development of appropriate behaviour protocols cannot be treated in isolation from the larger social context in which they are situated. As McLean (1995) writes:

“If we want boys to change, we also need to demand that the world they are expected to enter and survive within changes as well. We need to be turning the spotlight on ourselves and asking what sort of society we want to live in, how schools can attribute to building such a society, and what it is about schools, as they currently are, that gets in the way of creating a community”.

(McLean, 1995, p.9)
7.5 Discourses

This thesis assumes that our language reflects our perception and that it also perpetuates our views. This means that our dominant view will lead our language to fit with this view and that our established language will support a particular way of thinking. The thesis also assumes that language and thought are negotiable. There is some debate over whether language shapes thought, or thought shapes language. For example, Vygotsky (1978) supported the view that people shape their reality through the interactive use of language as a tool, while DeBarnadi (in Forrester, 1996) argued that language plays a greater part in shaping the life of its user than the user plays in shaping language. However, this study has examined associations rather than causal links between language and thought. The study sought to identify the most salient discourses about school behaviour as illustrated by the teachers' language. A number of discourses were identified throughout the conversations. These are listed then discussed below.

- Need to assign responsibility
- Personal agency
- Trying to understand
- Reflective practitioner
- Access to solutions
- School rules
- Students' disconnection from curriculum
- Defensive reasoning
- Isolation

7.5.1 Need to assign responsibility

Teachers indicating a student active/environment active (Quadrant 1) perspective presented as reflective and looking for a balance in terms of the placement of responsibility. They were thinking about their actions and the active role they played. T4 shared a good example of this, where she had “blown up over a small incident and blown it out of proportion” (line 165:T4). The next day, she apologised, explaining that “yesterday, I probably got a bit carried away with that”... I said: “at the end of the day, I don’t think you should have said that or
done that, but, I did get a bit carried away, so I apologise for that but in the future...you need to follow these instructions so... you have to be careful” (line 168:T4).

Teachers indicating a student active/environment passive (Quadrant 3) perspective placed the responsibility on the ‘misbehaving’ student. For example, one teachers suggested that students use “all sorts of delaying tactics” (line 136:T10) when it comes to completing their school work. T10 commented that “they’ve [students] got to take responsibility for themselves and for their learning and if they are not willing to take that responsibility then there’s only so much you can do” (line 185:T10). Teachers assumed a passive role in this situation, explaining that ultimately, the responsibility for learning is dependant upon the student.

7.5.2 Personal Agency
The conversation indicated that teacher perspectives and personal agency shifted in relation to the context. Responsibility for change was placed largely on the systems outside of the teacher. An example to illustrate this was where a teacher (T6) discussed a situation of a student misbehaving (Quadrant 3) - “he brought most of it on himself mind you because he doesn’t have the time management skills” (line 319:T6). However, as the conversation shifted towards her own child, her perspective shifted as well. The problem was no longer located in the student (Quadrant 3) but in the environment (Quadrant 2).

“It’s their parents’ fault too. I did that with my children too. They go to music on the same day and they go to this and that and you become the parent taxi driver but when are you going to have any peace?...they really don’t have peace at all and then there is television bombarding them...today there are label clothes bombarding them and you know all sorts of things”. (line 324:T6)

Figure 17 illustrates T6’s inferred perspectives on the one situation described. The two points illustrate the shift in the teacher’s perspective that took place as the context changed.
During the interview, T₈ questioned, “What are we trying to do? We are trying to make people conform in a way that doesn’t represent the outside world” (line 664:T₈). This is a statement of T₈’s view of a mismatch of school and the world. While teachers sometimes considered that their actions contributed to the situations they described, problems were mainly located in the concept of schooling (Quadrant 2). Furthermore, T₈ indicated that teachers cannot do anything because of the system. Responsibility was placed on the schools systems and “if you think about the system we’ve got” (line 233:T₈)...we and what whether we think as they see its right, they don’t care about it” (line: 235: T₈). Teachers placed responsibility on the system as opposed to their own personal efforts.

Figure 18 is a visual illustration of T₈’s indicated perspective of the described situation.

---

17 Methodology for data presentation as used by Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
Figure 18  Illustration of Ts indicated perspective of the situation described\textsuperscript{18}.

The personal agency dimension is reminiscent of Rotter's (1966) Locus of Control. Rotter developed this term to make reference to individuals' perceptions about the underlying main causes of events in their lives. His theory is a concept that considers that people place responsibility for the circumstances that they experience on a continuum between internal and external. Assigning responsibility for their own actions to either end of this continuum is not always a conscious decision but it affects the way they respond to events. People who locate responsibility in the external environment are more likely to attribute blame to others as an expression of powerlessness. Those who locate control internally view themselves as capable of effecting change. This concept is useful in helping to understand some of the findings in this study although alone it is not sufficiently contextualised or dynamic to provide a robust explanation.

7.5.3 Trying to Understand
Throughout the conversations, teachers demonstrated that, at times, they took an ecological view as they were trying to understand the students' perspectives, their reasons for their subsequent behaviours, student developmental factors, their own actions and the interactive context around these behaviours.

\textsuperscript{18} Methodology for data presentation as used by Bowler et al. (2007) based on concepts described by Dent-Read and Zukow-Goldring).
T₃ had a 'proportion perspective' of the students. He described a situation where a piece of paper came flying across the room and landed next to him as he was writing on the board. He confronted the class and one student confessed and apologised. The teacher instructed the student to pick up the piece of paper and "not to do it again". The teacher continued writing on the whiteboard. T₃ explained that after class, students approached him saying:

"Sir, that was cool", and I said: "what do you mean?" He said: "well, you didn’t blow it out of proportion and he said we felt comfortable owning up because we knew you weren’t going to blow it all out of proportion" and I quite like that, because of the boys respect...I never had a problem with that class throwing rubbish again because the boys were: (a) I didn’t like them to do it, but (b) I wasn’t going to be silly about it either and they respected my rule because it was a reasonable rule as well and they understood why. But I did like the fact that they were willing to accept a rule that they thought it’s a bit of fun, but T₃ doesn’t like it but the fact that they fronted up and because they fronted up, I dealt with it accordingly". (line 483:T₃)

It was interesting to see that T₃ did not operate within Quadrant 2, by using a behaviour modification strategy. He tried to understand the students’ perspective of having 'a bit of fun'; in addition, he understood what the student’s priorities were and acted accordingly.

Furthermore, evidence indicated that the teacher was trying to understand the student and the context around them. By doing this, the teacher based his decision and actions on information that highlighted the context around the student’s behaviour in a particular situation. An example was when T₃ found out that a student "had other issues" (line 197: T₃) and because they understood the social history and/or context around this student’s actions, they did not view the student as misbehaving, but instead were able to interact with this student and solve problems together. This teacher understood that an interactive context surrounds observed events.

"... often reactions that one teacher gets will be potentially a combination or culmination of things that have gone on (a) all day, (b) specifically with one other
In some situations the teachers considered the individual qualities and needs of the students and demonstrated their understanding of the dynamic interactive environment. There were times when they were in a position to take an ecological view. The example below demonstrates how T1 tried to understand the student in context and then base decisions around that, while acting accordingly. T1 interviewed his form class at lunch time (individually, a few students everyday) to

“find out what did make them tick as much as you can in five minutes and to see if they have been annoying or have been bullied, who they were friends with, what they liked and what they didn’t like so when it came to classroom management...” (line 213: T1). T1 tried to understand the students and to know “who not to put where and what not to say to certain boys and stuff like that” (line 217: T1).

When teachers were trying to understand students, they often took students developmental factors into consideration as teachers indicated the importance of having some kind of routine established. One teacher commented that students “like routine, they like everything has got routines...there’s got to be certain routines and things and you take them out of those routines then they loose control” (line 277:T5). Teachers commented that “children like things to be the same” (line 293:T6) and that “they are continually bombarded with things changing, people calling on them, lots of demands. I actually think it’s really hard on them too and it drives us spare, as classroom teachers, but I don’t think it helps them that things are changing and so many demands are made (line 295:T6)”. The teachers reported of situations in which the teacher and the students worked together as joint problem solvers.

Establishing and maintaining rules are important parts of creating and managing a learning environment (Frazier & Sterling, 2005). Well managed classrooms are organised to support the learning environment. It is more than maintaining discipline and therefore teachers put rules and routines in place to create effective learning environments. Doyle (cited in Tanner,
Chapter Seven: Discussion and Conclusion

Bottoms, & Feagin, 2003, p. 38) suggests that “classroom management is fundamentally a process of solving problems of order in classrooms rather than the problems of misbehaviour or student engagement”. These rules and routines, simplify the complexities of classroom life for both teachers and students by making events more predictable (Reynolds, 1992).

7.5.4 Reflective practitioner

Teachers reflected on their own actions as their thinking shifted from viewing students as problems to viewing situations as an opportunity to learn something new together.

Larrivee (2005) outline a number of requirements for developing as a reflective practitioner. She considered that a reflective practitioner needed to build three capacities. These were the capacity for continual examination of teaching practices, the capacity to carry out critical inquiry, and the capacity for self-reflection. Reflective teachers consider ethical implications of classroom practice, examine their personal values and beliefs, and they regularly review the assumptions and expectations they have of their students (Larrivee, 2005).

When teachers were presented with a situation where they indicated they had not understood the student’s action and/or behaviour, they appeared to revert to locating the responsibility for the event on the individual student. This action was demonstrated when teachers were discussing the behaviour of a boy who had an extremely unusual haircut. They viewed the student as misbehaving and considered an environmental adaptation to manage this behaviour in the short and long term. In most instances, people do narrow their perspective when events do not make sense to them (Perry, 2001). Reflective practitioners are able to examine their own natural responses and to reconsider alternative actions. The example below shows that the teachers, after reflecting, were able to alter their response to situations.

Initial response: “sometimes you need to work on the actual student and sometimes you have to threaten their lunch and they’ll never do it again” (line 255:T3) (a comment located in Quadrant 2).
Upon reflection: “we are dealing with individuals who have different needs of their own (line 257:T3)” (a comment located in Quadrant 1).
Chapter Seven: Discussion and Conclusion

7.5.5 Access to solutions
When teachers considered they were less able to manage student behaviour, they were less likely to work within an interactive paradigm and instead utilised a behavioural strategy or punishment.

Teachers indicated that “students will push teachers” (line 112:T₃) and that teachers found that sort of behaviour challenging, especially “when they [students] do that verbal defiant thing without actually going beyond it, I find that a big challenge and you know, I find that hard” (line 78:T₅). Furthermore, T₅ explained to the student that “I am dealing with your disruption in class...I’m dealing with not only your disruption in class but your defiance and umm refusal to follow my instruction” (line 86:T₅). Teachers found situations particularly challenging when a “pack mentality” (line 324:T₃) formed amongst students, as that getting the “boys to back down is very difficult” (line 344:T₃).

7.5.6 School rules
Teachers indicated that the students were responsible for knowing and following the school rules. However students deliberately chose not to follow the rules as they were actively selecting their actions.

An example of this was when T₅ discussed a situation comment that,

“what I find appalling about it, is that he knew he was going to get picked up on the third occasion because it was one day after the other...and he knew to the point where he stood, sat at his desk making sure I notice as well so you know, if you try to get away with it...he would have put his feet under his desk but and so yea, I find that, the funniest thing was he knew what he was doing, and was trying to push those boundaries (T₄: it's just like to get that attention, but deliberately flaunting the fact to the rest of their mates, (a) I don't care about school or also (b) they can't really do anything” (line 12:T₅).
In such incidents, students are viewed as disruptive and teachers have to provide some form of environmental control. However, this group of teachers went beyond this perspective and started looking at students and teachers trying to solve problems together (Quadrant 1).

7.5.7 Students’ disconnection with the curriculum
Teachers indicated that students actively chose to not engage with the work because the students don’t want to do it. There were several suggestions that the students were not always intrinsically motivated to learn the things that school was teaching. One teacher’s comments reflected that of the other participants when she said that, “students do not really want to do the work but they are coming to school but they don’t actually, deep down look or act as if they actually want to learn it” (line 130:T10). Another teacher commented that it is not “on their agenda” (line 79:T8) and teachers indicated that they constantly “need to motivate them to do the work” (line 81:T9) and that the “biggest challenge is not to control their behaviour it’s motivating them trying to get them to do the work” (line 83:T9).

7.5.8 Defensive reasoning
The teachers’ actions reflected some aspects of ecological understandings in manageable situations although their responses to the more challenging situations were located in behaviourism. They reported feeling overwhelmed when faced with challenging situations, especially when they did not have ready solutions for the problems that presented. Teachers’ reasoning appeared more likely to be defensive when situations were demanding but when situations were satisfying, they indicated that they could appreciate the dynamic between the student and the environment (Quadrant 1). This observation supports a relationship between knowledge and perspective. The more situationally applicable knowledge the teachers had, the less defensive reasoning was apparent and the more interactive problem solving was reported.

‘Defensive reasoning’ as suggested by Argyris (cited in Senge, 1994), protects us from acknowledging the validity of our reasoning. For most of us, exposing our reasoning is threatening because we are afraid that people will find errors in it as we might not always have the ‘right answer’. Senge (1994) outlines the concept of defensive routines, arguing that
we use these mental models to avoid the embarrassment and vulnerability associated with exposing our own thinking. Defensive routines form a sort of ‘protective shell’ around our deepest assumptions and guarding us against the pain of acknowledging errors or inconsistencies in our actions.

7.5.9 Teachers’ isolation
Teachers indicated that they sometimes feel isolated - not only by physical distance, but also in disciplining issues. Some of the teachers indicated that they were,

“...miles away, miles away and it also gets to the point where I’ve sent a kid away and stuff like that...” (line 508:T6) and to the “point where we as teachers have to deal with it ourselves rather than having too much support from other centres in the class or even in this school...” (line 3:T9). One teacher suggested that they “need more support” (line 250:T6).

The issue of teacher isolation (physical and social) has long been part of the discourse about the professional development of teachers. Teachers at any level (beginning teachers, ‘middle experienced’ group, and senior teacher) can face isolation. Lieberman and Miller (see Rogers & Babinski, 1999), suggested that schools oftentimes create cultures where there is little time allocated for teachers to talk to each other about their teaching practices and the challenges they encounter in their classrooms. Their research indicated that the teachers faced demands, preparing for lessons from scratch and that many first-year teachers were hesitant to approach colleagues for support and feedback.

Puchner & Taylor (2006) identified teacher collaboration as one of the most important features in schools to foster professional development, teacher satisfaction and effectiveness and in turn student achievement. The authors suggested that isolationist work cultures in schools can lead to competition, feelings of insecurity, and a lack of desire to share ideas.

Teaming and mentoring of novice teachers by veteran teachers was suggested by Drago-Severson & Pinto (2006) as one method for reducing isolation. Literature focusing on solving the problem of teacher isolation, suggested that formal mentoring has become a very popular induction tool in recent years (Heider, 2005). The author indicated that mentoring programs
can help school districts create nurturing environments in which she commented “reduce teacher isolation, and, in turn, inspire new teachers” (Heider, 2005, p. 8).

7.6 A Struggle for Power (undefined comment category)

There were many segments of conversation that did not position problems in just the student, or just the environment, or even in the reciprocity between them. The problems were located in both the student and the environment. In such cases, solutions were located within the environment, implying a perceived problem in both the environment and the learner. In such cases, there was no suggestion that teachers were trying to understand the learner. The learner and environment were both seen as active, but the problem was not necessarily located in the interaction because the responses were environmental reactions to the active learner. This interaction was not seen as a reciprocal process located in Quadrant 1, but as a two-way struggle. What the teachers in School A were recognising was two separate entities rather than an interaction. It seemed that the problem remained in environment and learner, rather than in the interaction between them.

It was interesting to note how discourse fitted into different parts of the quadrant. It was apparent that when the teachers were caught in Quadrant 3 (student active), it was difficult to move away from that perspective. It seemed that as soon as threats such as a ‘pack mentality’ appeared, it polarised the teachers and the students. One example of where this happened was when T₃ discussed a problematic situation from a Quadrant 1 perspective - interactive and understanding perspective. However, when he did not know what solution to use he reverted to Quadrant 3, putting the responsibility solely on the students. For example, “…boys back down is very difficult…all their mates and friends who have seen it” (line 344:T₃) and “they [students] talk about it” (line 346:T₁). As soon as this happened, T₃ pulled T₃ back on track into Quadrant 1. It became evident that when things were understood, it was easier to stay in that quadrant, as teachers seemed to have increased confidence to construct solutions. Interestingly, the fluidity of teachers perspectives became apparent as they shifted the focal points of their views on problems and solutions. This challenges the notions of fixed attributions of perspective. It suggests that, in relation to teachers’ perspectives on problems
and solutions, that you cannot place the teachers in a ‘box’. This positioning changes in relation to the context and their knowledge of solutions. This finding underscored the importance of considering the context of the conversation segments, taking the whole conversation, rather than individual words, phrases or sentences into consideration.

The conversation indicated that there was a ‘struggle for power’ between students and their environment, the latter represented by the teachers. One teacher asked, “lets face it; does he actually need to get a job for the future?” (line 223:T10). While another commented that “he comes and goes depending on what else is going on in his life and the other day, he was out of uniform...But that’s the only sort of power or thing that I can do” (line 587:T8). This comment demonstrated a perspective from Quadrant 4. One teacher commented that she was thankful that she was not “the only one fighting that battle” (Line 749:T9). These comments reflected feelings of powerlessness and the discourse of the overwhelming strength of external factors.

Teachers in today's classrooms have a great deal of autonomy over their classrooms, but in terms of school policies, teachers lack power. Porter (2000) suggests that the first goal of achieving school discipline is to establish and maintain order, creating an environment in which learning is not only possible but probable (Porter, 2000). Research by Zembylas and Papanastasiou (2006) indicated that lack of professional autonomy and the lack of feelings of power and confidence, contributed to teacher job dissatisfaction.

In summary, teachers from School A indicated that when they had solutions with which they were confident, they were able to work in a reciprocal paradigm. However, when situations presented in which teachers did not have applicable solutions, problems were located in the learner (Quadrant 3) and the solution in environment (Quadrant 2).
7.7  The usefulness of the Matrix of Perspectives

The report and feedback interviews conducted were a key component in the process of co-construction of the teacher conversations transcribed from recordings of the focus group interview. Teachers were given a feedback questionnaire, stamped-addressed-envelope and a copy of the study's findings to assist them in filling out the questionnaire. Participants were asked to complete this form and mail it back to me. Unfortunately, not all participants returned their questionnaires. Although it would have been preferable to have a greater return, the meetings provided valuable feedback. The, teachers took the opportunity to share their thoughts and concerns in relation to the study, and the matrix, and to verify the authenticity of the findings. The majority of the participants said that they found the matrix to be of some relevance in their work and that its implementation in this study had resulted in valid interpretations.

7.7.1 The usefulness of the Matrix of Perspectives: Teacher Understanding

Schools A and B indicated a moderate to strong fit of data consistency in terms of how the groups viewed school behaviour at the time of the initial interview. Teachers indicated that some situations were open to translation and that teachers' views would not always fit "nicely into a box". Some teachers appreciated the extent to which the matrix captured the fluidity of perspectives and concurred that people do tend to shift in terms of the perceptions they hold, depending on the context. Teachers indicated that this tool was useful for the purpose of this study, to gain understanding of the teachers' current positions in relation to the activity of the students and the environment. They considered that the interpretation represented the views that they took during the conversations we had shared.

7.7.2 The usefulness of the Matrix of Perspectives: Teaching Profession

In terms of the usefulness of the tool, to assist in understanding ones own position or that of others when seeking solutions in school situations, teachers in School A indicated "some relevance to limited fit". Teachers doubted they would use the matrix in a 'real life' situation, but commented that it was useful concept to reflect on, even though it was seen as being "too general" and "airy-fairy" for their purposes.
Chapter Seven: Discussion and Conclusion

After analysing the feedback data, it became evident that teachers had a different view of the purpose of the tool than I intended. One teacher commented “sorry, I just don’t see staff actually stopping to apply these concepts in real life”. This comment made me realize that teachers misunderstood the role of the Matrix of Perspectives. This comment implied that the teacher construed the matrix to be a tangible tool, possibly a form to be completed in a deliberate sense. As the researcher, and a teacher myself, I realised that, in this context, the teachers perceived the word ‘tool’ as having a concrete connotation although my intention had been to share an abstract understanding. I had intended that it may be viewed as a framework that operated as the teachers were talking and listening with one another, or talking with parents, or students. This observation has taught me that it takes time to share abstract ideas and that ideally, those with whom we share the knowledge would be ready and wanting to access it.

Use of the matrix does not require teachers to stop and ‘apply’ this tool although understanding of this concept may assist teachers to understand their own and others (E.g. peers, parents, students) views on situations and to enhance productive communication. Applying the abstract concept requires knowledge of the context of participants. To really understand people’s perspectives, we need to spend time with them in order to capture diverse views and perceptions in the context in which they occur. Some of the teachers viewed the matrix as a tool for reflection on their own teaching practices, which was the intention of its introduction in the school setting.

School A indicated that the Matrix of Perspectives had relevance to teachers’ work and could be used as a tool of communication. It would help them to understand the positions of other teachers and parents. The teachers cautioned, however, that the subjectivity of the user would influence the assignment to quadrants. In conclusion, they noted that the matrix could be useful for personal reflection as it provides some indication of ones own perspectives. Teachers commented that it is useful ‘catching yourself’ thinking in a certain way.
Chapter Seven: Discussion and Conclusion

7.7.3 The usefulness of the Matrix of Perspectives: Research and Educational Psychology

The Matrix of Perspectives was useful as a research tool and for the work of an educational psychologist. The purpose of the research was to understand teachers' views of the roles of students and the environment in determining and modifying student behaviour. The Matrix of Perspectives helped to organize the information in a way that supported the identification of dominant and less dominant views and provided data that the teachers considered to be valid. The understandings generated through use of the matrix helped to identify factors that impacted on teachers' actions in response to student behaviour.

These understandings would be useful to educational psychologists working collaboratively with students, parents and teachers. If teams are to work together effectively, understanding the points of view of other team members is essential (Annan, Bowler, Mentis & Phillipson, 2007).

7.8 Limitations

A limitation for this study can be traced to the development of the interview schedule. I may have inadvertently occasioned discussion by using the word 'classroom management' throughout the interview discussion. However, I consider that this problem may have been minimised by the currency of the term as it is part of the culture of schools, of school jargon. Although I worked to make the leading questions and topics as 'perspective free' as I could, this was clearly an impossible task.

One clear limitation of the study was the extent to which the researcher made decisions about assigning conversation to quadrants. This required making informed judgments. To address this limiting factor, I calculated inter-observer reliability with a peer who understood the matrix. In addition, I ensured that the participants had the opportunity to review my analysis of their conversation and to comment on its validity. They were able to make any changes they wished to the document to improve its representativeness. This process was applicable in this research as the matrix has only recently been developed. One of the purposes of the
study was to explore its usefulness as a tool for analysis. In future research, I think that I would spend more time with the groups of teachers, ensuring that their understanding of the concept was deep enough for them to work with me to assign the conversation to the quadrants.

One aspect of the matrix itself limited the extent to which I could draw conclusions about the location of conversation on the grid. Assignment of segments of conversation involved a ‘forced choice’. All conversation had to be assigned to a quadrant but there was no way of discerning where, within the quadrant, the comments were best represented. The matrix was presented as intersecting continua and it would have been useful to consider it as a scatter plot. It would not be possible to so precisely quantify results. This reflection highlights the abstract nature of the Matrix of Perspectives and the difficulties involved in adequately representing some fundamental aspects of life in concrete form.

### 7.9 Future Research

An underlying belief for teachers suggests that ‘good’ teachers are in control of their classrooms. We need to be able to understand what helps teachers to feel a sense of control. Freiberg, (1999, p.5) commented that “the way we look at the problems often determines its solutions”. Future research could focus on understanding what makes teachers feel in control, or out of control.

This matrix allows us to reflect on the way we think about our role as teachers and the way we think about learners. Finding ways to create healthy learning environments to teach and learn is the goal of every teacher (Freiberg, 1999). This may well encourage an interesting future study to analyse primary school teachers’ discourse or educators of different gender, races, teaching experience and ages. The usefulness of the matrix of perspectives to analyse student conversation and improve communication between students and teachers could be examined.
It will also be interesting to work with groups of people as they used the matrix to analyse their conversation together and made inferences about their own and peers’ perspectives. However, we must first learn to work with it ourselves, ironing out any problems. The long term intention is to introduce the matrix of perspectives so that educators can make their own interpretations, understand their own perspectives, rather than having these imposed on them by observers. It is important to understand our own perspectives and that of others as this will enhance our communication with people, our understanding of one another, and our ability to create solutions together.

7.7 Conclusion

This research study used qualitative approaches, namely focus groups and questionnaires to find out about teachers’ perceptions of the locations of problems and solutions in relation to student behaviour. This study also examined the contextual validity of the Matrix of Perspectives to understand these teachers’ points of view. A sample of ten teachers from two large secondary schools participated in the study.

The findings of the study add to our knowledge related to how teachers perceive and talk about student behaviour. Furthermore, this study provides the developers of the Matrix of Perspectives with a better understanding of teacher perspectives in terms of the usefulness of this tool in relation to their teaching practices and teaching profession. It also highlights the areas of the matrix which teachers found difficult to understand, and the suggestions made by teachers to increase the validity of the tool. The results show how teachers produced many and varied constructions when talking about student behaviour, indicating a range of perspectives.

The teachers who took part in the study indicated through their conversation that they did experience problems with student behaviour and that they believed that these problems were, at least in part, influenced by the students’ disconnections from the curriculum and their own experience of isolation (see Figure 19).
The teachers' conversation implied that they viewed it as their responsibility to maintain acceptable behaviour within the student group. They indicated that they made different decisions about the way they addressed student behaviour problems depending on their own sense of personal agency at the time. In the situations where the teachers considered that they knew the solutions to problems, they tried to further understand the various perspectives on the circumstances. They explained how they reflected on their own practice and then worked with students to solve problems with them. In situations where they appeared to be overwhelmed by difficult circumstances, and where the solutions were not readily accessible, teachers engaged in defensive reasoning, assigning responsibility outside of them, to either the students or the environment. Solutions to the problems in these cases were most likely to involve behaviour modification, either through environmental adjustments or by instructing or expecting the student to effect change.
References


References


References


References


Appendices
Appendix A

Approval letter from Massey University Human Ethics Committee

29 March 2007

Vasti Bester
36 Beechwood Road
Brown's Bay
AUCKLAND

Dear Vasti

Re: Teacher Talk about Student Characteristics and Patterns of Behaviour

Thank you for your Low Risk Notification which was received on 21 March 2007. Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees. Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone 06 350 5249, e-mail: humanethics@massey.ac.nz."

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Sylvia V Rumball
Professor
Chair, Human Ethics Chairs' Committee and
Assistant to the Vice-Chancellor (Ethics & Equity)

cc: Mrs Jean Annan
School of Education
Albany

Ms Tara Fisher
Graduate School of Education
PN900

Massey University Human Ethics Committee
Accredited by the Health Research Council
Appendix B
Consent form for participants and principals

CONSENT TO PARTICIPATE IN
RESEARCH PROJECT: HOW TEACHERS THINK AND TALK ABOUT
STUDENT CHARACTERISTICS AND PATTERNS OF BEHAVIOUR

I have read the Information Sheet and have had the details of the study explained to me. My
questions have been answered to my satisfaction, and I understand that I may ask
further questions at any time.

I understand I have the right to withdraw from the study before information is analysed
and to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will
not be used without my permission. (This information will be used only for this research and publications arising from
the research project).

I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: .................................................................
Name: .................................................................
Date: .................................................................

Contact
Researcher: Vasti Bestor – 021 264 9818 or vasti@psych.massey.ac.nz
School of Psychology
Albany Campus
Massey University

Supervisor:
Dr. Jesse Donovan – 09 443 7906 ext 9814 or jodonn@massey.ac.nz

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been
reviewed by one of the University’s Human Ethics Committees. The researcher named above is responsible
for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than
the researcher, please contact Professor Sophie Ramball, Associate to the Vice-Chancellor (Ethics &
Equity), telephone 06 350 5209, humanity@massey.ac.nz.
Appendix C

Information sheet for participants

Massey University
COLLEGE OF EDUCATION
Te Kopenga o Te Mātauranga

15 March 2006

RESEARCH PROJECT INFORMATION SHEET

TEACHER TALK ABOUT STUDENT CHARACTERISTICS AND PATTERNS OF BEHAVIOUR

Research Project
This study examines how a group of secondary school teachers on the North Shore of Auckland think and talk about student characteristics and patterns of behaviour. The study aims to develop a tool which psychologists can use to understand the theories teachers hold. If psychologists are to work with teachers, it is important that they operate within the teachers’ belief system in order to create mutual understandings. This research will help to understand one group of teachers’ perspectives on student’s interactions in schools. A further outcome of the research will be to develop a conceptual tool for psychologists to learn about the perspectives of the teachers with whom they work.

The Researcher
This research is being carried out by Vasti Bester to fulfil the requirements of a Masters degree in Psychology at Massey University, Auckland. Vasti will be supervised by Dr. Jean Annan, senior lecturer and registered Educational Psychologist at Massey University, Auckland.

The Study
The study involves two stages. Firstly, focus groups will be held made up of five volunteer teachers at two secondary schools. Participants will be asked to discuss student characteristics and patterns of behaviour by using examples and stories about school situations. The second stage of the study involves the same focus groups. The researcher will report back the findings of the data analysis providing teachers with a chance to respond to the findings and to make further comments.

The Significance of the Study
If psychologists understand the way teachers perceive problematic behavioural situations, they will be in a better position to develop collaborative relationships with teachers. Further to that, psychologists require tools to understand school perspectives on behavioural problems and this study aims to develop such a tool.

The Interview
People who agree to participate in the research will be interviewed for approximately one hour. Written informed consent will be obtained from willing participants prior to the
interview. The interview will take place at a mutually arranged venue and time and will be conducted by Vasti Bester, the researcher. Once completed, the interviews will be transcribed (written up). All personal information including people's names (and school names) will be removed.

Confidentiality
All information obtained in this research will be treated in confidence. The interview will be audio taped and immediately erased after it has been transcribed (written up). To ensure confidentiality pseudonyms (aliases) will be used instead of real names. Access to any data during the study will be restricted to the researcher, Vasti Bester and Dr. Jean Annan (supervisor), all of whom will treat the research with confidence. Information recorded during the project will be kept in locked storage for a period of five years following completion of the research and then destroyed.

Participation in this Research
Participation in this research is entirely voluntary.
Participants have the right to withdraw from the research at any time until the beginning of the analysis of the data, without fear of recrimination or discrimination in the future. Transport is available to and from the venue and childcare costs will be met if this is required.

Distribution of Findings
The research will be submitted for examination and lodged as a thesis at Massey University, Auckland. A summary report on the findings of the research will be sent to all the research participants. The complete report will be available to all participants on completion of the project.

Further Information
If you require further information or have any issues with this research, please feel free to contact either:
The researcher:
Vasti Bester on 021 264 9818 or email vasti@family.net.nz or

The Supervisor:
Dr. Jean Annan at Albany Campus, Massey University on 09-443 9700 ext 9814 or email j.annan@massey.ac.nz or
Educational Psychology Training Programme
Department of Learning and Teaching
College of Education
Albany Campus
Massey University
Private Bag 102 90
Auckland

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University’s Human Ethics Committees. The researcher named above is responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher, please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone 06 350 5249, humanethics@massey.ac.nz."
Appendix D
Feedback questionnaire

[Name of School] 

FEEDBACK QUESTIONNAIRE

1) Is the data consistent with how you believe the focus group viewed school behaviour at the time of the interview? (Please circle)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Fit</td>
<td></td>
<td></td>
<td>Some Relevance</td>
<td>Strong Fit</td>
<td></td>
</tr>
</tbody>
</table>

Comment (optional): ...........................................

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

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

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

2) Would this matrix be useful to you to understand your position or that of others...

a) when seeking solutions in school situations? (Please circle)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Fit</td>
<td></td>
<td></td>
<td>Some Relevance</td>
<td>Strong Fit</td>
<td></td>
</tr>
</tbody>
</table>

Comment (optional): ...........................................

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

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

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

b) when working with other teachers and parents? (Please circle)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Fit</td>
<td></td>
<td></td>
<td>Some Relevance</td>
<td>Strong Fit</td>
<td></td>
</tr>
</tbody>
</table>

Comment (optional): ...........................................

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

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

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

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

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

............................................................
d) Would you like to make any changes on the summary document to make it more valid or accurate?

Any other comments?

Thank you for taking the time to fill out this questionnaire.

Please return this form in the stamped addressed envelope provided.

THANK YOU
Appendix E
Interrater-reliability tally chart

<table>
<thead>
<tr>
<th>Conversation Segment</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>15</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>16</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>25</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>37</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>38</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>117</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>119</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>126</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>128</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>129</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>131</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>132</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>134</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
## Appendices

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>135</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>141</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>147</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>149</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL** 163 154 9