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Teacher expectations and ethnicity: Student and teacher perspectives

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Abstract

Having expectations tends to be a fundamental part of human nature. This particular phenomenon has been seen to have a crucial role in education. There has been strong evidence to suggest that teacher expectations influence student learning in a variety of ways. This thesis is based on the influences and understandings of teacher expectations that may be evident in multi-ethnic classrooms in Aotearoa New Zealand. The thesis comprises three studies. Study 1 examined whether ethnicity played a role in teachers’ expectations. The participants were 57 primary school teachers who completed a teacher expectation survey. The findings showed that the higher teachers’ expectations were for students, the more progress they made. However, when achievement was not taken into account, expectations for Maori and Pasifika students were lower than for the other groups. This may mean that Maori and Pasifika are engaged in the low level activities often assigned to those performing at low levels. Study 2 explored whether and how students knew their teachers had high or low expectations of them. The participants were 1,187 students aged between 8–12 years. The findings showed that students were astute at knowing which teacher behaviours portrayed alternatively high or low expectations. Understandings that teacher expectations are low for some students may lead to student self-belief and motivation declining over time. Study 3 examined what teachers understood about teacher expectations with a particular focus on Māori and Pasifika students. Through interviews with 10 teachers, Study 3 explored teacher perceptions of how teacher expectations are shaped, whether teacher expectations influenced teacher practice and student outcomes. Study 3 indicated that teachers recognised that some teachers had lower expectations for Maori and Pasifika students. Overall, teachers
had a fairly superficial understanding of the expectation phenomenon. It is recommended that teachers develop a deeper conceptual understanding of teacher expectations and the implications teacher expectation has on student learning. The thesis makes a contribution to both theoretical and educational understandings of the phenomenon of teacher expectations. Directions for future research are outlined.
Dedication

I dedicate this thesis
to my father Tearikivao Taria Rio
who worked so hard to educate and provide for his children, thank you Dad.

To my mother
Tunganekore Putou Henry Rio
you worked a lifetime for your family. Your immeasurable strength and beauty is stamped on
every page you are both forever in my heart, thank you for everything.
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school to those who know who they are thank you for the respect and the aroha you gave to me. I wish you all the best.

To my family, my sisters and brothers we have been blessed with beautiful parents who chose to settle in Aotearoa New Zealand. After leaving their homeland in Aitutaki our parents worked hard to give us the best possible start in life. Having a good education was so important to them and I know they will be very proud to have a daughter that has completed her PhD. This PhD is for them, it is for the family, and it is for the people of Aitutaki. My whakapapa has been where I have drawn strength from to get me through this process that will be forever enduring. He mihi nui ki a Tainui mo ngā huruhuru awhina i ahau mo taku ara matauranga. ‘With feathers this bird can now fly’.
# Contents

Abstract ........................................................................................................... i

Dedication ....................................................................................................... iii

Acknowledgements ........................................................................................ iv

**Chapter 1  Introduction** .................................................................................. 1

Purpose of the research ..................................................................................... 4

Significance of the research ............................................................................ 5

Design of the research ..................................................................................... 6

The three studies ............................................................................................... 7

Ethical considerations ...................................................................................... 8

Defining terms .................................................................................................. 10

Minority ethnic groups .................................................................................... 10

Race and ethnicity ........................................................................................... 10

Achievement .................................................................................................... 12

Organisation of the thesis ............................................................................... 13

**Chapter 2  Literature review** ......................................................................... 15

Defining teacher expectations ......................................................................... 16

International literature on teacher expectations ............................................ 18

Teacher expectations: Earlier milestones ....................................................... 18

Experimental and naturalistic studies ............................................................. 22

Self-fulfilling prophecy and ethnic minority groups ...................................... 24

Theoretical understandings: Teacher expectation and minority ethnic groups ..... 25

Teacher expectations and ethnic minority group studies .............................. 27

Stereotyping and ethnic minority groups ....................................................... 30

Stereotype consciousness and children’s perceptions of teacher expectations .... 32

The perceptive student and teacher behaviour ............................................. 34

Teachers’ perceptions and understanding of teacher expectations ............... 41

Summary of international teacher expectation research ............................... 42

Teacher expectation research in Aotearoa New Zealand ............................... 45

The influence of teacher expectations ............................................................. 46

The measured influences of teacher expectations .......................................... 50

Summary of the Aotearoa New Zealand research .......................................... 53
Chapter 3  Study 1: Teachers’ expectations of their students ..........................56
   Method ..................................................................................................................57
   Participants ............................................................................................................57
   School deciles .......................................................................................................58
   Measures ...............................................................................................................59
   Procedures .............................................................................................................62
   Results ....................................................................................................................69
   Assumption of normality .......................................................................................70
   Assessment of ethnic bias in teacher expectations .............................................73
   Discussion .............................................................................................................75
   Summary ................................................................................................................78

Chapter 4  Study 2: Students’ perceptions of teachers’ expectations of achievement ...80
   Method ...................................................................................................................81
   Teacher Treatment Inventory questionnaire .....................................................81
   Interviews ..............................................................................................................88
   Results ....................................................................................................................90
   Teacher Treatment Inventory questionnaire .....................................................90
   Achiever attributes ...............................................................................................98
   Interviews ..............................................................................................................104
   Discussion .............................................................................................................113
   Summary ................................................................................................................120

Chapter 5  Study 3: Teacher expectations of Māori and Pasifika students in Aotearoa New Zealand .................................................................122
   Method ...................................................................................................................123
   Ethical considerations ............................................................................................123
   Participants .............................................................................................................123
   Interviews ..............................................................................................................124
   Analysis of the interviews .....................................................................................125
   Results ....................................................................................................................126
   Teachers critically examining their understanding of teacher expectations ..........126
   Teachers understanding of how teacher expectations are shaped ......................131
   Implications of teacher expectations for practice ..............................................135
Implications of teacher expectations for Māori and Pasifika students .................. 141
Discussion ............................................................................................................. 145
Educational experiences for Māori and Pasifika in Aotearoa New Zealand .......... 146
Resilience of social stereotypes and prejudicial views ......................................... 148
Gap between policy and implementation ......................................................... 150
Complexities and challenges for teacher practice ............................................. 152

Chapter 6 Discussion: Working toward equity—how is this possible? ............... 156
Overview of the findings ..................................................................................... 157
The differences in student achievement ............................................................... 161
Maximising students’ opportunity to do well ..................................................... 162
Student perceptions of the teacher ................................................................... 164
‘I always have high expectations of all my students . . ’ .................................. 166
Tensions and contradictions ............................................................................. 167
Limitations of the research .............................................................................. 169
Implications, and directions for future research .............................................. 170
Conclusion ......................................................................................................... 173

References .......................................................................................................... 176
Appendix A: Information and consent forms .................................................... 199
Appendix B: Teacher Assessment Survey .......................................................... 225
Appendix C: Teacher Treatment Inventory (TTI) Instrument ............................... 227
List of tables

Table 1  Total Number of Students in Year Groups and by Ethnicity..........................58
Table 2  Descriptive Statistics for Teacher Expectations Centered by Year Level .................68
Table 3  Hierarchical Regression Model Exploring How Teacher Expectations and Ethnicity
         Predict T2 Achievement of e-asTTle Reading (N = 750) .............................71
Table 4  Hierarchical Regression Model Exploring How Teacher Expectations of Different
         Ethnic Groups Predict T2 Achievement of e-asTTle Reading (N = 750) .............73
Table 5  Means and SDs of Teacher Expectations for the Different Ethnic Groups ............74
Table 6  Total Number of Students in Year Groups and By Ethnicity ..........................82
Table 7  Summary of Exploratory Factor Analysis Results for Teacher Treatment Inventory
         (N = 1,187) ........................................................................................................92
Table 8  Means and Standard Deviations of Students’ Perceived Differences of the Four
         Factors ..................................................................................................................95
Table 9  Summary of the ANOVA for the Four Factors ................................................95
Table 10 Tukey Comparisons for Students’ Perceived Differences for the Four Factors......97
Table 11 Mean Adjective Ratings for High Achieving and Low Achieving Male and Female
         Students ..................................................................................................................98
Table 12 Summary of the ANOVA for the Seven Attributes ..........................................99
Table 13 Tukey Comparisons for the Attributes for High and Low Male and Female
         Achievers ...............................................................................................................100
Chapter 1

Introduction

Research on teacher expectations has shown that teachers are likely to have lower expectations of students from minority ethnic groups even when achievement levels are similar to those of students from dominant ethnic groups (Baron, Tom, & Cooper, 1985; Clark, 1960; Weinstein & Middlestadt, 1979). A particular area of such scholarly debate has been the expectations of teachers and the influence they may have on students’ learning and their academic performance. There have been consistent findings showing high and low expectations of students are associated with correspondingly high and low achievement (Brophy, 1983; Good & Brophy, 1997; Rosenthal & Jacobson, 1968; Weinstein, Madison, & Kuklinski, 1995; McKown & Weinstein, 2008; Weinstein, 2002). These findings have suggested that differential expectations for minority ethnic groups contribute toward differences in academic achievement because teachers choose to differentiate their pedagogical practice in terms of how and what they teach the student according to ethnicity (Tenenbaum & Ruck, 2007).

Within New Zealand, the focus on ethnic characteristics influencing teacher expectations has been found to be detrimental to the learning experiences for many Māori and Pasifika (see Bishop, Berryman, Richardson, & Tiakiwai, 2003; Rubie-Davies, Hattie, & Hamilton, 2006; Turner, Rubie-Davies, & Webber, 2015). Shields, Bishop, and Mazawi (2005) noted that deficit explanations for why students do not achieve have focused on blaming the students and their families. Teachers have argued that low performing students come from
poor homes, have parents who do not care, and who are unskilled. Other explanations have included that there are no books in the home, students come from single parent homes, and students are linguistically deficient and unmotivated. The thesis will examine whether teacher expectations are based on the ethnicity of the students as a means to understanding the possible achievement gaps between minority groups and the dominant ethnic group in Aotearoa New Zealand (Ministry of Education, 2014).

The phenomenon of teacher expectations has long been studied among educational researchers from a range of disciplines, in particular social psychology, educational psychology, and sociology. Several understandings about teacher expectations are relevant to this thesis. These include how teacher expectations might influence the way teachers behave towards and communicate with their students. In addition, how students interpret and internalise their teacher’s behaviour and how this might impact on student performance is also important. Teachers aim to expect the best from their students (Rubie-Davies, 2015). How this is manifested for different students is more complex, because a teacher’s expectations may differ from one student to the next (Hinnant, O’Brien, & Ghazarian, 2009; Mckown & Weinstein, 2008) and research has found students are astute and able to ‘read’ with relative accuracy what their teachers feel about their learning based on the way teachers interact with them (Weinstein, 2002).

It is important to capture and understand the views of students on the messages that teachers are relaying either verbally or through non-verbal communication, because students’ perceptions of the messages teachers relay may influence how students perceive their own learning, and thus influence their learning outcomes (Babad, & Taylor, 1992; 1990; Brattresani, Weinstein & Marshall, 1984). If for example, as research has shown, teachers do differ in their expectations of students (Jussim & Harber, 2005; Van den Berg, Denessen,
Hornstra, Voeten, & Holland, 2010), and teachers express those differential expectations through their behaviour in treating students differently (Brophy & Good, 1970), there is a likelihood that some children will confirm these teacher expectations (Babad, 1990; Jussim & Eccles, 1992). This is critical in understanding how teacher expectations may be expressed and understood in the classroom as a means to address the achievement disparities in Aotearoa New Zealand (Ministry of Education, 2014).

The research for this thesis looked at not only in how teachers perceive teacher expectations but also at how teachers express their expectations in practice. It has been my experience, the phenomenon of teacher expectations tends to be something that teachers express willingly in that they always have high expectations of their students. However, based on my role working with and observing teachers’ practice in primary school classes, it was not clear whether the teachers fully understood the phenomenon of teacher expectations and having high expectations meant. It was this experience that prompted my interest in exploring what it is that teachers understood about the phenomenon of teacher expectations. There has been little research conducted in this area and it is the intention of this thesis to examine what is potentially an important area of research in the field of teacher expectations.

The three studies for this thesis aimed to draw on the experiences of classroom teachers and their students, in relation to teacher expectations. That is, both teachers and students brought their own perspectives, backgrounds, and experiences to the research. The teacher’s role, it appears, is to enhance student performance through the adoption of what exhaustive studies have demonstrated to be ‘effective’ practices (Alton-Lee, 2003; Hattie, 2009). However, the educational journey for students who are underserved by the education system can shape both the student’s experience and the teacher’s expectations in significant ways. If
a student does not connect to a learning environment, the desired learning outcomes are, at best, elusive (Hernandez Sheets, 2005).

**Purpose of the research**

Aotearoa New Zealand has an indigenous Māori population and a history of colonisation. It is also a multicultural society, which is a reflection of economic expediency on the part of successive New Zealand governments over several decades during which it has imported labour, skills, and overseas investments. The current multicultural society is also a function of migratory flows in an increasing globalised world. In particular, a large and significant Pasifika community is now visible in all aspects of social life and education in Aotearoa New Zealand (Anae, Anderson, Benseman, & Coxon, 2001). These Pasifika groups include people from the Cook Islands, Samoa, Tonga, Niue, Fiji, and Tokelau, with the Samoan group being the largest (Statistics New Zealand, 2014).

The purpose of this thesis derived from increasing concerns over differential learning outcomes for students in Aotearoa New Zealand and this disparity in achievement has prompted considerable interest in the teacher as an agent of intervention (Bishop, 2005; Waitere-Ang, 2005). To add further, the Organisation for Economic Co-Operation and Development (2010, 2013) has consistently found that education in Aotearoa New Zealand has been of comparatively high quality but low in equity, when compared with other developed nations. This thesis examines the role of teacher expectations in influencing learning and achievement, in particular for Māori and Pasifika learners in Aotearoa New Zealand. The thesis also explores how teacher expectations are perceived by students and teachers in order to gain a greater understanding of how influential the phenomenon of teacher expectations may be in classrooms in Aotearoa New Zealand. It is suggested that this knowledge will provide a basis for understanding possible causes of the disparities in
educational experiences and outcomes for these two groups of learners. By exploring the phenomenon of teacher expectations more deeply, the thesis intends to provide greater insights into how teacher expectations might be manifested in ways that could bring about equitable educational outcomes for all students in Aotearoa New Zealand.

**Significance of the research**

This research is of critical importance in New Zealand in light of limited success met by repeated attempts to increase the academic achievement levels for Māori and Pasifika students (Bishop, 2005; Mara, 2014) and the social, economic, and education projections for Aotearoa New Zealand. Māori and Pasifika numbers over the next two decades will increase substantially. The major ethnic group is made up of 74% European/Pākehā, thus comprising nearly three-quarters (just over 2.9 million) of the total population in 2013 (Statistics New Zealand, 2014). Projections are that collectively, Māori and Pasifika will make up approximately a quarter of the working population by 2026 (Statistics New Zealand, 2008). European/Pākehā falls to the projected 69.4% (Statistics New Zealand, 2008). Given these figures, and ongoing concerns about engagement and retention experienced by marginalised students, there is urgency for Māori and Pasifika peoples to be developing knowledge, understanding, and skills to meet not just national but global economic demands and challenges in a changing world. Within a decade, the demographic landscape will be different and the percentages of Māori and Pasifika students leaving school early will have an increased impact on the social, economic, and political landscape of Aotearoa New Zealand (Waitere-Ang & Adams, 2005). It is therefore critical that the current inequitable outcomes for Māori and Pasifika students are addressed.

For teachers to meet the demands of a changing world they will need to consider a number of curricular and pedagogical demands (Banks, 2006; Bishop, 2005; Delpit, 1988).
None more urgent is to be cognizant of their expectations for their students—because what they do in the classroom can make a difference to the achievement performance of their students. Rubie-Davies (2015) argued that high expectation teachers, who are those who have high expectations for all their students relative to achievement, practice in markedly different ways to low expectation teachers. More importantly, she found that students of high expectation teachers tend to make significant gains in achievement over a year. The understanding of what a high expectation teacher may be capable of in terms of shifting achievement for all students is thus significant to teacher practice. Students are going to be exposed to greater learning opportunities, students are more likely to have a positive attitude of themselves, and they will be working in classrooms where the teacher is more supportive and the classroom environment more intuitive to enhancing the social and wellbeing of the learner (Rubie-Davies, 2015; Rubie-Davies, Hattie, & Hamilton, 2007).

The current research also places a closer lens on the behaviour of the teacher from the perspective of the student. Capturing students’ perceptions of teacher behaviour is significant in that these perceptions provide a mechanism for understanding the influences of teacher expectations (Weinstein, 2002) and showing what teachers need to understand if they want to be a high expectation teacher.

Finally, the research adds to a body of research in the field of teacher expectations, particularly that in Aotearoa New Zealand.

**Design of the research**

Any research design must be structured in a planned way that will bring about a process for investigating the research questions relevant to the study (Macmillan & Schumacher, 2001). Yin (2004) defines research design as ‘the logic that links the data to be collected
(and the conclusions to be drawn) to the initial questions of a study’ (p. 18). In essence, the research design enables the researcher to move from research questions to valid conclusions through the collection and analysis of data. Marshall and Rossman (1999) add that the design process allows for a systematic undertaking of an exploration to be investigated. Therefore by attending to the research design, researchers seek to ensure that the results of their studies produce valid and accurate results (Macmillan & Schumacher, 2001).

The research design for the current thesis includes three studies involving a survey, questionnaires, assessment data, and individual interviews. The participants were teachers and their students in Years 4-8 with ages ranging from 8–12 years. Study 1 investigated the teachers’ expectations of the different ethnic groups. Study 2 examined students’ perceptions of teacher expectations and Study 3 examined teachers’ understanding of teacher expectations, with a particular focus on Māori and Pasifika students.

The three studies

The three studies bring together the significance of teacher expectations by drawing on the professional judgement of the teachers and student perceptions of teachers. The first study investigated the possible variability of teacher expectations for the different ethnic groups in Aotearoa New Zealand. The findings from this study were expected to provide a purposeful background to the second study in that if particular ethnic or minority groups were being exposed to lowered expectations by the teacher, it would be interesting to ascertain how the teacher expectations were perceived by the students. Thus, Study 2 examined students’ perceptions of teacher behaviours that informed the students of their teachers’ expectations; that is, how well their teacher expected them to do at school. Students spend a great deal of their daily lives interacting and engaging within socially dynamic classrooms (Weinstein, 2002). It has been found that from about the age of 7 years students are able to
incorporate individual information and have the ability to make social judgements (Hirschfeld, 2008) and by the age of 10 are more susceptible to stereotypes which can then affect their academic performance (Quintana & McKown, 2008). In this case, it seems evident that if a teacher portrays behaviour in classrooms based on stereotypical information, students will be able to identify specific teacher behaviours, as Rist’s (1970) research shows. When teachers interact differently with those for whom they have high or low expectations, this could have implications for a student’s opportunity to learn (Rubie-Davies, 2015). The first two studies in this thesis are intended to provide an awareness of the influences of teacher expectations and how teachers interact with students when they have lowered their expectations of a student. Study 3, on the other hand, was designed to explore teachers’ understanding of the teacher expectation phenomenon. The study was aimed at understanding in more depth the seeming contradiction in teachers reporting unequivocally that they always have high expectations for their students and yet research that continues to find evidence that teachers have low expectations for some students.

The research questions posed in this thesis thus investigate:

1. Are there variations in teachers’ expectations depending on the ethnicity of their students?
2. What are students’ perceptions of their teacher’s behaviour toward high achieving and low achieving male and female students?
3. What are teachers’ understandings of teacher expectations, in particular for Māori and Pasifika students?

**Ethical considerations**

In accordance with the University of Auckland Human Participants Ethics Applications and Guidelines, a number of prerequisites were met. This was ensured through the
completion of an ethics application and provision of the requisite support materials for ethics approval for research with human participants. All the forms related to the ethics application are in Appendix A.

An important ethical principle of this research was ensuring the data for analysing the questionnaires, surveys, and interviews would be accurate. The data collection methods used involved particular ethical considerations. In terms of interviews, Fontana and Frey (2003) have argued that whereas there are three traditional concerns for interviewing human subjects—informed consent, the right to privacy, and protection from harm—there are other unethical practices that must be avoided. These include the covert use of recording devices, inaccurate and demeaning depictions in notes, misrepresentation of opinions and ideas, manipulation of participants, and treating subjects as objects rather than individual human beings. In the development of the questionnaires and questions for conducting interviews, there was a commitment to such ethical considerations and ensuring such practices were avoided.

Informed consent had to be sought from participants. Their agreement to voluntarily participate was based on full and open information about the aim of the research, the methods that were to be used, and the anticipated duration of the research. The use of informed consent forms, a standard practice in educational research, allowed respondents to know how information was going to be used and gave them an opportunity to ask any questions they might have about the research in general. Participants were informed of the time commitments for completing the questionnaires and for the interviews. They were also informed about the nature of the interview process. Permission was sought to have the interview audiotaped and transcribed, with the understanding that participants could withdraw from the research before a given point in time.
### Defining terms

#### Minority ethnic groups

For the purpose of this study, minority ethnic group is defined along similar lines to that used by Gupta and Schmid (1994) as:

A group of people, who are inferior in number to the rest of the population, are in a non-dominant position, and who typically share a sense of solidarity and a desire to preserve their culture, traditions, religion, or language. They can sometimes be a numerical majority in a minority group position and are often subject to discrimination, are disadvantaged at the hand of another group, are socially visible, and have a sense of oneness. (p. 257).

#### Race and ethnicity

Throughout the thesis, reference is made to particular literature that uses the terms race and ethnicity interchangeably. This is problematic as the origins of race and ethnicity have distinct histories (Banks, 2006). When used interchangeably, there is the danger of conflating them as being identical in meaning and using them indiscriminately as though they were the same. Baron, Tom, and Cooper (1985) use the physical marking of race (e.g., white and black) in their study. Other studies (Steele & Aronson, 1997; McKown & Weinstein, 2002; McKown & Strambler, 2009) use ethnic labels such as African Americans or Latinos for describing groups or individual students. Quintan and McKown (2008) suggest ‘some may prefer to use the language of ethnicity because they believe the idea of race as a biological fact is false … others may prefer the language of race because they believe that even though biological conceptions of race are incorrect … race reflects true biological boundaries’ (p. 4). Some argue there are similarities in meaning between race and ethnicity whereby ethnicity is
defined in terms of demographics of national origins of one’s ethnic heritage, whereas race is based on racial heritage. Quintana and McKown argue that in a lived experience, race and ethnicity are essentially more similar than they are different. Much of the literature examined for this study takes that view.

In understanding these terms, however, the researcher also drew on the literature that sees them as being distinct entities. Race was coined in about the 15th century as a descriptor to categorise species of plants and animals based on their physical characteristics. By the turn of the 19th century, humans were being categorised in the same way. Physical and biological differences became the marker for defining people. Human beings were categorised by race by the colour of their skin, their hair type, physical appearance, and brain size. During this era, culture became linked to physical and biological differences that imposed a ranking for civilised and primitive cultures, and there was an implication of permanence about the cultural characteristics of each group (Waitere-Ang & Adams, 2005).

In the 1960s and 1970s, African Americans in the United States took affirmative action for their rights and this action became known as the black civil rights movement. This became a way in which African Americans overturned the power that had become inscribed in the racially-based term ‘black’ which had been used against them in a pejorative way, and redefined it as a positive marker and statement of their identity. African American peoples not only took control of the way they were being identified, but fought against other areas of discrimination across society. African Americans demanded more control of education for their people, equal access to health and employment, and equality in social, political, and legal issues (Banks, 2006). In response to the civil rights movement of the 1960s and 1970s, the term ethnicity became not only a useful term in defining culturally distinct groups but it was also a political statement against the indiscriminate use of the negative categorisation of
people through ‘race’. The term ethnicity gave scope for inclusion of cultural and ancestral heritage. A person’s shared experiences, language, and their bloodline as well as origin of birth and physical characteristics became the markers and boundaries that determined one’s ethnic group. In this sense, it was about how a person or group defined themselves rather than how others defined them. It is with this understanding that the term ‘ethnicity’ will be used in this research.

**Achievement**

The whole notion of student achievement is a relational term. To put it another way, we have no notion of achievement without a sense of ‘underachievement’. This idea of underachievement presupposes that we know the ‘actual’ achievement to which ‘under’ is related. When we talk about achievement we are talking about one phenomenon in relation to another. For example, when we speak of how achievement varies from one to another there is a benchmark against which achievement is measured. For achievement to be understood it needs to be put into context, so an understanding of what counts as ‘achievement’ is critical.

In Aotearoa New Zealand, metaphors such as ‘closing the gap’ and ‘tail of underachievement’ have been used to describe underachievement. Hattie (2008) argued that metaphors such as the ‘tail’ or the ‘gap’ of underachievement were misleading in that there was an assumption that mainly Māori and Pasifika students were positioned at the lower end of achievement. In his analysis of asTTle norming data for reading, he showed a significant distribution from one end of the spectrum to the other. The distribution of reading scores was flatter in that Māori and Pasifika did not just sit at one end of the ‘tail’; these students were also represented everywhere else in the distribution. Hattie pointed out that this was also the case for Pākehā/European and Asian students and although the psyche of underachievement
focused on the ‘tail’ or ‘closing the gap’ and ‘pulling up the bottom’, there needed to be a shift in the way achievement was thought about. He suggested thinking not so much about pulling up the bottom groups of students, but rather of merging the two dispersed groups—that is, merging the group of Pākehā/European and Asian with the group of Māori and Pasifika. In this way, the focus would be on lifting all students at the bottom, middle, and top end. Hattie argued that it was clear that addressing this difference required, as he aptly put it, ‘a seismic shift to align the plates’ (p. 22) so the alignment had all students sitting on the one bell curve. The discussion of achievement for students in Aotearoa New Zealand in this research will be referred to with this understanding.

**Organisation of the thesis**

This chapter, Chapter 1, establishes a clear rationale for the study on teacher expectations that is based on the reality that some Māori and Pasifika students do not do as well as others in schooling. The chapter defines the aims of the research and identifies the research questions. In arguing for more equitable educational outcomes for Māori and Pasifika students, the thesis stresses the importance of teachers having high expectations of all their students. The chapter also includes some defining of terms used in the thesis.

Chapter 2 reviews the literature on teacher expectations internationally and nationally. The literature has three foci: teacher biases toward ethnic minority groups, student perception of teacher behaviour, and the way teachers understand teacher expectations. The review starts with definitions of teacher expectations, followed by an examination of literature giving historical context from 1968 to the 1980s. This was a significant period during which research on this phenomenon was at its peak, before scholarly interest on teacher expectations declined (Brophy, 1988).
As noted, the research in this thesis comprises three studies. Chapter 3 presents the first study, exploring teachers’ expectations of their students and providing a rationale for the possible implications of the influences of teacher expectations on minority ethnic groups. Chapter 4 sets out the second study, which focused on students’ perceptions of their teacher’s behaviour. Students are introduced through their own accounts and questionnaires. Methodologically it was imperative that the students were able to discuss their lived realities with minimum intrusion from the researcher. In Chapter 5, in the third study, it is the teachers who bring to light their own accounts and perceptions of teacher expectations. The teachers discussed the implications of teachers having lowered expectations for some students, and critiqued their understanding of this phenomenon. They also discussed how teacher expectations are shaped and the implications this may have on practice and student outcomes. The teachers’ attempts to explain and understand the concept of teacher expectations gives important insights about their understanding that brings another dimension to this study.

The final chapter, Chapter 6, synthesises and applies insights from the earlier chapters to the specific research questions of the thesis. Possible limitations of the research and implications of this thesis are discussed, and suggestions for future research provided. The chapter concludes with a summary of the thesis.
Chapter 2

Literature review

This literature review describes the manner in which teacher expectations have been theorised and understood. An historical context of teacher expectation research will be presented, starting with the Pygmalion study of Rosenthal and Jacobson (1968) that pioneered research on teacher expectations and led to new areas of interest to researchers. The literature review will also consider studies that followed the seminal work of Rosenthal and Jacobson, both those that have been experimental and those conducted in naturalistic environments. The self-fulfilling prophecy (Merton, 1948) will be reviewed particularly in relation to ethnic minority groups. This is followed by an examination of the interface between ethnic minority groups and teacher expectations, and the role of stereotyping in relation to ethnic minority groups. Subsequently, the review focuses on student perceptions of teacher differential behaviour in classrooms and how students perceive that this portrays teacher expectations. Finally, how teachers understand the significance of teacher expectations will be presented.

Understanding teacher expectations is important because of the impact teacher expectations can have on the learning experiences of students, and, in particular, those from minority ethnic groups. Some of the international research on teacher expectations has focused on several areas pertinent to the three areas that are the primary subject of this thesis: how the expectations of the teacher can influence the way s/he behaves towards and communicates with their students; how students may interpret and internalise the teacher’s behaviour; and how this might affect student performance (Brophy & Good, 1970; Cooper &
Underpinning the current thesis is a focus on ethnic minority groups. Related to this, Dusek and Joseph (1983) have shown that teacher expectations may in part be influenced by characteristics of students such as physical attractiveness, student classroom conduct, cumulative folder information, race, and social class.

**Defining teacher expectations**

The phenomenon of teacher expectations has entrenched itself into the scholarly consciousness of researchers in several disciplines, including, but not limited to, psychology, education, and sociology. Several definitions of teacher expectations have been posited. A common understanding of this term is: ‘the inferences that teachers make about the future behaviour or academic achievement of their students, based on what they know about these students ...’, and teacher expectation effects as: ‘student outcomes that occur because of the actions that teachers take in response to their own expectations’ (Good, 1987, p. 116).

Teachers will form expectations of their students or class and expectations may be based on a variety of factors. The expectations teachers form of their students or class could influence decisions teachers make toward their teaching practices. Teacher expectations can be based on student records and verbal information received from a teacher that includes a student’s previous progress. The teacher will use this information to decide on the ability levels of the student and what ability group the student should be placed in. The teacher may also have expectations of how a student will progress through the year, and what will be expected for planning learning and instructional activities (Rubie-Davies, 2015).

Teachers can have high or low expectations of their students and those expectations can influence the academic learning experiences and outcomes of students (Good & Brophy, 2008; Dusek & Joseph, 1983; Rosenthal & Rubin, 1978). Cooper and Tom (1984) examined
how the expectations of teachers influenced the processes of schooling. They described three measures of expectations present in the literature. The first type occurred when teachers estimated the student’s present ability or achievement. An example of this type of expectation measure is a study by Rubie-Davies, Weinstein, Huang, Gregory, Cowan, & Cowan, (2014) whereby teachers were asked to estimate the ability of their fourth grade students. As Cooper and Tom explained, even though this may not be an exact measure of the teachers’ expectations due to the measure being an estimate rather than a direct measure, the estimate is argued to show expectancy effects reflecting the level of the teacher’s expectation. The second type of expectation focuses on expected improvement. This involves the teacher making a prediction related to the possible academic progression of their student over a period of time. For example, teachers may be asked to estimate where their student will be for reading at the end of the year; this is the approach taken in this thesis. An example of this method for measuring teachers’ expectations is a study by Rubie-Davies, Petersen, Sibley, and Rosenthal (2015) in which teachers were asked to predict student end-of-year achievement in mathematics and reading. The third type looks at the estimations that teachers make of their students, in particular the degree to which they may over- or underestimate the student’s present performance in relation to a standardised measure. Examples of this type of approach are a study by Rubie-Davies and Peterson (2016) that examined whether teachers under or over-estimated the achievement of their Māori and Pākehā students and a study by McKown and Weinstein (2002), who examined elementary students’ differential responses that were measured against a teacher’s extreme over and underestimation of their student’s current performance.
International literature on teacher expectations

Teacher expectations: Earlier milestones

All teachers have expectations of their students. Teacher expectations form the basis of teacher planning to maximise learning opportunities for students. Teachers decide how well they perceive students will achieve, and plan lessons and learning experiences accordingly (Rubie-Davies, 2015). The characteristics of these expectations and their effects have produced five decades of empirical research in this area. Merton (1948) identified and recognised the power of the self-fulfilling prophecy. A self-fulfilling prophecy according to Merton ‘is, in the beginning, a false definition of the situation evoking a new behaviour which makes the originally false conception comes true’ (p. 195). In other words, people who are consistently told that life is difficult, for example, may be so convinced that life is always difficult that they place themselves in situations that result in life becoming more difficult. As Merton argued, that initial belief a person may hold, in this example, that life is too difficult will lead to an entirely justified fear, and that belief becomes true, fulfilling the prophecy. In a learning context, students often make predictions on how well they will do in an examination. A student who thinks he or she is not clever enough to pass an examination may become disheartened, and lose motivation to learn, give up on study, and then do poorly in the exam. The student who believes he or she is not clever enough to pass an examination convinces her or himself of that fact. The self-fulfilling prophecy was first tested in the classroom setting by Rosenthal and Jacobson (1968). Their study showed that teacher expectations were influential such that the students fulfilled the teacher’s expectations.

Merton explained that the self-fulfilling prophecy often started with a false assumption of a situation which then became actualised, and he argued, ‘the false validity of the self-fulfilling prophecy perpetuates a reign of error’ (p. 195). He noted that predictions are part of
the human psyche, and highlighted how a belief could have a significant impact on people’s lives. Merton gave an example of the Last National Bank, which was doing very well and was in sound financial order. One morning, the bank manager could not understand why there were people lining up and withdrawing their life savings when they should have been at work. What he did not know was that a rumour had spread that the bank was about to collapse. People rushed to withdraw their savings which led to the bank’s insolvency. The incorrect rumour evoked a new behaviour which created a new situation that led to the false rumour becoming true. Merton explained that this error became a self-fulfilling prophecy. In schools, the self-fulfilling prophecy was linked to teacher expectations such that the expectations became a powerful influencer for shaping the learning experiences of students (Brophy & Good, 1974; Rosenthal & Jacobson, 1968; Rosenthal & Rubin, 1978). It was with this understanding that the idea of self-fulfilling prophecies entered into the field of teacher expectations.

The seminal experimental Pygmalion study of Rosenthal and Jacobson (1968) became a focal point in trying to understand the relationship between self-fulfilling prophecies and teacher expectations. The study was completed in a period in which the civil rights movement in the United States was at its peak. Racism and inequalities were at the forefront of African Americans of the time and the goal was to end racial segregation. Jussim (2012) added, ‘the idea that teacher expectations could profoundly influence student achievement fit[ted] well … racism, as manifested in teachers’ low expectations for, and unfair treatment of minority students could be a powerful contributor to educational inequalities’ (p. 34). Against this backdrop of the civil rights movement, Rosenthal and Jacobson’s research was most timely.
Rosenthal and Jacobson asked whether a teacher’s expectation of their pupils’ intellectual competence could lead to a self-fulfilling prophecy, arguing that ‘how one person’s expectation for another person’s behaviour can quite unwittingly become a more accurate prediction simply for its having been made’ (p. vii). The researchers administered a non-verbal intelligence test in an elementary school to students from kindergarten to fifth grade which involved 18 classes. Teachers were not told that the test was to measure intelligence; instead they were told that the test was designed by Harvard University to identify children who were likely to ‘bloom’, which suggested these students would show a significant intellectual spurt over the coming year. Testing was given at selected times of the year, once prior to the start of the study and then one and two years later. After initial testing teachers were informed which students were the potential ‘late bloomers’. Twenty percent of the children were randomly selected from the school for this category. Rosenthal and Jacobson explained that the difference between those likely to ‘bloom and those not likely to bloom existed solely in the minds of the teachers’ (p. 70). The test was administered one year later and those selected as ‘late bloomers’ were found to have increased their IQ compared to the control group, and again after testing two years later. Rosenthal and Jacobson confirmed that the teachers’ false beliefs had become true. What was proposed was that the false positive expectations of the teachers of the randomly selected students evoked a new behaviour in the teachers and that situation led to the false expectation becoming true. However, although this was proposed, Rosenthal and Jacobson did not actually observe teachers’ differential behaviour in their original study. Since this study, Rosenthal (1987) has argued there have been numerous studies that have substantiated the existence of differential teacher behaviour toward high and low achieving students. Rosenthal referred to the 31 meta-analyses of such studies reported by Harris and Rosenthal (1985). Early research by Brophy and Good (1970) reported teachers treated students differently depending on their expectations of the student.
Teachers expected more of those students that they had high expectations for and gave more positive praise when students performed well, than teachers who held low expectations of students. The teachers were more likely to accept poor performance and less likely to praise students they had low expectations for. Differential teacher treatment has also been identified by Weinstein and her colleagues (Weinstein, 2002; Weinstein & Middlestadt, 1979; Weinstein, Marshall, Brattesani, & Middlestadt, 1982).

Although the Pygmalion study was the first of its kind to examine notions of teacher expectations and their contributions to self-fulfilling prophecies, there were criticisms related to this study. For example, Elashoff and Snow (1971), Thorndike, 1968) and Jussim and Harber (2005) argued that the IQ measurement was not reliable and that the accuracy of teacher expectations was not assessed. Rosenthal and Jacobson (1968) did not assess whether the teachers’ expectations were influenced by other student characteristics, such as the students’ demographics and social stereotypes. Jussim and Harber (2005) asserted that the power of the self-fulfilling prophecy was not as strong overall as it had been portrayed as being. Jussim, Robustelli, and Cain (2009) added that although there was evidence that the self-fulfilling prophecy had occurred, the degree to which it happened was debatable. When averaged out, the difference in IQ points equated to four, which Jussim et al. suggested was not particularly dramatic. Despite this, the difference was statistically significant; the IQ of the experimental group did increase more than that of the control group overall.

Nevertheless, others did find the effects to be important because of the potential that teacher expectations could have in creating social inequalities (e.g., Rist, 1979; Schultz & Oskamp, 2000; Weinstein & Mckown, 1998). This led to numerous further studies. Several studies in the United States (Good & Brophy, 1997; Cooper & Tom, 1984; Brophy, 1983; Weinstein, 2002) followed that of Rosenthal and Jacobson (1968) and researchers began to
study the conditions when self-fulfilling prophecies occurred and the effects these had on children’s learning. Many of these studies were carried out in classroom settings rather than under experimental conditions. Brophy and Good (1970) designed a model to show how differential teacher expectations functioned as self-fulfilling prophecies. First, the teacher formed differential expectations for student performance and treated the students according to these perceived differences. Because the children were being treated differently by the teacher, they exhibited behaviour that complemented and reinforced the teacher’s expectations. As a result, the general academic performance of some children would increase whereas that of others decreased. When tested at the end of the year, the differences in academic performance of those students who were treated differentially provided support for the proposal that a self-fulfilling prophecy effect had occurred. Further models were proposed by Cooper (1979), Cooper and Good (1983), Darley and Fazio (1980), Harris and Rosenthal (1985) and Rubie-Davies, (2015). Despite the differences in the models, the main consensus was that teachers can develop inaccurate expectations, those expectations lead teachers to treat students differently, and the differential treatment can lead students to react to those differences in ways which confirmed the inaccurate expectations. These arguments add validity to the naturalistic setting of this thesis.

**Experimental and naturalistic studies**

Studies related to teacher expectations have been conducted under experimental conditions (Rosenthal & Jacobson, 1968) and under naturalistic conditions (Ambady & Rosenthal, 1992; Babad, Bernier, & Rosenthal, 1987; Babad, Inbar, & Rosenthal, 1982). The current thesis was conducted in a naturalistic setting, within the classroom. There is an argument that studies conducted under experimental, as opposed to natural, conditions limit the possibility of assessing expectancy effects over time (Hodge, 1984). Student–teacher
interactions are ongoing in classrooms and such interactions can produce an array of variables that would be difficult to measure in experimental studies and therefore limit such studies. An example is the complex interaction students and teachers experience daily in classrooms, which can be positive, negative, or rapidly changing over the day. Ethically, negative expectations cannot be manipulated in an experimental study but negative expectations may occur naturally in a classroom setting in a naturalistic study. Also positive or negative expectations accumulate over time (Weinstein, 2002) which would be difficult to achieve in an experiment because in reality these behaviours do not act in isolation. Jussim and Eccles (1995) have argued that naturalistic studies tend to show stronger results particularly when studies are conducted over an extended period. This is because there is no artificial manipulation of the target variable, in this case teacher expectations, which could lead to greater understanding of teacher and student behaviours in their natural setting.

Although experimental studies enable researchers to control variables so that they can be sure it is the intervention that has caused the change, there are always questions about the degree to which what is found can be generalised to a naturalistic setting.

The classroom setting is now more ethnically diverse and it is highly likely that teachers will be in classrooms with students from different ethnic minority backgrounds and those who belong to a dominant ethnic group. Hernández-Sheets (2005) argued that teachers are challenged as educators to recognise the ways in which their teaching may advantage or disadvantage their students. Ethnic minority students have been shown to be disadvantaged and not given equitable access to learning by the teacher. The next section will discuss research that examined these disadvantages in the light of teacher expectations, and the influences that may have on these groups of students.
Self-fulfilling prophecy and ethnic minority groups

There have been debates in some United States-based literature about the strength of the self-fulfilling prophecy in terms of the size of the effects (see for example, the later studies by Jussim, Robustelli, & Cain, 2009). Earlier studies by Madon, Jussim, and Eccles (1997) argued that while research on this phenomenon had found self-fulfilling prophecies to be powerful (e.g., Fisk & Taylor 1991; Snyder 1984), this was not the case for an experimental study conducted by Rosenthal and Rubin (1978). Also, some of the naturalistic studies by Brophy and Good (1974), Brophy (1983), Jussim (1991), and Jussim and Eccles (1995) did not show powerful effects. However, Madon et al. (1997) targeted certain groups where they believed self-fulfilling prophecies might be more powerful. Sixth-grade mathematics students who had consistently experienced low or high grades for mathematics and high or low levels of self-concept about their levels of achievement were more susceptible to teacher expectations and that led to more powerful self-fulfilling prophecies. In addition, Jussim, Eccles, and Maddon (1996) also found this to be the case for stigmatised groups. Self-fulfilling prophecies were more powerful among African American students and students from lower socioeconomic areas. Madon et al. (1997) suggested those belonging to stigmatised groups doubted their own worth, recorded low academic performance, were not happy with their school environment, constantly received negative feedback from their teachers, and had fewer academic successes. Such students were more likely to be vulnerable to self-fulfilling prophecies. Although differential teacher expectations manifesting into a self-fulfilling prophecy are not investigated in the present thesis, explaining the possibility of such an occurrence is a particular focus.
Theoretical understandings: Teacher expectation and minority ethnic groups

Teacher expectations may be influenced by several factors such as, socioeconomic status, ethnicity, gender, and race (Baron, Tom, & Cooper, 1985; Rist, 1970). The theory behind such influences has been noted in the literature published in the United States since the 1960s. In the 1960s, a large number of African Americans were living in poverty. Clark (1965), a social scientist and educator, examined the educational experiences of some of African American children, highlighting the injustices and prejudices that they had experienced in school. Clark argued that school organisations and teachers’ attitudes and expectations could undermine the self-esteem and academic future for children of colour. His concern for students being educated in schools situated in culturally poorer areas indicated that he believed teachers in these schools thought students were culturally deprived, had low intelligence, and were not only from poor backgrounds, but their status was genetically determined, so there was little chance that they could be educated. He believed teachers’ inaccurate assumptions led students to exhibit behaviour that reinforced the teachers’ expectations. The debates during this era in the United States pressed for changes to the education system that would lead to improving the academic performance of black, underprivileged children. The journey for change has been arduous and the challenges for equitable education for all in the United States continue to be debated even today (Banks, 2006; Gay, 2000).

Further, Knight (1974) and Keddie, (1971), two sociologists, gave a theoretical understanding of the societal influences that occurred in education. As far back as the early 1970s, a study conducted by Knight discussed the notion that there were four structural elements of schooling which worked together in compounding ways that disadvantaged some
students. These were highlighted as being streaming, labelling, teacher expectations, and student reputation. The potential impact on educational futures, occupational destinations, and social and economic possibilities was of prime concern for Knight. Although his work has particular significance at the secondary level, the marginalising processes about which he writes begin, as Rist (1970) suggested, at the elementary level. The long-term effects, he argued, were that the information that pupils accessed, the cognitive levels of their assigned tasks, the opportunities for learning, and the quality of instruction could all contribute to restricting the academic progress of many average to lower group children. Knight suggested that a simplistic notion of ‘ability’ on which students were sorted and selected in schools could foster low self-esteem, promote behavioural issues, and lower aspirations for some children. Furthermore, because sorting and selecting often reflected wider social inequalities, sorting often paralleled social class and ethnicity, and served, therefore, to separate rich from poor, white from non-white. This sorting then further perpetuated those inequalities.

Keddie (1971), on the other hand, looked at the processes within the school by which pupils were categorised, and the social organisation of curriculum knowledge. Student categorisation for a differentiated curriculum, she believed, was the process by which students’ supposedly deviant identities were maintained. For Keddie, it was necessary to take account of two aspects of classroom knowledge, the knowledge teachers had of pupils and what counted as knowledge, to be available and evaluated in the classroom. To do this, it was necessary to question what ‘knowledge’ and ‘ability’ really meant, rather than simply take them for granted. She noted that, despite their best intentions, teachers saw students at various social levels differently and that this was reflected in the way classes were taught. Teachers frequently linked ability with social class background, believing that students from working class backgrounds were not motivated; that they were able but that they did not work
hard. Teachers tended to pathologise the background of children seen as ‘abnormal’, viewing the home as problematic, so the children were ‘disturbed’. Teachers looked at the failure of working class students in an individual way instead of looking at the class issues which the school operated on. The way the curriculum was structured favoured middle class interests and teachers prepared different work for different streams (or tracks as they are known in the United States). Hence, the work of Clark (1965), Knight (1974), and Keddie (1971) all highlighted possible influences that could shape teachers having high or low expectations of their students.

**Teacher expectations and ethnic minority group studies**

The international research shows greater awareness of the impact of teacher expectations on minority ethnic groups. The meta-analysis of Baron et al. (1985) examined 16 experimental studies that had looked at the effects of student race on teacher expectations. Nine of these reported that teachers expected European Americans to perform better than African Americans, one reported an expectation that African Americans would perform better than European Americans, and the rest of the studies reported no results. This revealed that in a majority of the studies, race was an influencing factor in shaping teacher expectations. Some two decades later it seems not much had changed. A more recent meta-analysis of experimental studies by Tenenbaum and Ruck (2007) included four meta-analyses examining teacher expectations, referrals, positive and neutral speech, and negative speech toward ethnic minority students. Consistent with a majority of research in this area, expectations and ways teachers communicated varied between ethnic groups. Teachers had higher expectations for Asian American students than for other ethnicities but overall favoured European American over Latino and African American students. Although the studies above were experimental, McKown and Weinstein (2002) conducted a naturalistic study that investigated whether
gender and ethnicity moderated student responses to teacher expectations. Elementary students’ differential responses were measured against a teacher’s extreme over- and underestimate of their student’s current performance. The study found that students who were members of stigmatised groups (e.g., African American students and girls, with regards to mathematics) were more likely to benefit from overestimates than were members of non-stigmatised groups (e.g., Caucasian students and boys, with regards to mathematics). They also found the effect to be stronger with age. Fifth-grade students demonstrated a stronger effect than students in first or third grades. The older students learnt to become more cognisant of inferring the beliefs of others, leading to a more accurate perception of their teacher’s expectations. Other research in the United States has consistently shown that students from ethnic minority groups such as African American and Latinos report differential treatment related to teachers’ low expectations compared to that of their white peers (Rosenbloom & Way, 2004; Wong, Eccles, & Sameroff, 2003). Research on teacher bias has also shown teachers to have implicit bias. Implicit bias reflects judgments made at a subconscious level, without deliberate control, while explicit biases are opinions that are held consciously and deliberately (Dovidio, Gaertner, Kawakami, & Hudson, 2002).

Van den Bergh, Denessen, Hornstra, Voeten, and Holland’s (2010) study examined the implicit prejudiced attitudes of teachers in relation to teacher expectations. The achievement gap pointed to possible teacher biases across several countries with respect to ethnic minority groups. They explained that stereotypes were automatically activated when teachers perceived a student as belonging to a particular category, for example, an ethnic minority group. Further to that, Van den Berg et al. added that the automatic response could differ and that depended in part, on the level of prejudiced attitudes teachers had towards a particular category within the population. As they said, ‘high-prejudiced people endorse more negative
stereotypic features, while low-prejudiced people endorse more positive stereotypic features’ (p. 502). Van den Berg et al. used an Implicit Association Test on 41 teachers from 17 elementary ethnically diverse schools. The Implicit Association Test measured the strength of the association with an ethnic group (in this case Turkish or Moroccan versus Dutch) with words that had either a positive or negative connotation. The examples they provided were ‘peace, war, paradise, fear’ (p. 506). They found teacher implicit biases towards minority ethnic groups were evident. Van den Bergh et al. argued that in countries in which the socio-political environment was embedded with negativity towards particular groups of people, it could be assumed that the expectations of teachers and the way they functioned in their practice would be affected.

Babad, Inbar, and Rosenthal (1982) found teachers who were biased, described as those who were ‘susceptible to biasing information about students’ (p. 459), tended to demonstrate lower expectations of their students and treated them more negatively than unbiased teachers. Expectations of biased teachers were more likely to be self-fulfilling. In a subsequent study, Babad, Bernieri, and Rosenthal (1989) investigated teachers’ differential expectations using clips of videotaped teacher behaviour, separated into isolated non-verbal and verbal channels (face, body, speech content, tone of voice, and so on). It was found that teachers’ affective, verbal and non-verbal behaviours were more negative and assertive with low than with high expectancy students. Babad et al. also showed that teachers who tended to be more susceptible to biasing information were likely to be more negative and produce stronger expectancy effects. Babad (2009a) argued that biases and stereotyping were important constructs to understand for two reasons. The first was that teachers are faced with an array of social and intellectual differences. Second, teachers made value judgements of their
students regularly in the classroom and Babad suggested that these two constructs were linked by the “social characteristics of students and social judgements of teachers” (p. 77).

**Stereotyping and ethnic minority groups**

There are a range of complex and interrelated factors that appear to perpetuate low teacher expectations which can be reinforced by negative stereotyping. Imparting stereotypical messages that may, for example, be exposed through teacher behaviour, whether implicitly or explicitly, may negatively or positively affect the academic performance of the student. Steele and Aronson (1997) argued that negative stereotypes threatened the performance of high achieving African American students. The authors coined the term ‘stereotype threat’ and explained that when there was a stereotype pertaining to a group (e.g., African Americans have low levels of intelligence), there was a likely increased chance that a student from that group would be judged on the basis of the stereotype. The threat of the negative stereotype may affect the academic performance in the stereotyped domain where student performance potential might be placed at risk. In a study (Steele & Aronson, 1995) of 114 Stanford undergraduates, it was found that African American students performed significantly lower than white students on a verbal test when they were told that the test would be an evaluation of their ability. The same test was given to another group of students, but this time, the test was presented in a non-evaluative manner and the results for the African American students matched that of their white American counterparts. Steele and Aronson argued that African American students did worse in the first experiment because the evaluative expectation of testing for ability was threatening. The authors concluded that in order to not be reduced to the negative stereotype (that African Americans have low levels of intelligence), the African American students changed their behaviour to avoid being viewed and treated as though the stereotype were true. This negative stereotype produced
expectations about what is perceived by others and indicated that such expectations on the part of the teacher can influence student outcomes (Weinstein, 2002). It also suggested that the achievement gap between ethnic minority groups and those from the dominant group may in part result from differential treatment (Ferguson, 2003) by the teacher.

Ethnic identification and knowledge of stereotypes becomes increasingly sophisticated with age. Initially, children develop knowledge of social categories and then of social stereotypes (Ambady, Shih, & Pittinsky, 2001). When children start school at the age of about five years, their perceptions of others in terms of differences, stereotypes, racial attitudes, and social class will reflect those of the wider society (Robinson & Jones Diaz, 2006). Research indicates that between the ages of three to five, children are able to identify that people are of different ethnicities. About seven years of age they are able to incorporate individual information and make social judgements and as they get older, about 10 years of age, children have a good understanding and knowledge of social stereotypes (Hirschfield, 2008). With this awareness they become susceptible to situational cues that endorse a particular stereotype and affect their level of academic performance (Quintana & McKown, 2008). Children at a very young age can become vulnerable to stereotypes, be concerned about the evaluation of others, and understand that people have negative expectations for certain groups. While children are gathering information about social stereotypes, they also gather information about prejudices and discrimination (McKown & Strambler, 2009). Aronson (2004) argues that children who are more exposed to prejudices and discrimination and have a good understanding of negative stereotypes of intellectual abilities will be more vulnerable to negative teacher expectations.
Stereotype consciousness and children’s perceptions of teacher expectations

The extent to which children are conscious of stereotypes is an important factor for several reasons. Having knowledge of broadly held stereotypes and having the ability to infer others’ stereotypes means it is likely to affect not only the way children perceive their social position (Quintana & McKown, 2008) but also their academic world. Stereotype-consciousness refers to ‘children’s knowledge that people other than the child himself endorse such stereotypes whether or not the child agrees with those stereotypes’ (McKown & Strambler, 2009, p. 1643). It is possible that children as young as five years, due to their developing mental state, could have awareness of others’ stereotypes (McKown & Strambler, 2009). Indeed children as young as five have the mental state to racially categorise positively to a majority race and negatively to minority races (Hirschfeld, 2008). Research conducted in Australia found children as young as five and six years of age were aware of the cultural stereotypes regarding skin colour (Augoustinos & Rosewarne, 2001). The knowledge of stereotypes of others was highly congruent with their personal beliefs about skin colour. However, Augoustinos and Rosewarne tentatively argued that this may not equate to prejudice as the young children may not have the ability as yet to differentiate their personal judgements from the dominant stereotypes. Even though it is possible for children under the age of 8 years to be aware of broadly held stereotypes, it is generally found that this awareness becomes more significant for children from middle to late elementary level, between the ages of 9 and 10 years. The point is that if students are aware that their teachers hold these broadly held stereotypes, it may be likely this will also lead to self-fulfilling prophecies or, in other words, stereotype threat (Steele & Aronson, 1997). More importantly, African American and Latino students showed as they got older that the effects of being susceptible to stereotype threat increased when having knowledge of broadly held stereotypes
(McKown & Strambler, 2009). In addition, they tended to develop a greater awareness of broadly held stereotypes than their white and Asian counterparts (McKown & Weinstein, 2003). When children develop a greater awareness of negative stereotypes and perceive the teacher as behaving in a way that reinforces the negative stereotype, then the children may come to understand their teacher’s expectation of the stereotype and begin to act accordingly (Aronson, 2004).

The international studies of teacher expectations of ethnic minority students demonstrated that teacher’s expectations of students showed teacher bias of lower expectations for ethnic minority students. Because few studies in Aotearoa New Zealand have investigated the expectations of teachers of different ethnic groups (see Rubie-Davies, et al., 2006; Peterson, Rubie-Davies, Osborne, & Sibley, 2016; Turner, Rubie-Davies, & Webber, 2015 for some exceptions) Study 1 of this thesis investigates whether there are biases in teacher expectations of ethnic minority students in a primary setting. The studies alluded to above will be discussed in a later section in this chapter.

Studies have clearly shown that teachers do differentiate in their expectations but whether or not that is important really depends on whether students perceive differences of teacher expectations in the classroom. If students perceive differences in the way some students are treated versus other students, they are likely to internalise that information and perform in line with the teacher’s expectation. There is evidence to suggest that students not only identify messages that teachers display but they also understand what those messages are telling students about how teachers perceive students.
The perceptive student and teacher behaviour

Babad (2009) explained that teacher differential behaviour was considered to be linked to self-fulfilling prophecy. The way that teachers treated students differently was due to the expectations teachers had of individual students. Babad stated that ‘for teachers to influence student’s performance or behaviour, they [teacher expectations] must be transmitted to students via differential behaviour, which is in turn, perceived by students, and influences their self-image, their self-expectations, and eventually their academic performance as well’ (p. 88). The link between the self-fulfilling prophecy and teacher differential behaviour provides an important understanding of the possible implications the link may have on minority ethnic students in the present research. Also relevant to the thesis is the student’s perceptions of teachers’ differential behaviour. A lot of the research on students’ perceptions of differential teacher behaviour has come from research by Babad (1990, 1998), and Weinstein and her colleagues (Weinstein, 2000; Weinstein, Marshall, Brattesani, & Middlestadt, 1982; Weinstein & McKown, 1998; Weinstein & Middlestadt, 1979). These studies have all shown that from a very young age students are highly perceptive and expert at deciphering the teacher’s differential behaviour towards different students.

Babad (1990) measured students’ perception of their teachers’ differential behaviour and compared that with the perceptions of the teachers themselves. The participants were Jerusalem students in seventh grade who were provided with questionnaires and asked to rate teacher behaviours directed at individual students and teacher behaviours directed at the classroom as a whole. The teachers’ questionnaires were the same as the last three parts of the students’ questionnaire and teachers were asked to rate their own perceptions of teacher behaviour. The behaviours rated were learning support, emotional support, and pressure by the teacher. Babad found the students were consistent in perceiving their teachers gave low
achieving students more learning support and less pressure than high achieving students, but that more positive emotional support was given to high than low achieving students. Teachers also agreed to giving low achieving students more learning support and less pressure but did not agree to giving more emotional support to high achieving students. The teachers, instead, perceived giving more positive emotional support to the low achieving student. Babad noted that students accepted that teachers will give more learning support to low achievers than high achievers and think that is a good thing. However, the students did not accept teachers giving more positive emotional support to high rather than low achievers.

Babad et al. (1989) examined adults’ rating of teacher differential behaviour when interacting with high and low achievers using video clips. In subsequent studies, Babad and his colleagues explored the validity of students’ perceptions of teachers’ differential behaviour by having primary students do the same test that the adults judged to rate the teachers’ differential behaviour in Israel (Babad, Bernieri, & Rosenthal, 1991) and Aotearoa New Zealand (Babad & Taylor, 1992). The fourth-grade students (aged 9 to 10 years) were exposed to a few seconds of the same non-verbal teacher behaviour of unknown teachers’ interactions with high and low achievers. The researchers found, even within those few seconds, it was enough for students to identify differences in teacher behaviour with high and low achievers. The students’ perceptions corresponded with those of the adults who were tested with the same information by Babad et al (1989).

The following discussion will focus on the research of Weinstein and colleagues (Weinstein, 2000; Weinstein et al., 1982; Weinstein & McKown, 1998; Weinstein & Middlestadt, 1979). Their research in this area adds further understanding to what students see and hear in classrooms that tells them whether the teacher thinks they have the ability to achieve or not. Weinstein’s work is important to the thesis for two reasons. First, Study 2
will examine students’ perceptions of teacher behaviour, which to date has not been done in primary schools in Aotearoa New Zealand. The second is that the study employs the Teacher Treatment Inventory (TTI) developed by Weinstein and colleagues (Weinstein, Marshall, Sharp, & Botkin, 1987; Weinstein & Middlestadt, 1979), thus making it the first study to use the measure within the context of Aotearoa New Zealand and outside of the United States. Therefore, Study 2 has the potential to determine whether the teacher behaviours identified by students in the United State schools are more universal, and identified by students in Aotearoa New Zealand as well.

Weinstein (1983) has explained that since the 1950s there has been a growing interest in the way students process information during instruction and how that might influence teaching behaviours and affect learning outcomes. She noted that classrooms were provocative spaces, social and complex, and that children spent a significant time of their lives in these environments as students, subjected to an array of often complex demands and expectations. Weinstein examined past studies (Berliner, 1976; Duke, 1977; Fraser, 1980; Fraser & Walberg, 1981) of students’ perceptions of what occurred in classrooms and found that these earlier studies were varied and in some cases did not add value to understanding children’s perceptions of classroom life. She stated that classrooms over the years had changed in that they ‘have become increasingly differentiated, incorporating multiple types of social stimuli … classrooms also have multiple actors, and there are several areas of knowledge that make up students’ thoughts about schooling’ (p. 290).

More recently, Weinstein (2002) argued that there was more than one way children learnt about their ability and what was expected of them in the classroom; for example, through teacher feedback and the various forms of assessments students received. Other forms of assessment she suggested were through teacher interactions and behaviours. Students are
expert observers and are tuned in to the complex distinctions of behaviour that teachers portray. Students are aware of the quality of the content they receive, the varying quality of instructions, and who gets noticed most and who gets accorded more positive feedback.

Weinstein also measured the quality of the relationships teachers had with their students. When students were asked about how well they performed in class, the students described this by the way the teacher verbalised their expectations of the student either negatively or positively. Weinstein (2002) reported that children make inferences and notice when teachers are making comparisons of a student’s abilities in relation to another student. It is at this point that they gauge their relative positions of ability. For example, a teacher may say ‘Look at Johnny; he’s completed his work already’. The students tend to gauge their ability also by the ability groups teachers select for them. Students know why they have been streamed into the higher groups, and that they do not need much help from the teacher because they are smarter. This is the same for students who are in the lower groups. When students are selected for the low ability group, the students know that the low-level task work they receive and the extra support they get means they are not smart (Weinstein, 2002).

A series of other studies conducted by Weinstein and colleagues found that students were indeed aware of the differential treatment teachers accorded high and low achievers. Weinstein and Middlestadt (1979) investigated whether students perceived differential treatment by teachers of high and low achievers. One hundred and two children from Grades 1–3 and 4–6, were asked to rate 60 teacher behaviours using the Teacher Treatment Inventory that described how the teacher treated high and low achievers. This particular study involved only students who were high achievers and of middle class backgrounds. The students perceived differential treatment between high and low achievers in that students reported that
high achievers tended to be accorded special privileges, the teacher had higher expectations of them, and provided them with more challenging work than low achievers.

In a subsequent study, Weinstein, Marshall, Brattesani, and Middlestadt (1982) explored the influence of classroom differences by examining students’ perceptions of learning in two different classroom environments; the open classroom that provided greater flexibility in student choice of curriculum, space, and activities, and the traditional classroom. There were 234 fourth-, fifth- and sixth-graders from 16 urban schools who were ethnically mixed and of varying socioeconomic levels. The study also used the Teacher Treatment Inventory but this time using 44 teacher behaviours relating to four rather than two types of hypothetical students (high and low achieving male and female students). Though there were no differences in class environments, students could identify how teachers treated high and low achievers. The findings were similar to those of Weinstein and Middlestadt (1979) in that children knew that teachers were providing more opportunities and choices for higher achievers and that low achievers were subject to more negative feedback and teacher authority and control. Weinstein et al. (1982) argued that there were some important messages that could be drawn from several studies which had shown that students were able to perceive differences in the ways teachers treated high and low achievers. These findings may have some significance for Study 2 in this thesis. The first important message from Weinstein and Middlestadt findings, suggested there would be more opportunities of developing self-regulation skills for high achievers and that they would be given more autonomy and choices to complete tasks. Purdie, Hattie, and Douglas (1996) explained that ‘typically, self-regulators are characterised as purposeful, strategic, and persistent in their learning … they are self-initiators who exercise personal choice and control of the methods needed to attain the learning goals they have set for themselves’ (p. 87). The second
important message referred to the very ‘public nature’ (Weinstein, et al., 1982, p. 690) of a teacher’s expectations. A teacher’s positive behaviour and practices may serve to be advantageous for students who notice the regularity of the teacher’s behaviours affording more choices and opportunities for some students than others. Weinstein et al. explained that the ability to have choices may be perceived by the student as a signpost of high academic status, and therefore raised the students’ own expectations of academic performance. The researchers noted that ‘the treatment of others provides standards against which one’s own treatment can be measured’ (p. 690).

Brattesani, Weinstein, and Marshall (1984) conducted two studies that investigated classrooms in which students could perceive differences in the ways that teachers worked with high or low achievers. Brattesani et al. then proposed that students would make changes to their own expectations and implicitly align those to the perceived expectations of the teacher. It was found that the greater the differential teacher treatment in the class perceived by the students, the more likely their own expectations would be more closely matched to those of their teachers’ expectations demonstrating the influence that teacher expectations may have on student performance. The study suggested that changing the student’s own expectations to match that of the teacher was similar to the behaviour of self-fulfilling prophecy effects. That is, the student comes to believe that the teacher’s expectation of the student is true and fulfils the expectations of the teacher. Indeed, Weinstein, Marshall, Sharp, and Botkin (1987) explored whether children could perceive and know how to interpret a teacher’s behaviours and, second whether the children’s perceived differential behaviour of the teacher influenced their own expectations and beliefs about their academic performance. The study showed that there was greater congruency between the teacher’s and students’ own high and low expectations and this congruence was particularly salient among the younger
age groups of six- to seven-year-olds. Therefore, it was likely that students were matching the expectations of the teacher to their own. In addition, the younger age group were as astute as the older-aged 10- and 11-year-olds in recognising differential treatment of high and low achievers by the teacher.

A later study by Kuklinski & Weinstein (2000) explored the stability of classroom learning environments that differed in the extent of teacher differential treatment favouring high achievers over low achievers, as perceived by students. It was found that in classrooms where there was highly differentiated treatment of high and low achievers, the perceptions were more stable across time than in classrooms where differential treatment of high and low achievers was perceived to be more equitable. This result was increasingly evident as children advanced in grades through school. The implications for these results were that if students matched their expectations to those of the teacher (Weinstein et al., 1987), it was likely that student achievement would be low in classrooms where consistently low-level but highly differentiated expectations were expressed.

There have been a number of researchers who supported the claim that teachers’ differential treatment of students can be self-fulfilling (Babad, 1993; Brophy, 1983; Dusek, 1985; Jussim, 1986). In addition, several researchers have added that differential teacher behaviour could mean that students’ opportunity to learn may not be maximised. Teacher differential behaviour also sends messages to students that inform those students of whether teachers think that they are high or low achievers. In terms of the present thesis, such differences in teacher behaviour would signal a cause for concern given that many students from ethnic minority and low socioeconomic groups are overrepresented at the lower end of the achievement scale within the New Zealand context (Ministry of Education, 2014). In addition, studies discussed previously have identified that those who are most at risk of being
influenced by the effects of the self-fulfilling prophecy are those from low socioeconomic and ethnic minority groups (Baron et al., 1985).

The research concerned with students’ perceptions of teacher behaviour demonstrates the extent of knowledge students hold about their teacher. The research has shown that students were cognisant of teachers’ high and low expectations for students perceived to be high and low achievers. As students who are the receivers of a teacher’s high or low expectations, these students were clear about what the teacher behaviours looked like in the studies discussed in this literature review. The other interest to this thesis in relation to the studies of student perceptions of teacher behaviour is what teachers understand about teacher expectations. An extensive search of the literature failed to locate any studies that have explored teacher beliefs about teacher expectations and how teachers’ perceived that expectations would influence student achievement. Study 3 in this thesis is designed to explore teachers’ views of expectations and their potential effects on students. Studies that may add some understanding in relation to teacher perceptions about teacher expectations (Warren, 2002; Weinstein, 2002) will be discussed next.

**Teachers’ perceptions and understanding of teacher expectations**

Warren (2002) examined whether teachers have the same expectations for all students, with particular reference to students of colour and from low socioeconomic backgrounds. Teachers from both poor and middle class schools took part in the study, and the teachers were from a variety of racial backgrounds. The findings suggested that for a majority of the teachers, deficit explanations were given regarding students not doing well at school and for whom they had low expectations, and these were mainly targeted at the students and their families. Warren’s findings revealed that the deficit thinking of teachers was informed by various notions and beliefs that were influenced by a variety of social norms. Warren stated,
teachers often hold hegemonic views, that is, those based on skills or cultural capital valued by the dominant group’ (Applebee, 1996; Delpit, 1988). Study 3 in the thesis examined teachers’ understandings of teacher expectations by having teachers share their own narratives about the impact and influences of teacher expectations.

Weinstein (2002) focused her questions on transformational change for schools that has some bearing on the underpinning beliefs of teachers that Warren (2002) discussed. Weinstein argued that there was a need for changing beliefs and practices in schools. Teachers’ differential expectations can be reinforced or undermined by institutional practices and beliefs. For example, she wanted to see institutional policies based on equitable practices for all students. Weinstein argued the policies not only undermine decisions teachers make for student programmes such as tracking and special education, but they also reinforce deficit beliefs teachers may have of students going into these programmes. Weinstein also argued that change in schools would require teachers to challenge their own belief systems and practices that had the potential to influence students’ learning experiences in significant ways. To do this would mean a focus on oneself, on others, on the history of education and the system, on societal norms, and on the historical influences of biases, stereotypes, attitudes and what is valued in society.

**Summary of international teacher expectation research**

The literature review has sought to account for the expectancy effects of teachers in relation to minority ethnic groups. Starting with a broad overview of the literature on teacher expectation, the influential work of Clark (1965) in the United States came at a time when African American children were living in segregation. This not only illuminated key issues but established a framework for finding a way forward for creating an equitable learning environment for these groups of children. The ethnic inequalities in education were made
more salient during those years as African Americans fought to end racial segregation and discrimination. Even though integration happened in most cases, these inequalities still linger. Knight (1974) identified four intersecting structural elements in schooling which compounded disadvantage for some students, and these had potential impact on educational futures, occupations, and therefore social and economic possibilities. Keddie (1971), on the other hand, focused on curriculum and how she believed curriculum was differentiated for certain groups of students. She identified a link between the knowledge teachers have of pupils and the forms of knowledge to which students are given access. She noted also that teachers associated ability with social class. Keddie and Knight’s work is important to this thesis for the reasons already stated, but also because it provided a backdrop to some recent research conducted in Aotearoa New Zealand (Bishop, Berryman, Glynn, McKinley, Devine, & Richardson, 2001; Bishop, Berryman, Tiakiwai, & Richardson, 2003). Bishop and his colleagues argued deficit thinking and low expectations meant the curriculum was also differentiated for Māori.

Emerging themes in the literature identified a consistent pattern of ethnic minority students being at risk of school failure and a likelihood that this could be related to negative teacher expectancy effects (Baron et al., 1985; Dusek & Joseph, 1983; McKown & Weinstein, 2002; Rist, 1970; Rosenbloom & Way, 2004; Wong, Eccles, & Sameroff, 2003; Tenenbaum & Ruck, 2007; Van den Berg et al., 2010). Another theme was based on the interplay between self-fulfilling prophecy and ethnicity (Cooper & Tom, 1984; Weinstein, 2002). The seminal work of Rosenthal and Jacobson (1986) showed that teacher expectations created a self-fulfilling prophecy. Although critics questioned the findings (Jussim, Robustelli, & Cain, 2009), others argued that self-fulfilling prophecies had a significant influence (Schultz & Oskamp, 2000). However, there was a general consensus that
stigmatised minority ethnic groups were affected. For minority groups of students, a critical and consequential implication of the self-fulfilling prophecy phenomenon was that academic achievement was also affected (see Jussim, Robustelli, & Cain, 2009). The influences of possible stereotypes and implicit prejudiced attitudes of teachers provide possible explanations for teachers’ explicit expectations of their students (Devine, 1989; Steele & Aronson, 1997; Van den Berg et al., 2010).

Students’ perceptions of their teacher’s behaviour can convey further messages of themselves as students, not just in terms of their potential to achieve, but of the nature and level of the tasks they might expect to be assigned. The literature led to understanding how teacher expectations affected the behaviour of teachers and how teacher expectations were perceived by students. Babad and colleagues (Babad, 1990; Babad, Bernieri, & Rosenthal, 1991; Babad & Taylor, 1992; Babad, Bernieri, & Rosenthal, 1989) provided strong evidence that students were perceptive in understanding the finest nuances of teacher behaviour.

Weinstein and her colleagues (Brattesani et al., 1984; Weinstein et al., 1982; Weinstein et al., 1987; Weinstein & Middlestadt, 1979) have shown that students are capable of identifying and, further to that, can articulate, types of differential behaviours teachers display pertaining to high and low achievers. Ethnic identification and knowledge of stereotypes by students are known to increase with age (Ambady, Shih, & Pittinsky, 2001). Students’ perceptions of others in terms of differences start at about five years of age (Robinson & Jones Diaz, 2006). Other studies have identified that children are capable of making social judgements (Hirschfield, 2008) and become susceptible to cues that may endorse a stereotype (Quintana & McKown, 2008) such as prejudices and discrimination (Augoustinos & Rosewarne, 2001; McKown & Strambler, 2009). Essentially children perceive their social world with awareness at a very early age. The studies highlighted important implications that were
relevant to this thesis particularly in relation to the possible outcomes for minority ethnic groups in Aotearoa New Zealand.

Finally, the behaviours and practices that teachers employ in interacting and relating with students are governed in part by the belief systems of teachers and those beliefs may be influencing the expectations teachers have of their students (Warren, 2002; Weinstein, 2002). Teachers’ beliefs, and what teachers understand about what influences a teacher’s expectations is of particular interest to Study 3.

**Teacher expectation research in Aotearoa New Zealand**

The research on teacher expectation in Aotearoa New Zealand has often been in reference to there being a strong correlation between teacher expectations and student achievement (Bishop, 2005; Phillips, McNaughton, & MacDonald, 2001; St George, 1980; Timperley, Robinson, & Bullard, 1999). How teacher expectations manifests in classrooms has been the subject of debate in Aotearoa New Zealand (Education Review Office, 2013; Bishop, 2005; Ministry of Education, 2014) and recent research has begun to measure the impact of teacher expectations on student achievement (Rubie-Davies et al., 2006; 2008; Peterson et al., 2016; Turner et al., 2015). Several decades of research and initiatives to increase the academic achievement for Māori and Pasifika students have not made great differences to achievement (Ministry of Education, 2014).

The Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) ‘evaluates the quality, equity and efficiency of school systems in some 70 countries’ (OECD, 2010, p. 3). PISA monitors the educational outcomes of education systems in each country within an internationally agreed framework. Aotearoa New Zealand students have completed PISA tests, which, since 2000, has been a triennial event (Ministry of Education, 2016). PISA results have shown that the education
system in Aotearoa New Zealand provides high quality education, but also that inequality in educational outcomes is substantial, and there is a long ‘tail’ of underachievers (OECD, 2012). The major ethnic groups that are in this tail of underachievement are Māori and Pasifika students and therefore some groups of students are not receiving equitable access to learning (Marshall, Caygill, & May, 2008). To improve these outcomes, schools are focusing on the fact that Aotearoa New Zealand classrooms are heterogeneous and that there is no classroom where ‘one size fits all’.

**The influence of teacher expectations**

Although teacher expectations were not measured, several of the education studies in Aotearoa New Zealand argued that teacher expectations influenced how teachers practised and perceived their students. Research in Aotearoa New Zealand has examined a number of possible reasons why such achievement differences in Aotearoa New Zealand occur. Coxon, Anae, Mara, Wendt-Samu, and Finau (2002), in a review of the literature on the education of Pasifika students, identified a number of factors which they claimed needed to be taken into account. They found that low teacher expectations, lack of a holistic approach in terms of a student’s mental and spiritual well-being, the use of inappropriate pedagogies, and little inclusion of indigenous culture, language, and culturally relevant text books all contributed to low Pasifika achievement.

Timperley et al. (1999) located their research in South Auckland primary schools in a very low socioeconomic area. They included a high percentage of Māori and Pasifika students in their study and found teachers identified barriers to learning as deficits they perceived in the students and their families rather than pedagogical practices, educational structures, or a mismatch between the instructional practices of home and school. In other words, teachers’ initial perceptions of barriers to learning for Māori students were considered
outside, rather than within, their control. Phillips et al. (2001) also worked in primary schools in low socioeconomic areas with the aim of improving the literacy levels of new entrant and Year 1 students, many of whom were Māori and Pasifika students. This project involved an innovative, intense intervention literacy programme aimed at raising student literacy levels. The study highlighted how a change in the way teachers’ practice, with teachers having high expectations of their students could make a difference. Further studies in Aotearoa New Zealand (Biddulph, Biddulph, & Biddulph, 2003; Alton-Lee, 2003; Timperley, 2003) have found that teacher expectations for minority ethnic students have played a part in determining the social, emotional and academic learning outcomes for students.

Carpenter, McMurchy-Pilkington, and Sutherland (2001) wanted to determine what characteristics defined an effective and successful teacher for ‘poor urban schools’. Effective teachers were identified by professional colleagues and visitors to the schools, including lecturers, school advisors, and those involved in teacher preparation and development. The study identified nine teachers and ascertained eleven beliefs and values common to the nine teachers selected for the study. The teachers were goal driven and keen to reflect on their practice. They consistently sought professional development, built relationships with students, were non-judgemental, had high expectations of every child, and loved and cared for their students. In addition, the teachers attempted to understand what it was like to ‘walk in the shoes of others’. These teachers had an effective, creative, and interactive pedagogy; they extended their classrooms into the community, modelled successful learning and social interactions, and empowered their students. The study identified the schools in terms of ‘social class’ rather than ethnic diversity; the reality is that structural inequalities in Aotearoa New Zealand have a clearly defined class/ethnicity intersection, so that the majority of the
children in the low decile South Auckland schools are from Māori and Pasifika families (McNaughton, MacDonald, Amituanai-Toloa, & Farry, 2006).

Teacher expectations were an important element in the study by Phillips et al. (2001). The researchers examined the transition for students from early childhood centres to primary school with the aim of improving literacy instruction for a group of students attending low decile schools. As part of their study, they found that effective teachers knew their students well, provided feedback that matched the student’s level of understanding, were motivating, and had high expectations of their students. Such teachers increased the literacy progression of students over the first six months of school. Phillips et al. did not aim to study Māori and Pasifika students specifically; however, the schools involved in their research had high percentages of Māori and Pasifika students from low socioeconomic backgrounds.

Other studies conducted in Aotearoa New Zealand have shown that teachers with high expectations were important in making a difference to learning and student self-esteem. For example, Te Kotahitanga, a kaupapa Māori research project, had several phases that involved a number of key researchers aimed at improving the educational achievement for Māori secondary students. Some of those involved (Bishop, 2005; Bishop, Berryman, Glynn, McKinley, Devine, & Richardson, 2001; Bishop, Berryman, Tiakiwai, & Richardson, 2003) found students reported that many of their teachers had low expectations of them and that deficit thinking was embedded in the unconscious of teachers who often identified dysfunctional families and home conditions and low socioeconomic status as reasons Māori students were failing. In addition, assimilating pedagogical practices led to marginalisation, low academic achievement, and disproportionately high suspension rates. Bishop et al. (2003) argued that if teachers did what was expected of an effective practitioner, had greater awareness and understanding of the student culture, and high expectations of their Māori
students, then academic levels would increase. To explain further, Bishop’s later (2005) work focused on an in-depth discussion on the phenomenon of pathologising the lived experiences of indigenous Māori students. Pathologising is defined as:

[A] process where perceived structural-functional, cultural or epistemological deviation from an assumed normal state is ascribed to another group as a product of power relationships, whereby the less powerful group is deemed to be abnormal in some way. Pathologizing is a mode of colonisation used to govern, regulate, manage, marginalise, or minoritise, primarily through hegemonic discourses. (Shields et al., 2005, p. x)

The intention of Bishop was to show how such a phenomenon occurred. That is, how pathologising practices manifest, and ultimately impact on students’ lives, and how the phenomenon is institutionalised in schools. Bishop argued that when students’ lives were pathologised, their differences such as ethnicity and academic ability were treated in deficit ways. Home and socioeconomic background were expounded by teachers as reasons the students did not do well at school. Bishop argued that the teachers had not considered locating the responsibility for what happens in the classroom or indeed, the education system itself. Waitere-Ang (2005) added to this debate, suggesting that educational attainment for Māori and Pasifika students lay in the social, cultural, and political landscape in Aotearoa New Zealand. She examined norms and the process of normalisation and argued ‘that, for the most part, educational success and failure lies not primarily within the control of the individual student, but in the politics of difference’ (p. 347). Waitere-Ang suggested the difference was between what is valued and normalised in one society and denied in another. The research above discussed the influence of teacher expectations even though that had not been directly investigated in Aotearoa New Zealand. The following section will discuss
research that has investigated teacher expectations and in particular the impact of teacher expectations on Māori and Pasifika students.

**The measured influences of teacher expectations**

Early research that began to examine the impact of teacher expectations was that of Nash (1973), who investigated the behaviour of teachers and children in the classroom setting across a range of primary and secondary schools and how teacher expectations could act as self-fulfilling prophecies. Nash found that students in classrooms knew where they stood academically by the implicit ‘messages’ underlying teacher behaviours. He argued that these implicit messages, portrayed through the organisation of the classroom and the teacher’s perceptions, attitudes, and expectations, were highly influential in determining the learning behaviour of students. Another study by St George (1983) investigated teacher expectations and teacher perceptions of Māori, Pasifika, and Pākehā students in relation to classroom behaviour and achievement. Her study examined five ethnically diverse primary classrooms and identified that negative perceptions and expectations for Māori and Pasifika students led the teachers to treat them the same as those with low ability. This behaviour meant that Māori and Pasifika students were frequently seen to be of low ability and would find moving out of the cycle of underachievement more difficult to do.

Recent studies on the effects of teacher expectations for Māori and Pasifika students (Peterson et al., 2016; Rubie-Davies et al., 2006; Turner et al., 2015) have added significantly to the field of teacher expectation research in Aotearoa New Zealand. Rubie-Davies (2015) identified teacher expectations for Māori and Pasifika students as being an important factor in maximising students’ opportunities for learning. Rubie-Davies et al. (2006) examined whether there were differences in teacher expectations and judgements of students in reading for various ethnic groups, and whether differences aligned with social class and achievement.
Students were from 12 different primary schools located in Auckland, Aotearoa New Zealand. The findings suggested that teacher expectations, after controlling for achievement, were higher for New Zealand European, Asian, and Pasifika students than they were for Māori. The authors concluded that ethnicity was the influencing factor for Māori and not student achievement or social class because Pasifika students, who are also mostly located in low socioeconomic areas, were achieving below Māori, yet expectations for Pasifika were high.

A subsequent study by Turner et al. (2015) examined the relationships between teacher expectations and ethnicity in the secondary school context. Turner et al. investigated why teachers had high expectations for some students and not for others. The researchers were also interested in the teachers’ perceptions of the different ethnic groups they were teaching, and what the teachers believed were the reasons Māori students were not achieving. The study was conducted in five urban secondary schools that included 15 mathematics teachers and 361 Year 9 and 10 students. The researchers found after controlling for achievement that differences in teacher expectations were evident across ethnic groups. Teachers had higher expectations for Pākehā and Asian students and lower expectations for Māori and Pasifika students. The study also revealed that teachers tended to have deficit explanations for why these groups of students did not do so well at school. Both these studies, Rubie-Davies et al. (2006) and Turner et al. (2015), demonstrated that teachers’ explicit expectations were evident; however, that did not seem to be the case for a later study by Peterson et al. (2016).

Peterson et al. (2016) examined teachers’ explicit ethnic-based expectations and implicit prejudiced attitudes related to academic achievement over time. The study involved 38 teachers who responded to a modified Implicit Association Task designed to assess teachers’ ethnic stereotypes associated with academic achievement and failure. Peterson et al.
explained that stereotypes or a teacher’s implicit prejudiced attitude toward a particular student may be influential in shaping a teacher’s expectations of their students and academic outcomes. The researchers pointed out that stereotypes and explicit prejudices are conceptually different from implicit stereotypes and implicit prejudices, in that they are cognitively distinct structures. Different pieces of information that may derive from these two constructs would have different implications when evaluating members of a stereotype group. Peterson et al. showed that when the teachers’ implicit prejudiced attitudes for academic achievement in mathematics and reading were measured, it was found that European and Māori were shown to be affected by the teachers’ implicit attitudes in mathematics only. The explicit teacher bias predicted expectations in reading. The difference in the finding may be because students are ability-grouped for reading, a practice typically found within the context of Aotearoa New Zealand classrooms. In this case, students are likely to perceive the messages about their ability from the teacher; therefore explicit bias may have had more of an effect. On the other hand, students are not grouped to the same extent in mathematics as they are in reading. Therefore, students may be picking up the messages more subtly through implicit messages by the teacher. The findings from the research suggested that there was a possibility that teachers may hold implicit stereotypical biases towards Māori, in particular, but when the explicit expectation of a teacher is being measured, the teacher may be reluctant to report on actual explicit bias. These few studies on teacher expectations are pertinent to this thesis because the thesis will explore teachers’ explicit expectations, as well as exploring what teachers understand of teacher expectations both explicitly and implicitly.
Summary of the Aotearoa New Zealand research

Research conducted in Aotearoa New Zealand has provided important background knowledge on the possible influences that may have shaped the expectation of teachers (Bishop, 2005; Coxon et al., 2002; Simon & Smith, 2001; Waitere-Ang, 2005). Important to the study is an understanding that the PISA and OECD data has shown that Aotearoa New Zealand has comparatively high quality education with low equity. Māori and Pasifika students are not succeeding to the same degree as other students. St George (1983) found negative perceptions and expectations for Māori and Pasifika children led teachers to treat them as if they had low ability, which perpetuated a cycle of underachievement. Carpenter et al. (2001), McNaughton et al. (2006), and Phillips et al. (2001) found that in lower socioeconomic areas, teachers’ positive dispositions empowered students. Effective teachers knew their students, gave appropriate feedback and had reported high expectations of their students. The research of McNaughton et al. (2006) and Phillips et al. (2001) was in schools in low socioeconomic areas which also had a high percentage of Māori and Pasifika students. Rubie-Davies, et al. (2006) and Turner et al. (2015) wanted to know why teachers had high expectations for some students and not others. They found that teachers had different expectations for different ethnic groups; higher for Pākehā and Asian, lower for Māori and Pasifika in the secondary context, and lower for Māori in primary schools. Importantly, Turner et al. noted that teachers revealed deficit explanations for poor student achievement. Peterson et al. (2016) examined teachers’ explicit ethnic expectations and implicit prejudiced attitudes. Implicit prejudiced attitudes were found to influence teacher expectations of student academic outcomes. Peterson et al. looked at how a teacher’s personal belief may consciously or unconsciously affect a teacher’s behaviour. They found that in mathematics, teachers’ implicit prejudiced attitudes meant that they had lower expectations for Māori than for European. This significantly affected Māori student achievement. Several articles have
been published in relation to the Te Kotahitanga research project, including, Bishop (2005), Bishop et al. (2001), and Bishop et al. (2003), all of which found that students knew when teachers had low expectations of them. They also found that teachers identified socioeconomic status and family life as an explanation for Māori student failure. On a positive note, McNaughton and MacDonald (2001), Biddulph et al. (2003), Alton-Lee (2003), and Timperley (2003) found that a change in teacher practice to having high expectations underpinned by the belief that students can achieve, can make a difference to student achievement.

The aims of the thesis

This thesis comprises three studies and aims to integrate key aspects of the literature on teacher expectations into the studies. Hence, teacher expectations of minority students, students’ perceptions of their teachers’ behaviours’, and what teachers perceive and understand about teacher expectations are examined in the next three chapters. Study 1 investigated whether there were variations in teacher expectations depending on the ethnicity of the students, and in particular for Māori and Pasifika students. The study was designed to ascertain if teachers did vary in their expectations of their students. The aim of Study 2 was to explore students’ perceptions of teachers’ behaviours and the messages students were receiving from the teacher’s behaviour, either explicitly or implicitly. The study was the first to explore students’ perception of teacher behaviour in classrooms in Aotearoa New Zealand and the first to use the Teacher Treatment Inventory (Weinstein, & Middlestadt, 1979; Weinstein et al., 1987) outside of the United States to measure student perceptions of teacher behaviour. Study 3 was interested in how teachers perceived and understood teacher expectations. The study used teacher narratives to gain an understanding of their notions of teacher expectations and in particular the perceived influences of teacher expectations on
Māori and Pasifika students. To date there have been no studies conducted in this area in Aotearoa New Zealand or within the international arena, as far as the author is aware. The findings from the three studies are used later in the thesis to consider the theoretical and practical implications of the research.
Chapter 3

Study 1: Teachers’ expectations of their students

Teacher expectations have been found to relate not just to the students’ academic achievement but to a number of other characteristics such as gender, student attractiveness, social class, and ethnicity (Dusek & Joseph, 1985). It is not surprising that teachers have differing expectations of their students’ abilities to achieve (Good & Brophy, 1997; Brophy, 1983; Weinstein, Madison, & Kuklinski, 1995; Weinstein, 2002) but what is surprising and concerning is that the differences in expectations have been found to relate to characteristics such as social class, ethnicity, and gender. In Aotearoa New Zealand, a number of researchers have explored the nature and implications of teacher expectations (see Rubie-Davies, 2007, 2004; Timperley, 2003; Bishop, Berryman, Richardson, & Tiakiwai, 2003, for some examples). Study 1 also examined the implications of teacher expectations but with a focus on minority ethnic groups, in particular Māori and Pasifika students attending primary schools in Aotearoa New Zealand. The section below describes the participants in this study and also outlines the measures and procedures used to gather the data, and the processes through which these data were analysed. This is followed by the presentation of the results for Study 1, a discussion of the implications of the results, and, finally, the summary of the chapter. This study explored the research question: Are there variations in teachers’ expectations depending on the ethnicity of their students?
Method

Participants

This study included 57 practising primary school teachers of whom 30 identified as European/Pākehā, 9 as Māori, 10 as Pasifika, and 8 as ‘other’. The gender distribution of the teachers was 47 female and 10 male, all teaching in a range of classes from Years 4–8. Four were teaching in a rural school, nine teaching in a provincial area of the upper half of the North Island of New Zealand and the rest of the teachers were teaching in city schools. In this study, there were a total of eight schools. Five schools were from low socioeconomic (deciles 1–3) and three from mid-range socioeconomic (deciles 4–6) communities. High decile schools were not included as most Māori and Pasifika Year 4-8 students are located in low to middle decile schools (Ministry of Education, 2014). (See below for an explanation of the school decile system.)

With an alpha = .05 and power = 0.95, the projected sample size needed for this study was $N = 162$ (GPower 3.1) for simple comparisons. Since the four main ethnic subgroups were of particular interest, and to allow for attrition, the minimum sample size was set at 656 ($162 \times 4$). The final number of students was 754 Year 4–8 students after students with missing data were removed (missing data is explored further in the Data Analysis Plan section, below).
The numbers per year group and their ethnic breakdown are represented in Table 1.

Table 1
Total Number of Students in Year Groups and by Ethnicity

<table>
<thead>
<tr>
<th>Year Group</th>
<th>European/ Pākehā</th>
<th>Māori</th>
<th>Pasifika</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y4</td>
<td>72</td>
<td>18</td>
<td>46</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Y5</td>
<td>27</td>
<td>32</td>
<td>85</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Y6</td>
<td>45</td>
<td>32</td>
<td>93</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Y7</td>
<td>25</td>
<td>38</td>
<td>44</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Y8</td>
<td>21</td>
<td>28</td>
<td>46</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td>148</td>
<td>314</td>
<td>42</td>
<td>60</td>
</tr>
</tbody>
</table>

Patton’s (1990) model of purposive sampling suggests targeting a particular group of people. Purposive sampling was used for this study because the method provides rich information for in-depth analysis. Sampling is a strategy for selecting a smaller section of the population that will accurately represent the ‘events, incidence, and experiences’ (Patton, 1980, p. 180) of the target population. Some of the strategies used in this type of sampling serve a particular data gathering and analytical purpose. Participants were selected based on meeting given criteria; they had to be students in Years 4–8, taught by registered teachers, and from the lower to mid decile schools to ensure a sizeable sample of Māori and Pasifika students.

School deciles

New Zealand schools are assigned a 1–10 decile rating. This system was put in place to address the educational inequity for those disadvantaged by poverty; the decile system provided a means of distributing extra funding to those schools that have high proportions of these students. The Ministry of Education uses census data and gets ‘a random selection of
students on each school roll’ (Post Primary Teachers’ Association, 2013. p. 2); those students are mapped on to a mesh block made up of about 100 houses belonging to a common geographic area. ‘The students are then assigned values from their mesh block and rated on five factors’ (p. 2). These are household income (the percentage of parents in the lowest 20% income bracket nationally), parents in the lowest occupational groups, household overcrowding, parents’ educational attainment, and whether or not the student’s family is receiving income benefits from the government.

Schools that take students who meet the criteria above receive proportionately greater funding from the government. Decile 1 schools are the 10% of schools with the highest proportion of students from low socioeconomic communities, and at the other end of the scale, decile 10 schools are the 10% of schools with the lowest proportion of these students (Ministry of Education, n. d.).

**Measures**

In the field of teacher expectations, when measuring bias, the most commonly used methods have involved self-report procedures that reflect explicit bias (e.g., Babad, 2009a). This type of measurement asks the participants to use their evaluative judgement which is a controlled behaviour, meaning that the participant’s response is a conscious one and one that they can control. For Study 1 the prime focus was to determine whether ethnic bias was a factor in shaping teacher expectations of their students. The nature of such bias was not relevant to the purpose of the study. The teacher assessment survey, outlined below, was therefore selected as an appropriate measure to determine possible bias in relation to ethnicity in the expectation of the teachers who participated in Study 1.
Teacher Assessment Survey

The Teacher Assessment Survey (TAS) was developed and refined by Rubie-Davies (2004). The survey was designed to measure teachers’ expectations of their students’ achievement in reading by the end of the year. A Likert scale entailed seven responses ranked in order from lowest to highest (Cohen, Lawrence, & Morrison, 2002). 1 = very much below average, 2 = moderately below average, 3 = just below average, 4 = average, 5 = just above average, 6 = moderately above average, and 7 = very much above average. The teachers’ estimations were considered to represent their expectations of where each student would be achieving by the end of the year. Each of these scales was aligned with the New Zealand Curriculum levels 1–8 (Ministry of Education, 2007).

The New Zealand Curriculum sets the direction for student learning and provides the basis for guiding schools on the eight essential learning areas: English, science, mathematics, the arts, physical education, technology, social sciences and languages. The New Zealand Curriculum is a flexible document and schools are expected to personalise the national curriculum to their community and learning context so that the teaching and learning is responsive to their students. Each essential learning area has a set of achievement objectives that are levelled from 1–8, representing progress from surface to deeper learning. An average student spends approximately two years at each level of the curriculum. Therefore, Year 4 students will typically be achieving at level 2 of the curriculum, Year 5 students between levels 2 and 3, Year 6 at level 3 and working toward level 4, Year 7 typically between levels 3 and 4 and Year 8 at level 4, working towards level 5 objectives.

To explain how the Teacher Assessment Survey aligns with the curriculum levels can be demonstrated by an example. Typically a Year 4 student would be performing at level 2 of the curriculum. If the teacher estimated their Year 4 student would be a 1 or 2 on the Likert
scale (very much below average) by the end of the year, the student would be less than half way to completing level 1 of the curriculum. A score of 3 on the Likert scale would suggest a teacher’s estimation that the student would be beginning curriculum level 2 and if a 4 was chosen, the student would be almost completing level 2 by the end of the year. For a 5 on the scale, the student would have completed half of curriculum level 3 and a 6 on the Likert scale would mean the student had completed level 3 of the curriculum. If 7 on the Likert scale were chosen, the student would be working at level 4 of the curriculum or above by the end of the year. If a student received 4 on the Likert scale, this would mean they were considered to be where they should typically be for that year level.

**Assessment Tools for Teaching and Learning (e-asTTle)**

Assessment data were collected for students using the electronic Assessment Tools for Teaching and Learning (e-asTTle). This electronic tool produces computerised adaptive tests using a linear programming method that incorporates Item Response Theory (IRT). IRT is ‘widely used in education to calibrate and evaluate items in tests, questionnaires and other instruments to score subjects on their abilities, attitudes or other latent traits’ (An & Yung, n.d., p. 1). In this sense, teachers are able to select calibrated items that are the most appropriate for a test based on various constraints such as testing time, difficulty, and type of content, and they can compare the scores across different subsets of items. This enables schools to compare and evaluate student scores between classes and among schools locally and nationally (Fletcher, 2000).

The e-asTTle tool is an optional assessment tool based on the official New Zealand curriculum statements of the learning objectives, and is calibrated to both national norms for sub-groups and populations on the one hand, and achievement standards within curriculum levels on the other (refer to the e-asTTle website at: http://e-asuttle.tki.org.nz/About-e-
The e-AsTTle provides teachers with a New Zealand curriculum-based assessment system for reading, writing, and mathematics. The e-asTTle reading and mathematics tests assess levels 2–6 of the curriculum, while writing tests assess levels 1–6 of the writing curriculum.

This tool allows teachers to create short tests from about 12–15 minutes up to 40 or 60 minutes, depending on the purpose. Tests can be completed online or manually with pen and paper. The e-asTTle analyses the test responses and provides teachers with a set of graphic reports that includes reporting against national norms, comparison of groups, diagnostic information at the student and class level, and reports on levels of achievement aligned to the New Zealand curriculum (Ward, Hattie, & Brown, 2003).

In the current study, an e-asTTle test for reading was created electronically by the researcher that matched the student year levels. This was a 40-minute paper test chosen to match the curriculum year levels for Years 4 through to 8. Therefore the test varied for each year level but because of the way in which the items are calibrated, students should score very similarly no matter what test they take. As the students were unknown to the researcher, the assigned test was based on the average achievement level for each year group. To accommodate for the possible different levels of a child, each test was created across two levels. For example, for the students in Year 4, the researcher chose ‘most’ of the questions to be at level 2 and ‘some’ to be at level 3, to accommodate those that may be achieving close to or at level 3 of the curriculum.

**Procedures**

Having gained ethics approval for the study (Reference Number 2010/455), permission to involve the teachers and students in the research was sought through a phone call and email,
followed by a visit to the principals of schools who agreed to participate. Each principal, board of trustees, and teacher was given an information sheet informing them of the research, and a consent form if they wished to participate (refer to Appendices A1, A2, A3, and A4). In explaining the research to the teachers, it was important not to use the term ‘teacher expectations’ to ensure a frank and open response to the questions, and a correspondingly accurate representation of their projected expectation of their achievement in the research process. Acknowledgement of this as a possible form of deception was a requirement within the ethics process. Teachers had their students take home the information and consent forms (refer to Appendices A5, A6, and A7) to their parents to inform them of the research and to give permission for their child to be involved in the study. At the same time, students were given an assent form (refer to Appendix A8) to sign that would also give their agreement to participate.

At the beginning of the year between weeks 3–5, teachers were given their Teacher Assessment Survey to fill out (see Appendix B). Raudenbush’s (1984) meta-analysis showed that teachers had formed their expectations by the second week of school and tended not to change them even after there was contradictory evidence. Teachers were instructed to estimate the level of achievement each student would have attained in reading by the end of the year and score them a number between 1 and 7 (see above in the ‘Measures’ section). The teachers were also asked to record their name, the class level they were teaching, and ethnicity. The purpose in having teachers complete the survey near to the beginning of the year was to give them a few weeks to get to know their students. This was also appropriate because it was at a point in which formal testing for reading would not have begun for the year. However, it is normal practice when students move from one year to the next that they will come with previous data and other information such as student profiles, school reports,
and anecdotal notes that can be either written or communicated between teachers. This helps the teacher to build a picture over time of a child’s probable progress and achievement in learning across the curriculum. This information may also enable a teacher to identify how a child learns, what they have learnt, and enable teachers to provide the appropriate support for learning. Therefore, although teachers would have had some information about their students, more recent achievement results would not be available until later in the school term, usually weeks 6 or 7.

At the beginning and at the end of the year, a team of four people including the researcher delivered the e-asTTle reading tests and teacher surveys in the schools that agreed to participate in the study. Teachers filled out the surveys either outside the class in a quiet space or in the class while the students were completing an e-asTTle reading test and were being supervised by a member of the research team. Once the tests were completed they were collected, as was the survey, and returned to the researcher.

The paper test contained multiple-choice and open-ended questions. Students were asked to record their first name, school, teacher’s name, and room number on the front of the test sheet. The teacher’s name was asked to be recorded in case students did not record their room numbers, and also for ease of coding. Practice items were provided and the researcher went through the questions with the students. This was a collaborative exercise to ensure all students understood the types of questions they may find in the test to follow. Students were reminded this was a reading test and that they needed to read each script carefully. The test was administered and students were given 40 minutes to complete, at which time they were asked to put their pens down and the tests were collected. The second test in Term 4, toward the end of the academic year, followed the same procedure.
**Data analysis plan**

The results of the multiple-choice reading tests were entered into the e-asTTle software. A response table lists the questions and a mark is given for each question. A marking guide provides marks for the open-ended questions. Once all the marks had been entered, the results were viewed in a report. The report, among other assessment information, provided a curriculum level and an overall reading score (Ministry of Education, 2010).

All teacher surveys and student ethnicities were first entered into the Smartadata program designed by Davies (2010). The Smartadata program was designed to allow the input of large numbers of data to be recorded effectively and rapidly for the researcher. Those students who identified as belonging to an ethnic group other than European/Pākehā, Māori, Pasifika, or Asian were categorised as ‘other’. Before the reading achievement scores were entered into the Smartadata program, the data were ‘cleaned’. The data cleaning was performed separately in Excel before loading the transformed data into SPSS for analysis. Cleaning the data meant removing students who did not take both reading tests: that at Time 1 (T1) at the beginning of the year and at that at Time 2 (T2) at the end of the year. Both test results were needed for sufficient information to be available to ascertain student progress across the year, and to be able to compare the achievement scores with the teacher expectation scores. Of the 1,031 students who gave consent, 277 students were excluded from the data because they were not present for one of the achievement tests. There were several reasons why students were not available for both tests; these included illnesses, being involved in group projects elsewhere in the school, attending the school dentist, having specialised tuition outside of the class, or attending other education programmes outside the school.
Due to the relatively large proportion of students who could not be included as a result of missing data (27%), one must consider the possibility that this affected the conclusions in this study. A t-test was conducted to compare the baseline achievement of students who were treated as missing (due to missing one of the data collection points) with those who had all measures. There was no significant difference in baseline achievement. However, a chi-square test of the differences in student characteristics indicated that there were no differences in gender or year level of the missing students, but that Māori students were significantly more likely to be not present at time 2. Apart from making all attempts to arrive at the school when most students would be available, it was not possible to mitigate the loss of data in any other way. Imputation of the missing achievement data was not possible, since students only had one other achievement result. In light of this, it is imperative the analyses conducted as well as the conclusions made about this study take into account the fact that one-third of students could not be followed up.

The cleaned data were then transferred into SPSS (2011) and descriptive statistics and multiple regressions using Blockwise Entry method (Field, 2009) were employed to ascertain if there was bias in teachers’ expectations of student achievement and whether this differed depending on the ethnicity of the student. Regression was chosen as the method of analysis for two reasons. First, at the time that this study was designed, in 2009, regression was the most common analytic method used in the field of teacher expectations. Using the same methodology allowed this study to be comparable to these previous studies. Second, it was important to the researcher that the results be as accessible as possible to teachers, since this is a population for whom these results have particular significance. However, multilevel modelling methods are now the recognised method for analysing nested data such as students within classrooms, and represent a more accurate way of estimating effects within a
hierarchical data structure. The intraclass correlation coefficient provides an indication of the extent to which a multilevel modelling method is beneficial. Partitioning of the variance relating to student achievement data indicated 32% of the variance was at higher levels (class and school), while for the teacher expectation measure, this figure was 18%. Therefore, in both cases, it was possible that the structure of the data could affect the results, so hierarchical linear models (HLMs) were conducted to verify the models reported in the results section. Since the conclusions were identical for both conventional regression and the HLMs, the conventional regressions are reported for the reasons outlined.

**Dummy variables**

Dummy variables were created for the multiple regressions for the purpose of sorting the ethnicity data into mutual categories. The variable ethnicity is regarded as a polytomous categorical variable and in this study there were five categories. Students identifying as European/Pākehā were combined into a single category with students of ‘other’ ethnicities because these students had a similar achievement profile as students who identified themselves as European/Pākehā (those in the ‘other’ category were predominantly European but not of New Zealand descent). This reduced the number of categories from five to four. The ethnic groups were then re-coded into three categories using the formula \( n-1 \), giving a total of three dummy variables (Field, 2009). European/Pākehā/’other’ took the value of 0 and served as the reference category, forming the basis for comparing the effects of the other ethnic categories (Brambor, Clark, & Golder, 2006). European/Pākehā was selected as the reference group because the largest number of students was in that group.

**Centring the data**

Before starting the multiple regression analyses, the students’ achievement scores were centred by subtracting their average reading scores from the year levels for the e-asTTle
national norms. This took into account differences in student achievement and progress by year levels. For example, a student at Year 4 receiving an average reading score of 1500 has a very different meaning for a Year 8 student receiving the same score. Centering also helps to avoid issues of perfect multicollinearity, and to improve interpretability of the intercept (Brambor et al., 2006). These achievement scores are recorded as $T_{1asTTlevNorm}$ in Table 3. $T_{2asTTlevNorm}$ is the dependent variable (DV) noted at the bottom of Table 3.

Teacher expectation ratings ranged from 1–7, and to ensure that the intercept remained interpretable it was necessary to centre the teacher expectation rating by subtracting each of the teachers’ rating for students by the teacher expectation mid-point scale of 4. It was also decided to centre the teacher expectations ratings by the overall means for year levels. Although conceptually the scale of 1–7 should be the same across year levels, there was evidence that this was not the case. When teacher expectations were centred by year level, the scores shifted for students of different age groups. It was found that the scores for teacher expectations were lower for Year 4–6 students and higher for Years 7–8 (refer to Table 2).

Table 2
Descriptive Statistics for Teacher Expectations Centered by Year Level

<table>
<thead>
<tr>
<th>Class Level</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>TAS* (Criteria level) 160</td>
<td>4.58</td>
<td>1.2</td>
</tr>
<tr>
<td>5</td>
<td>TAS (Criteria level) 173</td>
<td>4.47</td>
<td>1.3</td>
</tr>
<tr>
<td>6</td>
<td>TAS (Criteria level) 203</td>
<td>4.57</td>
<td>1.3</td>
</tr>
<tr>
<td>7</td>
<td>TAS (Criteria level) 112</td>
<td>4.73</td>
<td>1.2</td>
</tr>
<tr>
<td>8</td>
<td>TAS (Criteria level) 102</td>
<td>5.19</td>
<td>1.4</td>
</tr>
<tr>
<td>Overall TAS</td>
<td>750</td>
<td>4.66</td>
<td>1.3</td>
</tr>
</tbody>
</table>

* Teacher Assessment Survey
The data in this study showed that 4.6 was the average score for Year 4 students ($SD = 1.2$) and 5.2 for Year 8 students ($SD = 1.4$). Given this, while 5.2 is an average score for a Year 8 student, if a Year 4 student got a score of 5.2 this would suggest the teacher had higher expectations of that student than other students. Centring within the year level allowed for the expectation score of the teacher to be relevant to the student the teacher was scoring. However, the results were similar irrespective of centring method, so this study has reported on the original teacher expectation data centred on the teacher expectation mid-point scale of 4. This was given precedence since the teacher expectation scale is aligned with the New Zealand curriculum (Ministry of Education, 2007). Given this, a teacher expectation score of 4 is interpreted as being equivalent regardless of year level. A 4 means that the teacher thinks the student will be achieving at an average level relative to the curriculum expectation for their age. For the rest of the scores on the scale, they also applied across all year levels. A teacher expectation score between 1 and 3 means the student is below or very much below average regardless of the year level. This applies also for scores above the average; that is, between 5 and 7 means students are considered above or well above the mean.

**Results**

Two multiple regressions using the Blockwise Entry method (Field, 2009) were performed. One of the regressions investigated whether there was bias in teachers’ expectations of students and whether this bias differed by ethnicity after controlling for achievement. The other regression investigated whether teacher expectations predicted end-of-year achievement for different ethnic groups after controlling for beginning of year Time 1 (T1) reading achievement. This was to determine whether any bias detected translated into student achievement and levels of progress. The main factors investigated were achievement,
teacher expectations, and ethnicity. Interaction effects were explored to see whether there were differences in the effect of teacher expectations among students of different ethnicities.

**Assumption of normality**

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. The collinearity tests indicated that multicollinearity was not a concern since the variance inflation factors (VIF) were less than 10 and tolerance was above .10 (refer to Table 3), indicating there was enough information in the data to estimate the model parameters accurately (Brambor, Clark & Golder, 2006). The data also met the assumption of independence with the Durbin-Watson value = 1.76. Values less than one or greater than three would be cause for concern. A value of two is considered as good as it is possible to get in terms of meeting the assumption of independence (Field, 2009). The assumption of normality was assessed using Kolmogorov-Smirnov (K-S) with Lilliefors correction. The test was significant at the \( p < .05 \) level suggesting normality was not a reasonable assumption. However, while normality tests are useful, they are fallible.

Educational data have a degree of randomness and can tend to not follow a normal distribution (Micceri, 1989; Sawilowsky & Blair, 1992) and the \( p \)-value is likely to be affected by sample size (Wells & Hintze, 2007). If there is a medium to large sample size, as this study had, then the power to detect any departure from normality becomes high (Meissel, 2014). The absolute value of the statistic, however, is unaffected by sample size and gives a better impression of whether normality is a problem. An absolute value of <.052 is a relatively small departure from normality. While the normality test used is a more formal procedure for testing whether a particular data set follows a normal distribution, it is also useful to look at the graphical methods such as the Normal Quantile - Quantile Plot (Q-Q
Plot) and the histogram which had a mean of $-3.041 \times 10^{-16}$ and standard deviation of 0.99 suggesting a normal distribution.

The regression (refer to Table 3) included four steps, and the main factors were achievement, teacher expectations, and ethnicity. The variables were entered in this order based on theoretical reasons in that T1 achievement scores are likely to show the greatest proportion of variance to T2 achievement, and teacher expectations and ethnicity were likely to show the next additional proportion of variance consecutively in T2 achievement scores. Ethnicity was entered as an interaction term with teacher expectation scores so that differential achievement among ethnic groups could be investigated.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>7.12</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>T1asTTeNorm</td>
<td>0.83</td>
<td>0.02</td>
<td>0.79</td>
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<tr>
<td>(Constant)</td>
<td>0.75</td>
<td>1.72</td>
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<tr>
<td>T1asTTeNorm</td>
<td>0.74</td>
<td>0.03</td>
<td>0.70</td>
</tr>
<tr>
<td>TAS_4</td>
<td>9.03</td>
<td>1.29</td>
<td>0.18</td>
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<tr>
<td>(Constant)</td>
<td>7.28</td>
<td>2.67</td>
<td></td>
</tr>
<tr>
<td>T1asTTeNorm</td>
<td>0.72</td>
<td>0.03</td>
<td>0.69</td>
</tr>
<tr>
<td>TAS_4</td>
<td>8.78</td>
<td>1.27</td>
<td>0.17</td>
</tr>
<tr>
<td>European vs Māori</td>
<td>-1.32</td>
<td>4.11</td>
<td>-0.01</td>
</tr>
<tr>
<td>European vs Pasifika</td>
<td>-14.83</td>
<td>3.34</td>
<td>-0.11</td>
</tr>
<tr>
<td>European vs Asian</td>
<td>2.18</td>
<td>7.16</td>
<td>0.01</td>
</tr>
<tr>
<td>(Constant)</td>
<td>7.22</td>
<td>2.96</td>
<td></td>
</tr>
<tr>
<td>T1asTTeNorm</td>
<td>0.72</td>
<td>0.03</td>
<td>0.68</td>
</tr>
<tr>
<td>TAS_4</td>
<td>8.86</td>
<td>1.95</td>
<td>0.17</td>
</tr>
<tr>
<td>European vs Māori</td>
<td>-1.93</td>
<td>4.15</td>
<td>-0.01</td>
</tr>
</tbody>
</table>
In the first step of the regression, T1 achievement contributed statistically significantly to the regression model $F(1, 748) = 1245.61; p < .001$ and accounted for 63% of the variance in T2 achievement. To investigate the unique contribution of teacher expectation on T2 achievement, above and beyond T1 achievement, the teacher expectation variable (TAS_4) was entered in Step 2. After the entry of teacher expectations, the total variance explained by the model as a whole was $R^2 = .65$, $F(2, 747) = 49.38; p < .001$. The teacher expectation variable predicted higher T2 achievement reading scores than students achieved ($\beta = .18, p < .001$). The associated change in $R^2$ was significant, $F(1, 747) = 49.38, p < .001$. In Step 3, the three dummy ethnicity variables were also included. In this case, the Pasifika ethnicity variable predicted T2 reading at $\beta = -.11 (p < .001)$, indicating that Pasifika students gained less during the year than European/Pākehā. The associated change in $R^2$ was statistically significant, $F(3, 744) = 8.34, p < .001$. The other ethnic groupings provided no unique statistically significant contribution to T2 achievement. Finally, in Step 4 of the regression, three interaction terms were introduced to assess the interaction between ethnicity and teacher expectations on T2 achievement. None of the interaction terms made a statistically significant contribution, and the change in $R^2$ was not statistically significant, $F(3, 741) = 0.70$.

In sum, the result indicated that when a teacher had high expectations of their students, those students did significantly better at the end of the year in reading than the rest of their peers. A significant result also showed that Pasifika students made less gain in achievement across the year. Step 4 tested whether teacher expectations of certain ethnic groups provided
any unique explanatory power in the model predicting T2 achievement. Results revealed no interaction effect in this regard, suggesting that having higher expectations in general was relevant to the improvement in reading of all ethnic groups. These findings suggest that having high expectations has important implications in improving reading across ethnic lines. Overall results suggested that beyond the contribution of T1 and teacher expectations, only the Pasifika demographic factor had a statistically significant influence on T2 achievement, \( \beta = -.11, p < .001 \).

**Assessment of ethnic bias in teacher expectations**

Step 4 in Table 3 tests the predictive capacity of improved teacher expectations across ethnic groups. Table 4 shows whether actual teacher expectations varied with regard to student ethnicity after controlling for differences in student achievement as indicated by e-asTTle.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Hierarchical Regression Model Exploring How Ethnicity Predicts Teacher Expectations (N = 750)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardised Coefficients</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.71</td>
</tr>
<tr>
<td>T1asTTlevNorm</td>
<td>0.01</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.80</td>
</tr>
<tr>
<td>T1asTTlevNorm</td>
<td>0.01</td>
</tr>
<tr>
<td>Māori</td>
<td>-.15</td>
</tr>
<tr>
<td>Pasifika</td>
<td>-.15</td>
</tr>
<tr>
<td>Asian</td>
<td>-.15</td>
</tr>
</tbody>
</table>

Note: *** \( p < .001 \). TAS_4 = DV
In Step 2, controlling for T1 achievement, the results suggested that there was no statistically significant teacher expectation variability toward the different ethnic groups. These results were surprising, as much of the research conducted in New Zealand Aotearoa has suggested teachers’ expectations tend to differ by ethnicity, and in particular for Māori and Pasifika students, with low expectations typically resulting in lower achievement. A One Way Analysis of Variance (ANOVA) was completed to see if there were in fact differences in teacher expectations toward Maori and Pasifika students.

The means and SDs of the One Way ANOVA for the different ethnic groups are shown in Table 5. A one-way between-groups ANOVA showed there was a statistically significant difference between the ethnic groups, $F(4, 745) = 4.70, p < .01$. Post-hoc Tukey comparisons indicated that the mean scores for Māori and Pasifika students were significantly lower than those for Asian and European/Pākehā students ($p < .05$).

Table 5
*Means and SDs of Teacher Expectations for the Different Ethnic Groups*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>187</td>
<td>4.89</td>
<td>1.250</td>
<td>.091</td>
</tr>
<tr>
<td>Māori</td>
<td>146</td>
<td>4.48</td>
<td>1.340</td>
<td>.111</td>
</tr>
<tr>
<td>Pasifika</td>
<td>317</td>
<td>4.52</td>
<td>1.284</td>
<td>.072</td>
</tr>
<tr>
<td>Asian</td>
<td>35</td>
<td>5.20</td>
<td>.964</td>
<td>.163</td>
</tr>
<tr>
<td>Other</td>
<td>65</td>
<td>4.77</td>
<td>1.466</td>
<td>.182</td>
</tr>
<tr>
<td>Total</td>
<td>750</td>
<td>4.66</td>
<td>1.303</td>
<td>.048</td>
</tr>
</tbody>
</table>

In sum, students for whom expectations were high made greater progress than students for whom expectations were low. This would suggest that if teachers raised their expectations for Māori and Pasifika, those students’ achievement might well improve beyond their current levels, particularly given Pasifika students in this study made significantly less
progress than European/Pākehā students. When it was decided to do an ANOVA, differences in expectations by ethnicity were identified.

**Discussion**

Study 1 examined whether teachers’ expectations of the different ethnic groups were related to students’ end of year achievement. When achievement was controlled for, there was no apparent bias based on ethnicity and that those students for whom teachers had high expectations made greater progress in reading by the end of the year than other students. Nonetheless, at the end of the year, the Māori and Pasifika students on average did not make the same level of progress as European/Pākehā and Asian students. The findings suggested that if a teacher had high expectations of a student, the student typically made significantly greater gains in achievement for reading by the end of year. In addition, what was evident was that Pasifika students were significantly below European/Pākehā in terms of average achievement, and typically made approximately 15 points less progress by the end of the year than New Zealand European students. Māori also showed lower average achievement than New Zealand European students, suggesting that teachers had lower expectations for Māori and Pasifika students than for their European/Pākehā and Asian counterparts.

Given Māori and Pasifika students were lower in achievement, and that differences in the achievement gap between European/Pākehā and Asian students with Māori and Pasifika had been widened for some time (Hunn, 1960; ERO, 2014), when further analysis was conducted, in which achievement was not controlled for, teacher expectations were lower for Māori and Pasifika students. In essence, teachers showed no bias in their expectations toward different ethnic groups when achievement was controlled for, but when achievement was not controlled for, teachers’ were more likely to have lower expectations for Māori and Pasifika than for European/Pākehā and Asian students.
The findings of the present study were comparable to those of Peterson et al. (2016). In their study, teachers’ explicit expectations for each ethnic group suggested that when prior achievement was controlled for, ethnic differences in end of year achievement also showed no bias. The present study and the Peterson et al. findings did contrast with two other studies by Rubie-Davies et al. (2006) and Turner, et al. (2015). When achievement was controlled for by Rubie-Davies et al., they found teachers’ expectations were statistically significantly lower for Māori students compared to European/Pākehā, Asian and Pasifika students. Turner, et al. found teacher expectations were higher for Asian and European/Pākehā than for Māori and Pasifika students.

There are possible explanations for these findings. Even though the findings of Peterson et al. (2016) suggested that teachers showed no explicit ethnic expectation bias when achievement was controlled for, when they measured the teachers’ implicit prejudiced attitudes, they found ethnic differences in favour of European/Pākehā students. A teacher’s implicit prejudiced attitude may also have been influential in the present study, hence the difference in results.

Another possible reason for the findings is that there is more information in the schooling sector that informs teachers about how teacher expectations are communicated and how that may be influential in raising student achievement. The Education Review Office (2014) and the Ministry of Education (2012) have been explicit in their attention to promoting and encouraging the need for teachers to have high expectations of their students. The Ministry of Education has a website specifically on promoting high expectations. Moreover, one of the guiding principles in the New Zealand curriculum relates to high teacher expectation (Ministry of Education, 2007). This in itself could be a possible reason for not finding any ethnic bias when controlling for achievement. The concerted effort to make teachers aware of
the power of their expectations may have been influential in the current study in teachers’ rating of their expectations of their students.

The messages both from the Education Review Office (2014) and the Ministry of Education (2012) about having high expectations as an important aspect to teacher practice may mean teachers outwardly subscribe to the concept because they see it as socially desirable but that implicitly, the teachers may hold expectations that are biased in ways they may not even be aware of.

However, after the ANOVA findings, the analyses suggested that teachers’ expectations had more to do with the ethnicity of the student. Teachers in this case were judging the achievement to be lower for Māori and Pasifika than for European/Pākehā and Asian students. The difference in the findings when achievement was controlled for may rest in the beliefs and perceptions teachers may have of Māori and Pasifika students. Turner et al. found when the teachers were interviewed, they tended to demonstrate deficit beliefs in their explanations for why Māori and Pasifika students were not doing so well in contrast to European/Pākehā, and Asian students. Teachers placed the responsibility for the achievement differences with students, parents, and their home backgrounds, arguing that lack of parental support and generations of dysfunctional families hinder Māori and Pasifika students in their learning. European/Pākehā and Asian students were perceived differently. The standards of living for European/Pākehā students were higher, and their parents had higher qualifications and were more supportive in the home. Asian families were seen to have high expectations of their children succeeding at school and students responded accordingly. In the Turner et al. (2015) study, it appeared that teachers do have different expectations depending on the ethnicity of the student. Their findings and those of others such as St
George (1983), may help toward understand how teachers could make judgements based on ethnic stereotypes (Weinstein, 2002) that produce differencing expectations.

The findings from the present study may be explained and understood by those findings of Peterson et al. and Turner et al, particularly with respect to how teacher expectations may be shaped and the possible influences teacher expectations may have on student achievement. In Aotearoa New Zealand there have been consistent messages for at least four decades that Māori and Pasifika students are underachieving and not doing as well as European/Pākehā and later Asian students (Hunn, 1960, Ministry of Education, 2014), which, one can argue, is an explanation for low expectations (Rubie-Davies, et al., 2006; St George, 1983). The findings of the present study are notable for three reasons. One is that there has been a history of underachievement for Pasifika and Māori students in Aotearoa New Zealand (Hunn, 1960; ERO, 2014). Another is that teachers’ expectations have been shown to affect the achievement outcomes of students, and the third is that teachers’ expectations of their students can affect the quality of teaching students receive and their success at school. As Good (1981) argued, when teachers had lower expectations for some students, they were likely to provide fewer educational opportunities for those students.

Summary

The current research reinforces that the expectation of a teacher is influential in raising the achievement of all students and in particular for Māori and Pasifika students. That those students with teachers who had high expectations made greater academic gains over one year shows what is possible in bringing about change for Māori and Pasifika students who are currently underachieving in Aotearoa New Zealand. When this is not the case, it is more likely students will experience differential opportunities to learn. In this sense it is important
to be reflective of the past so as to make better sense of the present educational experiences for Māori and Pasifika peoples. Finally, if teachers want to continue accelerating progress and raising achievement for all their students, it is clear from this current study that having high expectations is one variable that will probably allow their students to reach their achievement goals. Weinstein (2002) would argue that having a strong belief about wanting students to achieve has enormous implications for not only how teachers perceive their students’ abilities, but their role as teachers in educating these students to ensure they reach their fullest potential. This first study has suggested that expectations are influential in the learning outcomes of students. It also suggests that if teachers had higher expectations for their Māori and Pasifika students, those students would make greater progress. The second study will explore teacher expectations through the lens of the student, and will address the research question: What are students’ perceptions of their teacher’s behaviour toward high achieving and low achieving male and female students?
Chapter 4

Study 2: Students’ perceptions of teachers’ expectations of achievement

Study 1 was designed to see if teachers were biased in their expectations of students from minority ethnic backgrounds, in particular Māori and Pasifika students. The study found no bias when controlling for achievement. Study 2, reported in this chapter, explored teacher expectations through the lens of the student. The goal was first to identify students’ perceptions of teacher behaviour of high and low achievers and as a result how students learned about their smartness in the classroom.

Even though Study 1 suggested no evidence of ethnic bias could be found this was evident when an ANOVA showed that expectations were lower for Māori and Pasifika students. Study 2 is expected through the voices of students show that bias is indeed evident in classrooms. The major focus was on the cues perceived by students as informing them about their teachers’ expectations. Because students experience a myriad of behavioural cues from their teacher and peers, it was predicted that students would be perceptive enough to identify behavioural cues that would inform them of how well they were doing at school. The research question for this study was: What are students’ perceptions of their teacher’s behaviour toward high and low achieving male and female students?

The study comprised two parts (a) the Teacher Treatment Inventory (TTI) questionnaire (Weinstein & Middlestadt, 1979) and (b) interviews with a randomly selected group of students. Note that while the colloquial term ‘brainy’ was used in the TTI, to remain
consistent with American Psychologist Association (APA) guidelines that requires no colloquial language, ‘high achiever’ will replace the term ‘brainy’ and ‘low achiever’ will replace the term ‘not so brainy’ in the reporting of this study.

Study 2 was approved by the University of Auckland Human Participants Ethics Committee (Reference Number 2010/455). All students were under the age of 16 years, so parental consent was required. Therefore, teachers sent participant information sheets home to parents, who returned signed consent forms agreeing that their child could participate. In addition, students whose parent or guardian had provided consent were given an assent form to sign to ensure that they were also happy to participate (refer to Appendix A). The ethics approval process for the research is explained in detail in Chapter 1.

**Method**

This section on method looks first at the quantitative TTI questionnaire and then at the qualitative interviews.

**Teacher Treatment Inventory questionnaire**

**Participants**

The total number of students in Study 2 was 1,187 students from Year 4–8 classes from eight schools—five from low socioeconomic communities (deciles 1–3) and three from mid-range socioeconomic communities (deciles 4–6). Of the total number of students, 51% were girls and 49% boys. In each year group, there were the following numbers of students: Y4 = 258, Y5 = 253, Y6 = 309, Y7 = 188 and Y8 = 183. The ethnic breakdown is represented in Table 6.
Table 6
*Total Number of Students in Year Groups and By Ethnicity*

<table>
<thead>
<tr>
<th></th>
<th>Pākehā/European</th>
<th>Māori</th>
<th>Pasifika</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y4</td>
<td>97</td>
<td>41</td>
<td>84</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Y5</td>
<td>49</td>
<td>54</td>
<td>110</td>
<td>23</td>
<td>17</td>
</tr>
<tr>
<td>Y6</td>
<td>69</td>
<td>41</td>
<td>155</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Y7</td>
<td>40</td>
<td>80</td>
<td>42</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Y8</td>
<td>39</td>
<td>65</td>
<td>67</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

As with the first study, purposive selection was employed using Patton’s model (1990) for the same reasons described in Study 1. Purposive selection allowed for a greater selection of rich information that would provide the types of analyses that were in-depth and more reliant. The strategy for selecting a particular cohort of the population serves a particular analytical purpose. In this case, the participants had to be students in Years 4–8, the teachers had to be registered teachers, and the students and teachers had to be from a variety of ethnic backgrounds. These criteria also drove the decision to include low- and mid-range socioeconomic schools in the study since those are the schools that have the most diversity in upper North Island schools and the largest proportion of Māori and Pasifika students (Davidson & Tolich, 2003).

**Measures**

The Teacher Treatment Inventory (Weinstein & Middlestadt, 1979) is a quantifiable tool that assessed students’ perceptions of differential treatment behaviour. The first part of which consists of 31 statements chosen to collect information on students’ perceptions of the teacher’s interactions with high and low achievers. The second part is a rating by students of
the attributes of high and low achieving students. A copy of the full scale is included in Appendix C.

The 31 statements are reflective of teacher behaviours which have been demonstrated to be related to students’ gains in achievement and to the differential treatment of high and low achievers. The items were phrased so that the teacher’s behaviour was focused on either a high or low achieving student. Teacher behaviours were broadly grouped so that they focused on teacher support, teacher attention, teacher expectations, teacher questioning, task orientation, and teacher versus student direction. An example of an item from the teacher support scale was: ‘When X is stuck, the teacher gives him some support’; for teacher attention: ‘The teacher carefully explains the work to X’; for teacher expectations: ‘The teacher criticises X’s wrong answer by telling him he could do better’; for teacher questions: ‘The teacher asks X easy questions’; for task orientation: ‘X is expected to do his work with no mucking around’; and for teacher versus student direction: ‘The teacher asks X to show others what to do’.

The tool provides a scenario describing a hypothetical male or female high or low achieving student (a ‘brainy’ and a ‘not so brainy’ student). Weinstein (2002) explained that using hypothetical scenarios freed students from the morality of sharing what might be viewed as negative behaviour on the part of the teacher. The students were asked to rate each of the 31 items on a four-point scale; ‘never’, ‘occasionally’, ‘often’, and ‘all the time’, in relation to each of the statements. Some of the wording in the statements was adapted to be suitable for use with groups of students in Aotearoa New Zealand. For example, students are more familiar with the word ‘brainy’ than with ‘smart’ when describing a high achiever in the Aotearoa New Zealand context. Low achieving students were described by the addition of ‘not so…’ prior to the adjective used (i.e., ‘not so brainy’). The TTI was trialled with a small
group of 28 Year 4 students not involved in the study to assess its suitability for students learning in the Aotearoa New Zealand context. No questions were altered as a result of the pilot testing because no students reported any difficulties with understanding any of the items.

The second part of the TTI was to rate the hypothetical high or low achieving female or male student using a four-point scale: ‘never’, ‘occasionally’, ‘often’, and ‘all the time’, on seven one-word descriptions of a hypothetical student. Examples of the one-worded descriptions were ‘popular’, ‘friendly’, and ‘successful’. The intent of the ratings was to assess the extent to which a student perceived differences between male and female high and low achieving students in terms of their characteristics. Refer to Appendix C for the full list of descriptions.

Procedure

The two-part TTI questionnaire was administered to all students for whom consent had been given in the middle of the school year. This was between the end of Term 2 (June) and beginning of Term 3 (July) in Aotearoa New Zealand schools. These students included those who participated in the first study. As discussed earlier, those students who participated in Study 1 were only those who were present for the reading test in the beginning and the end of the year. In Study 2 there was no such requirement and students who attended school on the day the questionnaire was given could participate. In this case the number of students was significantly greater because Study 2 was not restricted to students having to be present in the same place twice. Teachers of the classes allowed the researcher to take their students and group them in line with the research design. All classes were of mixed gender and before the TTI could be administered, students were required to swap classes so all boys were in one class and all girls in another. To ensure that there was an even coverage of the four scenarios,
the researcher was able to arrange two classes for the girls and two for the boys. The first class had girls reading the hypothetical high achieving girl scenario and the second class of girls reading the hypothetical low achieving girl scenario. The same occurred for the boys, with one of the boys’ classes having the hypothetical high achieving boy scenario, and the other the hypothetical low achieving boy scenario. This was in line with the protocol by Weinstein and Middlestadt (1979).

To get greater assurance that all items would be answered and remove the possibility that some students may not be able to read every word, all statements were read aloud. Students were given the right to ask questions if there was a statement or word they did not understand. When the scenario of the high or low achieving child was read to the students, they were instructed to imagine that the hypothetical student was a boy or girl that was in their class in the previous year. They were told not to think about the hypothetical student from a class they were in now but that there would have been some of these students they would have shared a class with last year or even the year before. To encourage them to think about their previous years at school, statements included what was your teacher’s name last year? Who was in your class? Who are the students you can remember? The one paragraph description of a hypothetical male or female student who was either a high or low achieving child was read aloud. The scenarios read as follows:

High achieving scenario: Kelly is someone who does very well in her school work. In fact she is always in the highest group and often gets high marks in her tests. A lot of people think Kelly is brainy. (Although the scenario here is about a girl, this was changed to a boy’s name for the boy classes.)

Low achieving scenario: Kane is someone who does not do very well in his school work. In fact he is always in the lowest group and often gets low marks in his tests.
A lot of people think Kane is not brainy. (Although the scenario here is about a boy, this was changed to a girl’s name for the girl classes).

After reading the hypothetical scenario, the students were given an example to practise. This was to give greater assurance that students knew how to answer each statement. They then completed their ratings of the 31 statements in the first part of the TTI. The statements are included in the summary of the factor analysis results shown in Table 7.

When the first part of the questionnaire was completed, the scenario of the hypothetical student was re-read to the students before they were asked to complete the second part of the TTI. Students were asked to rate the hypothetical high achieving or low achieving student for each of the seven descriptions: popular, friendly; a leader, competitive, focused, independent, and successful. The students were told to circle a number out of four, where 1 = Never, 2 = Occasionally, 3 = Often, and 4 = All of the time, for where they thought the student would rate on each of the descriptions. The students were given an example which read:

The first description is POPULAR. If you circle 1 out of 4 then you think John is not popular at all. If you circle 4 out of a possible 4 then John is a very popular person.

If you think John is in between then you circle one of the other numbers.

Each descriptor was read to the students and once that part was completed, the questionnaire was collected for analysis.

**Analysis process of the quantitative data**

Data analysis focused on the question: What are the students’ perceptions of teacher behaviour toward high and low achieving male and female students? To answer this question, an exploratory factor analysis was conducted to investigate whether students perceived male high achieving and male low achieving students and female high achieving
and female low achieving students to be treated differently by their teachers. The purpose of conducting a factor analysis was to explore patterns in the responses to the 31 TTI items by students and, subsequently, to identify the extent to which students gave different ratings on each of the four scenarios. Factor analysis reduces a large set of variables to a smaller set that is capable of accounting for a large portion of the total variability in the items. Items that correlate the highest with a factor define the meaning of the factor as judged by what thematically ties the items together conceptually (Tabachnick & Fidell, 2007).

Once the factors were identified, a one-way ANOVA and Tukey’s b post-hoc tests were carried out to test whether the factor scores differed significantly by group. The one-way ANOVA compared the means between the factors for female and male high and low achievers to determine whether those means were significantly different. In addition, Tukey’s b post-hoc tests were conducted to ascertain, if there were significant differences, exactly where those differences lay (Field, 2009).

A third set of analyses investigated whether or not students perceived differences in descriptions (adjectives) that could be attributed to high achieving and low achieving students. A one-way ANOVA and Tukey’s b post-hoc tests were also carried out to test whether the factor scores differed significantly by attributes. The Tukey’s b post-hoc tests would ascertain if there were significant differences, and exactly where those differences occurred. Finally, the last set of analyses was conducted to investigate whether perceptions of differential teacher treatment were shared across students or were moderated by the characteristics of the perceiver.
**Interviews**

The method subsections above looked at the quantitative TTI questionnaire. The next subsections discuss the qualitative interviews.

**Participants**

Fifty students from five schools, from year levels 4–8 and with a range of ethnic backgrounds, were randomly selected for the second part of the study, the interviews. This number was decided on for the purpose of gaining sufficient variation in the students’ views that would provide credence to the research question (Manson, 2010). Students were randomly selected from those who volunteered for the interviews.

**Measure**

The interviews were a qualitative measure that enabled a more in-depth understanding and give a richer context to the TTI the students had previously completed. The following are the prompts used in the interviews (Weinstein, 2000):

1. What do teachers do to make you feel you’re doing well at school?
2. What do teachers do that lets other students know they are not doing so well in school?
3. Can you tell the difference in school between a student who is brainy and a student who is not so brainy? How can you do that?
4. If a student is brainy in school this year, will that student be brainy next year? Why/why not? How does a person get to be brainy?
5. What is school like for the brainy students?
6. How do the brainy children act? What are they like?
7. What is school like for students who are not so brainy in school?
8. What are not so brainy children like?

9. How do other children act with the children who are not so brainy?

10. If you were the teacher of a class what would you do to help students learn?

**Procedure**

The students were released individually from class and taken to another room to be interviewed in private. They were asked questions to gain insight into students’ experiences of what they had observed in classrooms and how they interpreted what they observed in the daily lives of classroom interactions. These interviews enabled a more in-depth understanding and a richer context to the TTI the students had previously completed.

**Analysis process of the qualitative data**

The qualitative data sought students’ views of their lived experiences in relation to the teachers’ behaviours identified by the four factors. Given that classrooms are complex environments (Good & Brophy, 2008), the incorporation of qualitative methods in this study allowed the researcher to build both on the students’ observable realities and the empirical research to get a more complete ‘picture’ of students’ perceptions of their teachers’ behaviours (Patton, 2002).

To identify themes from the student interviews, their responses were analysed using the inductive thematic analysis procedure described by Braun and Clarke (2006). First, the interviews were transcribed by an independent transcriber; the researcher then read the transcripts, noting meaningful comments relevant to the research topic. To code the data into themes relied on recognising patterns, conceptualising the data, having in-depth background knowledge, and possessing the relevant information. The transcribed data were re-read several times to allow the researcher to become immersed in the conversations of the
participants and to give full consideration to the repeated ideas that became evident in the
data. Colour coding of the data helped to identify units of text dealing with the same issues
and these were grouped together in analytic categories and given provisional titles and
meanings. The coded data were selected if they formed a coherent pattern and the themes
accurately reflected what was in the data. Data were discarded if they were repetitive or did
not support the theme in a coherent manner (Braun & Clarke, 2006).

Results

This section looks first at the results for the Teacher Treatment Inventory questionnaire
and then at the results for the interviews.

Teacher Treatment Inventory questionnaire

Phase 1: Evaluating the suitability of factor analysis

Prior to the extraction of the factors, several tests were used to assess the suitability of the
data for factor analysis. These included the Kaiser-Meyer-Olkin (KMO) Measure of
Sampling Adequacy and Bartlett’s Test of Sphericity (Williams, Brown & Onsman, 2010).
The KMO and Bartlett’s Test of Sphericity were run as diagnostics on the TTI data which
had been entered into SPSS Version 22. These tests indicated that the data were appropriate
to analyse using exploratory factor analysis. The Bartlett’s test of sphericity (Bartlett, 1954)
was statistically significant \( \chi^2 (465) = 5922.261, p < .001 \), supporting the factorability of the
correlation matrix. Likewise, the KMO measure of sampling adequacy was .87 exceeding the
minimum recommended value of .60 (Kaiser 1970, 1974). Based on these two indices, it was
determined that the data set was amenable to factor analysis.
**Phase 2: Exploratory factor analyses (EFA)**

The factor analysis was carried out using SPSS. The 31 items of the TTI, measuring students’ perceptions of teacher behaviour towards high and low achieving students, were subjected to an exploratory factor analysis using the principal axis factor extraction to determine the factor structure of the TTI. An Oblimin rotation method was employed because it assumes that correlations among the factors are theoretically tenable or at least plausible. Producing factors that are correlated is important particularly where human behaviour is involved because the findings tend to be more accurate (Tabachnick & Fidell, 2007). In addition, as Tabachnick and Fidell explain, the effect of rotating the factor matrix ‘is to redistribute the variance from earlier factors to later ones to achieve a simpler, theoretically more meaningful factor pattern’ (p. 113).

**Phase 3: Determining the number of factors**

Factors were identified based on the Kaiser’s rule of eigenvalues over 1.0 and the scree plot. Kaiser’s rule determined which factors were most eligible for interpretation because this rule required that a given factor was capable of explaining at least the equivalent of one variable’s variance (Kaiser, 1960). A scree plot shows the empirical eigenvalues in descending order and suggests that relevant factors are situated above the sharp bend or elbow’ (Cattell, 1966). The scree plot supported a 4-factor solution explaining 34.18% of the variance, and appeared to be the most interpretable since it achieved a good match between the theoretically derived constructs of Weinstein and Middlestadt (1979) and the empirical data. The items were retained if primary loadings were greater than 0.30 with cross loading less than 0.30. Where cross-loading was above 0.30, only items with primary loadings above 0.40 were included. This led to the exclusion of 10 items, resulting in a 22-item solution. The factor loading matrix for this final solution is presented in Table 7.
Overall, in reference to Table 7, the analyses indicated that four distinct factors were underlying student responses to the TTI. The sum items for the first factor showed there was a relationship that aligned more specifically with low expectation behaviour. For example, when the students’ related the teacher’s behaviour to letting the low achieving students spend more time playing around and anticipating that they would not finish their work on time, this behaviour appears to have been interpreted as the teacher having low expectations of the student. In addition, when the students thought the teacher tended to ask them easy questions and had little trust in students, these behaviours were also considered typical of low teacher expectations (Brophy, 1985; Weinstein, 2002).

Table 7
Summary of Exploratory Factor Analysis Results for Teacher Treatment Inventory (N = 1,187)

<table>
<thead>
<tr>
<th>Item</th>
<th>Low expectation</th>
<th>Greater Independence</th>
<th>Supportive</th>
<th>Negative feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teacher asks …. To show others what to do.</td>
<td>-.651</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The teacher trusts ….</td>
<td>-.565</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. ……. Spends more time playing around then doing his class work.</td>
<td>.555</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The teacher knows that … won’t complete his work.</td>
<td>.539</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. The teacher share’s … work with the class</td>
<td>-.454</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. The teacher asks … easy questions</td>
<td>.404</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. The teacher waits a long time for … to answer a question before asking someone else.</td>
<td>.368</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. …. Is expected to do his work</td>
<td>-.331</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
with no mucking around

3. The teacher lets … do what he wants most of the time.

7. … is granted special privileges

9. The teacher only asks … questions where he will know the answer straight away.

16. The teacher lets John do what he likes as long as he finishes his work.

27. The teacher carefully explains the work to …

20. When … is stuck the teacher gives him some help.

21. The teacher asks if … understands what he is supposed to be doing.

18. When … is doing work, the teacher tells him exactly what to do.

19. When … is reading, the teacher criticises his behaviour instead of how he reads.

29. The teacher embarrasses … for not knowing the right answer.

31. The teacher criticises … wrong answer by telling him/her he/she could do better.

25. … does not get to choose the book he will read during reading time.

15. The teacher tells … off for not paying attention.
Factor two items related to teachers giving the students more independence in their learning. The students’ responses identified statements which indicated that the teacher let students choose what they liked to do most of the time, which included once the student had completed their work, and that teachers tended to grant such students special privileges. These items showed there was a relationship typical of high expectation students, where those students were often given greater independence by the teacher (Rubie-Davies 2015; Rubie-Davies et al., 2006).

Factor three items related to supportive behaviour by the teacher. In this instance, the teacher was helpful and carefully explained the work to the student. The teacher would also ask others to help and inquired if the student understood the work they were doing, and if not would explain exactly what they had to do. These items were grouped together because they all had similar qualities relating to supporting students who were not doing so well in school (Weinstein, 2002).

Finally, factor four items tended to be closely aligned to negative teacher behaviour. The teachers’ behaviour was seen by the students as being critical of and embarrassing towards students if they did not have the right answer. In such instances, the teacher would tell the student off frequently for not paying attention (Weinstein & Middlestadt, 1979; Weinstein, 2002). The four factors are displayed in Table 8 and the table presents descriptive data that shows the gender comparisons of the means for the four factors related to high and low achieving students.

The four factors were subjected to a one-way between group analysis of variance (ANOVA) and post-hoc Tukey’s b test to explore students’ perceptions of teacher behaviour toward male and female high and low achieving students. There was a statistically significant difference for low expectation behaviour between the four scenario groups: $F (3,$
$1174) = 3.6, p < .01$ (refer to Table 9). The post-hoc comparisons using the Tukey’s $b$ test showed that the only groups where there was a statistically significant difference were with male high ($M = 2.40, SD = 0.32; p < .05, d = 0.26$) and low achieving students ($M = 2.50, SD = 0.43; p < .05$).

Table 8
*Means and Standard Deviations of Students’ Perceived Differences of the Four Factors*

<table>
<thead>
<tr>
<th></th>
<th>Male high achiever</th>
<th>Female high achiever</th>
<th>Male low achiever</th>
<th>Female low achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Expectations</strong></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>2.40</td>
<td>0.32</td>
<td>2.41</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>2.50</td>
<td>0.43</td>
<td>2.42</td>
<td>0.36</td>
</tr>
<tr>
<td><strong>Greater Independence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.43</td>
<td>0.61</td>
<td>2.50</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>2.32</td>
<td>0.61</td>
<td>2.12</td>
<td>0.57</td>
</tr>
<tr>
<td><strong>Negative Behaviour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.04</td>
<td>0.57</td>
<td>1.90</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>2.44</td>
<td>0.58</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td><strong>Supportive Behaviour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.55</td>
<td>0.71</td>
<td>2.73</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>3.15</td>
<td>0.61</td>
<td>3.18</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Table 9
*Summary of the ANOVA for the Four Factors*

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>1.390</td>
<td>3</td>
<td>.463</td>
<td>3.555</td>
<td>.014</td>
</tr>
<tr>
<td>Within groups</td>
<td>152.977</td>
<td>1174</td>
<td>.130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>23.274</td>
<td>3</td>
<td>7.758</td>
<td>21.897</td>
<td>.001</td>
</tr>
<tr>
<td>Within groups</td>
<td>417.359</td>
<td>1178</td>
<td>.354</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>51.192</td>
<td>3</td>
<td>17.064</td>
<td>49.096</td>
<td>.001</td>
</tr>
<tr>
<td>Within groups</td>
<td>407.691</td>
<td>1173</td>
<td>.348</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>83.426</td>
<td>3</td>
<td>27.809</td>
<td>61.224</td>
<td>.001</td>
</tr>
<tr>
<td>Within groups</td>
<td>534.608</td>
<td>1177</td>
<td>.454</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In contrast, the students perceived the teacher displayed similar expectation behaviour towards high achieving ($M = 2.41$, $SD = 0.33$) and low achieving female ($M = 2.42$, $SD = 0.36$) students. In sum, the students perceived male low achievers as receiving behaviours from teachers indicating low expectations (refer to Table 10).

A statistically significant difference was also evident for perceived behaviour by the teacher indicating that they gave some students greater independence than others: $F (3, 1178) = 21.90, p < .01$. The post-hoc comparisons using the Tukey’s $b$ test showed that high achieving female ($M = 2.5$, $SD = 0.59; p < .05$) and male ($M = 2.3$, $SD = 0.61; p < .05, d = 0.33$) students were perceived as receiving more independence than low achieving female ($M = 2.1$, $SD = .57; p < .05$) students. On the other hand, low achieving female students were perceived as receiving less independence than low achieving male ($M = 2.32$, $SD = 0.61; p < .05, d = 0.37$) students. In sum, students perceived the teacher as giving greater independence for high achievers, in particular females, and least independence to low achieving females. Students perceived negative behaviour of teachers also showed a statistically significant difference $F (3, 1173) = 49.09, p < .01$ with the post-hoc Tukey’s $b$ test demonstrating a difference across all groups. Less negative behaviour was perceived for female ($M = 1.90$, $SD = 0.60; p < .05$) and male high achieving ($M = 2.04$, $SD = 0.57; p < .05, d = 0.17$) students than towards low achieving male ($M = 2.44$, $SD = 0.58; p < .05$) and female ($M = 2.30$, $SD = 0.61; p < .05, d = .24$) students. The low achieving males were perceived as receiving the highest negative behaviour from the teacher. In sum, high achieving students were perceived as receiving the least negative behaviour by the teacher with low achieving males receiving the most.
Table 10
Tukey Comparisons for Students’ Perceived Differences for the Four Factors

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) high achiever/low achiever</th>
<th>(J) high achiever/low achiever</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Expectations</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>.006</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>.042</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.056</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male low achiever</td>
<td>.037</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.061</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>-.098</td>
<td>.030</td>
</tr>
<tr>
<td>Independence</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>-.371*</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>-.308*</td>
<td>.050</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.198*</td>
<td>.051</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male high achiever</td>
<td>.061</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>.171*</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>.110</td>
<td>.050</td>
</tr>
<tr>
<td>Negative behaviour</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>.359*</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>.212*</td>
<td>.049</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.186*</td>
<td>.050</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male high achiever</td>
<td>-.147*</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.545*</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>-.398*</td>
<td>.050</td>
</tr>
<tr>
<td>Supportive</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>-.445*</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>-.623*</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>-.023</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male high achiever</td>
<td>-.178*</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td>Male high achiever</td>
<td>.422*</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>.600*</td>
<td>.056</td>
</tr>
</tbody>
</table>

Post-hoc Tukey b reveals the mean difference is significant at the 0.05 level.

Finally a statistically significant difference for student perceptions of supportive teacher behaviour was determined: $F (3, 1177) = 61.22, p < .01$. The post-hoc comparisons using the post-hoc Tukey’s b test revealed that there was a statistically significant difference between male ($M = 2.60, SD = 0.71; p < .05$) and female ($M = 2.73, SD = .74; p < .05, d = 0.18$) high
achieving students with males perceived as receiving the most support after female students. Low achieving male and female students ($M = 3.20$, $SD = 0.61$) were perceived as receiving the least support. In sum, high achieving students were perceived as receiving the most support by the teacher, and in particular male high achieving students.

**Achiever attributes**

Table 11 provides the descriptive data that shows the comparisons of means for the seven attributes of high and low achieving students. A one-way between-groups analysis of variance (ANOVA) (refer to Table 12) was conducted and a post-hoc Tukey’s $b$ test (refer to Table 13) revealed the students’ perceptions of attributes of high and low achieving male and female students.

**Table 11**

*Mean Adjective Ratings for High Achieving and Low Achieving Male and Female Students*

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Male high achiever</th>
<th>Female high achiever</th>
<th>Male low achiever</th>
<th>Female low achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Popular</td>
<td>2.90</td>
<td>0.94</td>
<td>2.93</td>
<td>0.93</td>
</tr>
<tr>
<td>Friendly</td>
<td>3.40</td>
<td>0.77</td>
<td>3.50</td>
<td>0.78</td>
</tr>
<tr>
<td>Leader</td>
<td>3.10</td>
<td>0.88</td>
<td>3.30</td>
<td>0.94</td>
</tr>
<tr>
<td>Competitive</td>
<td>2.94</td>
<td>1.05</td>
<td>3.00</td>
<td>1.02</td>
</tr>
<tr>
<td>Focused</td>
<td>3.42</td>
<td>0.84</td>
<td>3.43</td>
<td>0.82</td>
</tr>
<tr>
<td>Independent</td>
<td>3.30</td>
<td>0.86</td>
<td>3.30</td>
<td>0.88</td>
</tr>
<tr>
<td>Successful</td>
<td>3.52</td>
<td>0.73</td>
<td>3.60</td>
<td>0.73</td>
</tr>
</tbody>
</table>
### Table 12

**Summary of the ANOVA for the Seven Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Sum of Squares Between groups</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular</td>
<td>454.444</td>
<td>3</td>
<td>151.481</td>
<td>190.180</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>935.111</td>
<td>1174</td>
<td>.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td>139.945</td>
<td>3</td>
<td>46.648</td>
<td>59.628</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>918.452</td>
<td>1174</td>
<td>.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader</td>
<td>822.793</td>
<td>3</td>
<td>274.264</td>
<td>381.300</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>844.443</td>
<td>1174</td>
<td>.719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive</td>
<td>207.666</td>
<td>3</td>
<td>69.222</td>
<td>62.874</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>1290.334</td>
<td>1172</td>
<td>1.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused</td>
<td>723.795</td>
<td>3</td>
<td>241.265</td>
<td>323.240</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>875.521</td>
<td>1173</td>
<td>.746</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>535.222</td>
<td>3</td>
<td>178.407</td>
<td>221.609</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>944.330</td>
<td>1173</td>
<td>.805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Successful</td>
<td>808.201</td>
<td>3</td>
<td>269.400</td>
<td>394.864</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>796.880</td>
<td>1168</td>
<td>.682</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant difference for the descriptor ‘popular’ was determined: $F (3, 1174) = 190.20, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores for male high achievers ($M = 2.90, SD = 0.94$) being perceived as more popular than male low achieving students ($M = 1.70, SD = 0.85, d = 0.34$) and the female high achievers ($M = 2.93, SD = 0.93$) being considered more popular than female low achieving students ($M = 1.70, SD = 0.84$). However, the actual difference in mean scores between male and female high achievers and male and female low achieving students showed little difference. There was a statistically significant difference between the high and low achieving students (refer to Table 13). In sum, high achievers, in particular females, were perceived as being more popular than low achieving students.
Table 13

*Tukey Comparisons for the Attributes for High and Low Male and Female Achievers*

<table>
<thead>
<tr>
<th>Attributes</th>
<th>(I) High achiever/low achiever</th>
<th>(J) High achiever/low achiever</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>-1.23&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td></td>
<td>-1.21&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td></td>
<td>0.04</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male high achiever</td>
<td>.02</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male low achiever</td>
<td>1.28&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>1.25&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.08</td>
</tr>
<tr>
<td>Friendly</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>-0.73&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td></td>
<td>-0.64&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Male low achiever</td>
<td></td>
<td>0.00</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Female high achiever</td>
<td>Male high achiever</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male low achiever</td>
<td>0.72&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Male high achiever</td>
<td>Male low achiever</td>
<td>0.64&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td>Leader</td>
<td>Female low achiever</td>
<td>Female high achiever</td>
<td>-1.70&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
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Post-hoc Tukey $b$ reveals the mean difference is significant at the 0.05 level.

There was also a statistically significant difference for the descriptor ‘friendly’; $F (3, 1174) = 59.63, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores for being friendlier between female high achievers ($M = 3.50, SD = 0.78$) and female low achieving ($M = 2.80, SD = 0.97$) students. This was the same for male high achievers ($M = 3.40, SD = 0.77$) being perceived as more friendly than low achieving male students ($M = 2.80, SD = .1.02$). The students’ responses showed no statistically significant difference in friendliness between both male and female high and male and female low achieving students. In sum, high achieving students were perceived as being friendlier than the low achieving student.

A statistically significant difference for the descriptor ‘a leader’ was also determined: $F (3, 1174) = 381.30, p < .01$. Despite reaching statistical significance at the $p < .01$ level, the actual differences in mean scores between male and female high and male and female low achieving students were small. However, the post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores between male high achievers ($M = 3.10, SD = 0.88$) being perceived as more likely to be leaders than male low achieving students ($M = 1.50, SD = 0.78$). This was the same for female high achievers ($M = 3.30, SD = 0.94$) who were also perceived as more likely to be leaders than female low achieving students ($M = 1.60, SD = 0.75$). In sum, high achievers were perceived as likely to be leaders more so than low achievers.
A statistically significant difference for the descriptor ‘competitive’ was determined: $F(3, 1172) = 62.90, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores for being competitive between female high achieving ($M = 3.00, SD = 1.02$) and the female low achieving ($M = 2.14, SD = 1.09$) students. This was the same for male high achievers ($M = 2.94, SD = 1.05$) being considered more competitive than male low achieving students ($M = 2.11, SD = 1.04$). In sum, high achieving students were perceived as being more competitive than low achieving students.

There was also a statistically significant difference for the descriptor ‘focused’: $F(3, 1173) = 323.24, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores for the high female achiever being considered more focused ($M = 3.43, SD = 0.82$) than the low achieving female ($M = 1.93, SD = 0.89$) students and the low achieving male ($M = 1.80, SD = 0.91$) students. This was the same for male high achievers ($M = 3.42, SD = 0.84$) who were perceived as being more focused than low achieving male students ($M = 1.80, SD = 0.91$) and the low achieving female ($M = 1.93, SD = 0.89$) students. The students perceived no statistically significant differences for the variable ‘focused’ between both high and low achieving male and female students. In sum, the high achievers were perceived as being more focused than low achieving students.

A statistically significant difference for the descriptor ‘independent’ was determined: $F(3, 1173) = 221.61, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores, with the high achieving female students being perceived as more independent ($M = 3.30, SD = 0.88$) than low achieving female ($M = 2.00, SD = 0.92$) and male ($M = 1.90, SD = 0.93$) students. This was the same for high achieving male students ($M = 3.30, SD = 0.86$) who were considered to be more independent than low achieving male ($M = 1.90, SD = 0.93$) and female students ($M = 2.00, SD = 0.92$). The actual
difference in mean scores for being more independent between high achieving male and female students were not statistically significant. In sum, as expected, high achievers were perceived as being more independent than low achievers.

Finally, a statistically significant difference for the descriptor ‘successful’ was determined; $F(3, 1168) = 394.90, p < .01$. The post-hoc Tukey’s $b$ test showed that there was a statistically significant difference in mean scores that showed high achieving male students ($M = 3.52, SD = 0.73$) were perceived as being more successful than low achieving male ($M = 1.91, SD = 0.98$) and female ($M = 1.92, SD = 0.85$) students. This was the same for high achieving female ($M = 3.60, SD = 0.73$) who were perceived as being more successful than low achieving female ($M = 1.92, SD = 0.85$) and male ($M = 1.91, SD = 0.98$) students. The actual difference in mean scores between high and low male and female students was small and also showed no statistically significant difference. In sum, high achieving students were perceived as being more successful than low achievers.

Finally two separate ANOVAs were carried out to investigate whether there were perceptions of differential teacher treatment shared across students or whether this was moderated by achievement characteristics of the perceiver. Low, mid, and high achievement characteristics of the perceiver were subjected to an ANOVA. The results showed that irrespective of the perceiver’s achievement characteristics, their rating on each attribute did not play a role in determining perceived differences in attributes of high and low achievers.

When achievement characteristics of the perceiver were subjected to an ANOVA to compare their ratings of perceived differential teacher treatment of the four factors of low expectations, greater independence, negative behaviour, and supportive behaviour, it was found that, apart from greater independence, the patterns were identical across the low, mid, and high achievement groups. That is, for three factors, students had similar perceptions of
the degrees of differential teacher treatment irrespective of the perceiver’s achievement characteristics. However, for one of the factors, that of greater independence, it seems the low achieving perceivers had a different perception of who received the most independence than did the mid and high achievers. The actual low achieving participants perceived the high achieving boys, as opposed to the high achieving girls, as receiving greater independence from the teacher whereas the mid and low achievers in the sample perceived that high achieving girls had received the most independence. While these findings were statistically significant, the teachers’ perceived low expectations behaviour showed no significant difference when rated by the achievement characteristics of the perceiver.

In sum, these results suggested that the students perceived the high achieving hypothetical students as being more popular, friendly, leaders, competitive, focused, independent, and successful. Thus the higher the mean score for each of these adjectives, the more the participants perceived it to be descriptive of the high achieving student they rated. The students’ perceptions of different attributes for high and low achieving male and female students were in general shared by both genders, all ethnicities, and across year levels. Finally, perceptions of differential teacher treatment were shared across students and in general not moderated by the actual achievement characteristics of the perceiver.

**Interviews**

The subsections above have discussed the results from the Teacher Treatment Inventory. These next subsections discuss the results from the analysis of the interviews.

The analysis of the transcripts elicited three key themes related to what students understood about themselves and their learning from the way teachers behaved. The first theme related to how a teacher’s behaviour signalled whether students were doing well or not
(‘Messages from the teacher – assessing student ability’), the second to differences in teacher behaviour towards high achieving and low achieving students (‘Messages from the teacher – the evidence’), and the third to what the students themselves, as teachers, would do to better help students to learn (‘If I were the teacher – the students’ perspective’). It is important to note that the themes are not isolated concepts, and that aspects of the participants’ understanding ranged across these three categories.

**Messages from the teacher – assessing student ability**

This theme was defined by the ability of all participants to articulate what teachers did to make them feel they were doing well at school. It did not matter what age or year level these students were at, they all knew if the teacher thought they were doing well or not so well in their learning. There were obvious signals from the teachers that told students how well they were doing:

[The teacher] congratulate me (sic) … they push me to the best of my ability … give us compliments … [and] use your work as like an example to show somebody else.

And signals that were non-verbal but encouraging: ‘like impressions … facial expressions they smile at you’.

The students could differentiate between the type of help they received from the teacher in determining whether they knew they were or were not doing so well at school. Simply being told you were ‘doing well’, that teachers were supportive and could be seen to be helping the students do better was not always indicative of someone doing well in school. Students knew that even though the teacher was being supportive and helpful, it was the type of work they were receiving that told them they were not doing so well in school:
[The teacher] helps them [low achieving students] with their work ... makes it easier for them.

These messages were also being reinforced more explicitly when the teacher would:

always look up to see if we are doing the work ... the teacher tells us the answer ...
[or] gets one of the smarter children to work with them ... if she gets frustrated with that person then the teacher would umm get another person to try and teach that person as well.

In New Zealand classrooms, schools often have teacher aides working alongside students to support learning programmes delivered by the teacher (Ministry of Education, 2004). In some cases, a student or group of students may be removed from the class to work with the teacher aide and when this happens, Cameron, Sinclair, Waiti, & Wylie (Ministry of Education, 2004) note it can isolate the ‘students from their usual teacher–student interaction’ (p. 56) but more so, it has a stigmatising effect that views those students working with the teacher aide as being ‘different’. This was highlighted by one student who said:

[E]very time a helper [teacher aide] comes into the class the teacher will take the smart people. The others that need help will go to the helper.

In addition, even though the teacher may be attempting to support the student, it is the manner in which that support is given that told the students they were not doing so well at school. Several students noted:

[The teacher] says good job, but you need to improve.

This was also highlighted by who is asked by the teacher to give support:
[The teacher] gets one of the smarter children to work with you, if she gets frustrated with that person then the teacher would ummm get another person to try and teach that person as well. They shame them out in front of the class.

In general it seemed the students in this study had a clear understanding of how the teacher behaved towards students who were doing well and those who were not doing so well in school. Students were able to distinguish the nuances of the teacher’s behaviour that were in many cases obvious, but in others subtle. The findings of the factor analyses that related to teachers demonstrating low expectations concurred with what the students reported in the interviews that essentially showed that when students were not doing so well, the teacher had little trust in them, would ask them easy questions, tended to be more critical of them, and was inclined to embarrass the students who were not doing as well as others.

**Messages from the teacher – the evidence**

The evidence that students gather to learn about the expectations teachers have of a student’s potential to learn is through a number of teacher behaviours. Some behaviour can be more explicit than others. For example, the teacher would tell the student directly of their potential to achieve. In other ways, the messages teachers give about the student’s potential to do well in school can be by a simple smile or the way the teacher talks to students or shows a certain level of care. Weinstein (2002) noted that students are part of a school culture where students are active participants and observers, and where the teacher plays a central role in their learning. She adds that the students’ awareness of the subtleties of the teacher’s behaviour is noted as being ‘impressive, sophisticated, and even embarrassing’ (p. 113).

Referring back to the quantitative analyses, students were found to perceive teachers giving greater independence to the high achieving students; they were given more
opportunities to do what they liked, and tended to be granted more special privileges than the low achieving students. The quantitative analyses also showed students perceived teachers being more supportive to low achieving students. The qualitative analyses described this support as the teacher carefully explaining and asking others to help low achieving students. It also showed that students had some rather set views on what sorts of people high and low achieving students were like. Most students agreed that the high achieving students:

Get high marks … good report … they know their stuff … a student that is brainy is on task and finishes off his work quickly. … They don’t muck around … and they do their hard work [sic].

The opposite was found for student views of low achieving students. Students’ comments generally stated that they:

get low marks … students who are not brainy get a not so good report [sic] … mucks around and plays instead of doing his work.

One student noted that, when a high achieving student was asked a question by the teacher, not only did they get the question correct, but the quality of the response indicated how clever they were:

[There are] always a couple of people putting their hands up; you can tell they are really on to it … the brainy ones they answer all the questions … if you ask a question and if one gets it wrong and the other gets it right you can usually tell how he or she explains it … [they are] better at explaining things.

This was not evident for the low achieving students; essentially students thought low achieving students found it difficult to answer questions from the teacher, and how high and
low achievers were grouped was also a determining factor that defined your status of achievement:

[T]he not so brainy students go into the medium or lower group than the highest group [sic] … and they hardly do work and they just sit there and don’t answer questions … lower groups are full of the kids that need to improve more.

Even though students knew how well they were doing in class, their perceptions of how one gets to be a high achiever were based on what they observed in the classroom. They observed certain behaviours by the teacher that told them who the high achievers were:

[T]he brainy people they don’t get told off by the teacher … the smarter groups are full of the brainy students.

When they were asked how a student became a high achiever, most students agreed that you became a high achiever by being more focused in class, working hard, concentrating, and, as one student stated:

[by] paying attention in the class and understanding what to do and always trying even though you don’t know because you learn from that … they study hard.

To become a high achiever, students believed that good work paid off by continuing to study at home. Homework was an important factor:

[Y]ou read rather than play or watch TV; you get used to this and be smart [sic] … they study hard, they go like, night time instead of watching TV watching all those movies they go into bed with a torch light or something and then they read stories and they understand it like they imagine it in their brain what the story is about [sic]. They come to school the next day; they think about what they did last night [sic].
Some students thought intelligence was genetically determined:

[P]robably they grow up with brainy dads … yeah just grow up with a brainy dad and mum, … umm some people are like natural at it [sic].

When the students were asked if the high achieving students would be high achievers the following year there was a general consensus that they would be, with a few provisos:

When they listen and do not muck around and do not hang around with the bad people [sic] … by being resilient and trying harder … if they push themselves and give themselves a goal for next year I reckon they will be brainy.

A few students had a rather logical approach to believing students would be high achievers next year:

[B]ecause you don’t lose your brains over one year … yeah they are still brainy next year because they just know it like it’s stuck in their brain pretty much [sic].

In general, the students felt learning for high achieving students was easy. They perceived these students as always getting the answers right, that school was a fun place for them and some high achieving students were seen to be popular among their peers. However, students also felt that school could not be easy for them:

[M]ost brainy children are usually quiet because sometimes they get bullied.

However, students also believed that school had higher expectations of high achieving students, stating:

[T]he school thinks of you higher, they expect more.
This was not the case for low achievers. Students revealed that school would be hard for them and that it was evident by their behaviour that school was not always accepting of them. They need a lot of help, it’s hard and they always have to try hard to get up to a higher level … They might be a bit put down by the teacher and they might not be learning, It’s quite hard for them cause like when someone asks you something and you don’t know, others laugh at you.

Some students note the behaviour of the low achieving students as being disruptive:

Like they play and that in class … they are bored … really social and really loud they always talk and fight with each other.

But there were also positive comments for low achieving students, with one student stating:

Yea they are nice… they’re good looking … quiet, fairly quiet and they just get on with stuff.

This student continued by stating his class got on well with all their students:

Well, my class, we are a mixed class cause we’ve got the higher students but we all act the same. We don’t really have very many fights very often like between friends. We don’t make fun of each other or anything. We are a pretty good class …

If I were the teacher – the students’ perspective

Students were asked to consider if they were the teacher what they would do to help students learn. Many students were determined to help the low achieving students. They tended to show a lot of support and care for these students:
[I would] always work with the people that are not brainy … I would make the work easier for them but still make it a little bit hard and then make it harder each time they do their work. I will help them and I won’t give up on the kids and I will work my hardest. I would show them how to work out an answer or how to look for things and making sure that they’re doing their work so that they learn more and be more smart [sic]… would teach them as much as possible; if I can’t I will get the smart children to help them … I’ll make sure they do more reading and writing with them and if they improve more I’ll make them go to a higher level and I would keep helping them and encouraging them to do better. I’ll tell the parents to help them more at home with their reading or something … probably like make groups [sic] … and like make the not so brainy people like do like kinda easier work to start and then just get them onto harder stuff so they can learn [sic].

The students also had some clear expectations for the brainy students and they tended to focus on providing more challenging work:

[I would] explain more about the topic give more specific questions … give them a lot of work writing and [sic]… the people that are brainy I will give them extra work [sic]… I will give them creative projects [sic]… I’ll give them plenty of homework cause that is what makes me good, I would treat them like they are all the same, give them help if they need it, and ask them their goals and what they need to improve … Umm I would, for the brainy people I would make them do harder work so they are not learning all the same thing [sic].

One student had it all worked out:
Well I’d just find an easier way that they could understand it [the work] instead of the way that you [the teacher] understand it; you gotta find different ways so that they [the not so brainy student] can understand it [the work].

In sum, these interviews highlighted how differently students think about themselves as a learner and their potential to learn. There were clear identifiable markers that told students what teachers did to make them feel they were doing well at school. All students in this study could report that high and low achievers were treated differently by the teacher and more importantly could articulate what those differences looked like. For example, students reported that in general teachers had lower expectations of low achieving students, who were accorded fewer opportunities to learn and received more negative feedback. However, the low achieving students were perceived to get more support by the teacher. This was in contrast to the findings of the TTI. In that case, the high achieving students were given more support. These results suggest that students learn about their status of how well they do mainly from the teacher.

Discussion

The findings from the quantitative Teacher Treatment Inventory questionnaire indicated students perceived teachers had lower expectations for low achieving male students than for females, irrespective of the female students’ academic ability. On the other hand, students perceived the teacher as giving high achieving female students more independence than high or low male achievers or low achieving females. The findings also indicated students perceived low achieving students received more negative feedback than high achieving students, with the low achieving male students receiving the most negative feedback from the teacher. In addition, support for high achieving students was significantly different to low achieving students. The significant difference was also evident by gender between high and
low achieving male and female students. High achievers were perceived as getting more support than low achievers.

To summarise, the quantitative findings suggested that students perceived the teacher as having lower expectations for male students, and that they gave less independence, more negative feedback and less support to low achievers. If you were a high achiever, students perceived the teacher as having higher expectations in particular for males, and giving more independence, less negative feedback and more support for high achievers. In addition high achievers were perceived as being more competitive, popular, and friendly, as being leaders, and as being focused, independent, and successful when compared with low achieving students.

The qualitative findings from the interviews revealed students also observed the teachers’ patterns of behaviour were markedly different towards high and low achieving students. These young students provided some insightful perceptions that suggested students were indeed acquainted with the complex distinctions of behaviour that teachers revealed in their daily interactions with students. The study showed that regardless of a student’s year level, age, gender or ethnicity, the students were clear about their perceptions of differential treatment for high and low achieving students, and these perceptions in general aligned with those identified by the Teacher Treatment Inventory. Although the inventory provided information about teacher behaviour that was pre-determined, the interviews provided a frank view of what students were observing. This gave deeper insight into the students’ perceptions of teacher behaviour that would not be otherwise possible with the Teacher Treatment Inventory questionnaire alone.

Findings from the qualitative and quantitative evidence demonstrated that students were exposed to different academic learning opportunities and experiences of classroom life.
While Study 1 showed that when controlling for achievement the teachers’ expectations were in general accurate. There is an argument in that the evidence does suggest that teachers’ expectations can be accurate. However, given the literature that shows how teachers begin to differentiate practice and opportunities for learning, regardless of achievement if expectations are low for a particular group then this could mean that these students’ educational aspirations and possibly academic self-image may not be fulfilled. The ANOVA showed this was the case, without controlling for achievement expectations were lower for Māori and Pasifika students. The findings from Study 2 provides further evidence that teacher bias is indeed evident as students found that teachers were not only perceived as favouring high achievers over low achievers but opportunities to learn were also differentiated. For example a student reported that ‘the teacher helps them [low achieving students] with their work ... makes it easier for them’. Another student added, ‘[E]very time a helper [teacher aide] comes into the class the teacher will take the smart people. The others that need help will go to the helper’.

Weinstein (2002) explained that children spent a great deal of their lives in classrooms ‘as captive participants’ (p. 93). Classrooms are socially interactive learning spaces and it is in these spaces that students learn about how well they do at school. In the classroom environment, students ‘engage in a social comparative process’ (Weinstein, 2002, p. 100). Success or failure, and acceptance or rejection is measured by the teacher’s behaviour. Students and teachers engage in complex interpersonal teaching–learning events that include purposeful interactions, teacher/student talk, engaging students, and assessing work (Brophy, 2008). As the current study showed when students were attempting to make meaning of their environment they did not just rely on what was communicated verbally but also interpreted nonverbal communication.
Students learnt that teachers had higher expectations for those students who were doing well at school and that more was expected of these students. This was evident from both the quantitative and qualitative findings and, as was demonstrated in the first study, when teachers have high expectations of their students, on average they achieved significantly better than their peers. However, although the quantitative analysis showed higher teacher expectations were only evident for high achieving male students, the qualitative data identified this was the case regardless of gender. Rubie-Davies (2015) argued that students could do appreciably better if their teachers expected more of them. She suggested that teachers needed to be more cognisant of their displays of expectations and to understand what that meant and looked like in practice. As this study demonstrates, the impact of the teacher’s behaviour as perceived by the student can be considered influential. The students’ comments about students not doing well were reflective of the findings from the Teacher Treatment Inventory. Questions that focused on letting the low achieving students spend more time playing around and the teacher asking the students easy questions and having little trust in them were noted in the qualitative findings.

When it came to observing how students were grouped for ability, the students’ perceptions of these groupings were consistent. They knew what being in a low, medium, or high group meant in terms of their academic status. The extent of differences in learning was identified by students who also noted certain behavioural practices by the teacher that favoured students in the higher groups. Low ability groups were considered to be less attentive, were managed more for behaviour by the teacher, had difficulties with learning, and were assigned to groups that were socially less conducive to learning. This was in contrast to the students in the higher ability groups who students reported tended to experience less disruption and more cognitive engagement with the teacher. Research has shown that ability
grouping is a form of streaming, a process by which students are segregated by ability, and students have been found to be unhappy about this form of grouping (Boaler, William, & Brown, 2000). The current study suggested that there were polarisations of opportunities to learn that accompanied ability grouping, meaning that students in the low ability groups were receiving lower quality instruction that was less engaging and challenging. Ireson, Hallam, and Hurley (2005) have argued that such practice has been found to impact on students’ learning experiences in profound and largely negative ways, and more so for those students who were placed in the lower groups and tended to fall behind more significantly than those who were placed in high ability groups. As far back as the 1980s, Good and Marshall (1984) argued that being assigned to a lower group tended to communicate low expectations and that these were often self-fulfilling in terms of student achievement.

In addition, students learnt about their ability by the way teachers motivated or engaged them in learning. A lot of the praise students identified was more focused on task performance, but it was what the teacher was saying and in the context of those messages by which students gauged their ability in the class. Whereas the majority of students noted that the high achieving student received ‘high marks’ and the low achieving student received ‘low marks’, the students tended to identify ability more in relation to how the teacher praised or rewarded the students, or how they were criticised or told what to do. It was these messages that reflected students’ perspectives about where they stood relative to other students for learning. This was also reflective in students tending to perceive negative feedback as directed more towards students who were low achievers. For example the teacher was perceived as being more critical and would embarrass the students if they did not have the right answer. The student was told off frequently for not paying attention—and these behaviours tended to be directed more to the low than the high achievers.
When the teacher was being supportive, the students identified behaviours such as being helpful, taking the time to explain work to the student, asking others to help, and explaining exactly what they had to do in their work to low achievers. The students were suggesting that the type of support given for low achievers seemed to be different from the support high achievers received. While the support was given it was how that support was perceived by the students that gave them clues about their ability. For example, the students perceived the teacher asking the clever students to help the not so clever student, and that the teacher would support the not so clever student by giving them the answers to questions the teacher asks.

The qualitative findings from this study, conducted in Aotearoa New Zealand, were similar to the findings of Weinstein’s (2002) study conducted in the United States. Even though the context was very different, the students in both countries perceived the teacher as privileging high achievers over low achievers, and teacher behaviours that told students about their ability. These included how students were grouped for instruction. The high achievers were always in the high groups and the low in the lower groups. The students articulated differences in curriculum tasks measured by the level of challenging curricular tasks students were assigned. Students articulated differences in curriculum tasks as measured by the level of challenging curricular tasks different students were assigned. Students noted the low achieving students received easy work and high achieving students received work that was more challenging.

This study was also congruent with Weinstein’s (2000) finding of what students reported on the TTI. As Weinstein found, regardless of age and gender, students were ‘remarkably consistent in their capacity to identify differential teacher treatment on a brief questionnaire’ (p. 110). In Aotearoa New Zealand, students perceived high achievers as receiving greater independence, and being given more opportunities to engage in independent curricular
activities than low achievers. Low achieving students were perceived as being teacher directed, and monitored more closely. Teachers were inclined to have lower expectations of the low achievers, and to give them negative feedback. In Aotearoa New Zealand Māori and Pasifika students often find themselves in the lower ability groups (Bishop, 2005) and therefore could possibly be more exposed to lower levels of curricular tasks and less learning opportunities than would European/Pākehā students. The difference in treatment does then raise questions of certain teacher behaviours that have been identified, both qualitatively and quantitatively, about what could be possible if those behaviours were changed.

There are some key points to consider from the study, such as how students’ own academic expectations are influenced by their awareness of teachers’ differential treatment of high and low achieving students. The first study showed that when teachers had high expectations of their students, the students did significantly better than other students at the end of the year, after controlling for earlier achievement. There is a substantial body of research that identifies teachers’ negative expectations of their students, as expressed in this study, which can affect student opportunities to learn, as well as affecting their achievement outcomes (see reviews by Brophy, 1983 and the meta-analysis by Harris & Rosenthal, 1985). Brattesani, Weinstein, and Marshall (1984) found that teachers who engaged in more differential treatment of their students produced large self-fulfilling prophecy effects $(d = .3 \text{ to } .4)$. Self-fulfilling prophecies are particularly troubling as they tend to have greater salience for those with a low social class background and who are of a minority ethnic group (Dusek & Joseph, 1983), as many of the students in this study are. Given that, as noted above, Māori and Pasifika students are often exposed to low expectations and reduced learning opportunities, they are also at risk of being more exposed to self-fulfilling prophecy effects. It is a major concern that these groups of students learn to be complicit in defining
what is possible and what is not possible for themselves (Rosenthal & Rubin, 1978). The impact of differential treatment by the teacher may particularly disadvantage those students perceived as low achievers because this is likely to influence not only their social and emotional well-being but their opportunities to do well at school.

**Summary**

This chapter illustrated that there are lessons to be drawn from the students in this study. Students’ perceptions of their expectations of achievement were gained from teacher behaviour in the classroom. The students appeared to know that high and low achieving students were treated differently by their teacher. Greater opportunities, high expectations, and being in a top ability group meant that students were being afforded more positive feedback and independence. In contrast, negative behaviour from the teacher, less independence, low expectations, and more work-orientated support and help were associated with low achievers. It may be that these distinctions apply particularly to Māori and Pasifika students given that these two groups are often located in the lower ability groups (Bishop, 2005). A number of studies (Babad, 1990; 1993; Bishop, 2005; Brattesani, Weinstein, & Ministry of Education, 1984; Brophy & Good, 1970; Rubie-Davies, 2006) confirm similar findings in which they also reveal that these differential teacher behaviours are evident in many classrooms. Knowing this is vitally important for teacher practice and what it could possibly take to raise the achievement of all students. Hernandez Sheets (2005) writes, ‘Teachers are the single most important resource in any classroom. … Students’ success or failure and acceptance or rejection often depends on the ways teachers behave in classrooms’ (p. 3). As this study has shown, the choices teachers make to guide their behaviour in classrooms inevitably affects all students, but in significantly different ways, and with significantly different consequences. When a student is considered a low achiever, in a low
ability group, and the teacher has low expectations of that student, then the chances of success are also likely to be low.

These findings suggest that students are cognisant of subtle differences in treatment that favour high over low achievers. This is a disturbing feature of these findings, particularly the level of sophistication that students have in reading the teachers’ cues about where they stand in relation to their peers. That children know whether teachers think them smart or not smart should give educators reason to pause and consider the possibilities that teachers may be creating conditions for self-fulfilling prophecies to flourish. Although education policies have been engaged in raising academic expectations on a societal scale, reform efforts have made little use of research findings about teacher expectations. Importantly, children’s voices have too long been ignored in our understanding of what works in education in shaping children’s learning in schooling.

In Aotearoa New Zealand many students who are not doing so well in their schooling are Māori and Pasifika (Ministry of Education, 2014). This present study highlights the implications of the effects teacher behaviour may have on these two ethnic groups of students. Taking these findings into consideration, the third study will focus on teachers’ expectations of Māori and Pasifika students. According to Bishop (2005), to suggest that teachers raise their expectations for all their students is not sufficient to bring about change. He argued that as a precursor, teachers needed to understand the fundamentals of why teachers had low expectations of students in the first place.
Chapter 5

Study 3: Teacher expectations of Māori and Pasifika students in Aotearoa New Zealand

When teacher expectations are influenced by social class and ethnicity, students who are members of these groups are likely to see their learning journeys and life chances imbued with a sense of limited opportunities and possibilities for their future. The first study demonstrated that teachers did not show ethnic bias when achievement was controlled for, but when achievement was not controlled for lower expectations for Māori and Pasifika students were evident. The second study that demonstrated students’ perceptions of teacher behaviour in classrooms showed that those who were not doing so well in the classroom were subjected to low-level task work. The findings from this study showed what was happening when teachers had lower expectations of their students and suggested possible implications for the students’ educational experiences. Similar to that of Weinstein (2002) the study has shown that students’ voices are revealing in that they provide a very private lens of life in classrooms. The first two studies demonstrate that teacher bias is evident, and that students notice these biases through teacher behaviour. This has convinced the researcher to include teacher voice in Study 3 because we do not have as good an understanding of what teachers understand about the phenomenon of teacher expectations. In addition, because of the resilience of the impact of teacher expectations that has been identified in the literature (Rubie-Davies, 2015; Good & Brophy, 2008; Weinstein, 2002; Cooper & Tom, 1984; Dusek & Joseph, 1983) the author was aware that attitudes and meanings around teacher expectations should be taken into account.
Teachers’ attitudes and practice are influenced by the social ideologies that Waitere-Ang (2005) would describe as those that are ‘dominant at the time’ (p. 347). She argued that a teacher’s practice is shaped by a particular set of ideas and beliefs and teaching experiences which may then shape their understanding about teacher expectations. To gain better insight in the quest to understand teacher expectations, this study addresses the question: What are teachers’ understandings of teacher expectations and in particular for Māori and Pasifika students?

Method

Ethical considerations

Prior to the study beginning the researcher obtained consent for the research. Consent was given in accordance with The University of Auckland Human Participants Ethics Applications and Guidelines (Reference Number 2011/7686). All forms related to the ethics application may be sighted as Appendix A. Principals of the schools received an information and consent sheet related to the study and with a request to interview teachers (refer to appendices A10, A11). In addition teachers were provided with detailed written information about the study and consent sheet (refer to appendices A12, A13). Participation was voluntary and participants were given the right to withdraw from the study up until a prescribed date, and to withdraw their individual data, without having to give any reason.

Participants

Qualitative inquiry typically focuses in depth on relatively small samples selected for a specific purpose. Sample size, the fitting of sampling strategy to the research problem, and the researcher’s imagination and judgement are critical in the selection of participants (Denzin & Lincoln, 2003). This study focused on examining the views of teachers about
teacher expectations, with a particular focus on Māori and Pasifika students. Teachers included 10 practising primary school teachers of Years 1–8. Given that participants were drawn from a small number of schools, there was a possibility that they could be identified by their colleagues, so data related to teacher ethnicity and gender were omitted from this study. When citing data from participants in this study, the identifiers T1 to T10 are therefore used.

**Interviews**

Semi-structured interviews were carried out that lasted between 15 and 30 minutes. The questions focused on a particular area of interest that allowed the respondent to engage and provide details and explanations using their own knowledge and understanding of the topic (Roulston, 2010). The author was interested in exploring teachers’ understanding of the teacher expectation phenomenon with an emphasis on whether teachers hold the same expectations for all students, or whether they may differ especially for Māori and Pasifika students. By listening to the teachers’ responses, a context for understanding the complexities of what happened within classroom environments was possible and, in turn, this allowed for a more meaningful and in-depth analysis of the data (Neuman, 2011).

Questions were open-ended and designed so that teachers would be providing their opinions indirectly about the phenomenon of teacher expectations and of the biases that other teachers may hold. Asking the teachers to give their opinion on a topic that could be seen to be controversial was likely to be less threatening than directly addressing questions about their own practice. This would allow the teachers to share more openly about their understanding of the phenomenon through the lens of others (Weinstein, 2002). Open-ended questions allowed the respondents to answer in detail and provided the possibility of clarifying or qualifying their responses (Neuman, 2011). Although it was decided that open-ended questions would be the best way of eliciting and constructing the information, Neuman
has also suggested that open-ended questions have their disadvantages: there may be different
degrees of detail provided by the respondents; the responses may be irrelevant; coding
responses could be difficult; questions may be too general such that the respondent loses
direction; the time required for the respondent to be interviewed could be lengthy; and,
questions can be intimidating. These disadvantages were overcome by ensuring the questions
were clear and did not pose any problems for teachers. To this end, they were pilot tested
with five colleagues of the researcher who had been teachers previously. From this, it was
found that the questions did not require re-wording, there were no unnecessarily ambiguous
questions that had to be discarded, the time frame for the interview proved reasonable, and
the questions allowed for an adequate range of responses (Teijlingen & Hundley, 2001).

In order to gain teachers’ views, the initial prompts were:

1. Do you feel teachers differ in their expectations for some students? Why is that? For
which particular students might teachers have lower expectations?
2. Do you believe some teachers have lower expectations for Māori and Pasifika students?
3. Why do you think this might be the case?
4. How do you think this affects teacher practice? How does this affect the learner
outcomes?

Analysis of the interviews

In this study, the researcher followed the four-component analysis process of data
collection, data reduction, conclusion drawing, and verification described by Miles and
Huberman (1994). The process involved conducting, taping, and transcribing the interviews,
which were carried out by the researcher and a tertiary student who signed a confidentiality
form (refer to Appendix A9).
In seeking to understand the data, open coding as described by Neuman (2011) was initiated in which the data were colour-coded and condensed into relevant categories. Following this, axial coding was carried out, in which a second run of the data looked for categories or concepts that clustered together. Some other categories were added and others dropped in this process. Selective coding was the final process for identifying the final themes. This involved scanning the data again, looking selectively for cases that illustrated the final themes (Neuman, 2011). An independent rater coded transcripts into the four themes identified by the researcher. Overall there was a 90% agreement on coding between the researcher and the independent rater. Discussion brought further modification of the themes to base them on a more concise understanding of the participants’ narratives. There was some minor movement of the quotations from one theme to another until finally the themes and the quotations that pertained to those themes were agreed by both the researcher and the independent rater.

**Results**

Four themes were identified: teachers critically examining their understanding of teacher expectations; teacher understanding of how teacher expectations are shaped; implications of teacher expectations for practice; and implications of teacher expectations for Māori and Pasifika students.

**Teachers critically examining their understanding of teacher expectations**

The impetus to make a difference to the lives of students was evident for these teachers who knew that there were disproportionate rates of achievement among ethnic groups of students in Aotearoa New Zealand schools, and in particular for Māori and Pasifika students. Some educators have shown that teacher expectations have a significant influence on student progress (Rubie-Davies, 2015; Turner et al., 2015), and this was supported in Study 2. Data
from Study 3 demonstrated that opinions that existed among teachers varied as they critically examined their understanding of teacher expectations. Teacher 1 (T1) acknowledged that:

We do have differential expectations. I think we might like to think that we don’t, but I think we do.

The teacher rationalised this by simply stating that:

As human beings, we do tend to categorise, to organise our world.

Given there is a tendency to group, this teacher explained:

We have to be aware of our prejudices, stereotypes, and preconceptions. We have to be in touch and honest with ourselves about the values that we bring and how we categorize students. … I think it’s just about checking and being aware.

And this teacher made a poignant statement about teacher expectations that are founded on misunderstandings:

Historically, I don’t think there’s anyone that can hand on heart say they haven’t had lesser expectations founded on misconceptions.

When asked about whether teachers had differential expectations for some students, T3 acknowledged that often teachers did have lower expectations for Māori and Pasifika students, and elaborated:

I think it’s an awful perception, a closed mind-set perception … [and] you accept less … and we shouldn’t.

Another teacher, T2, noted the possibility that teachers have lower expectations of Māori and Pasifika students that are formed before they even get to know the students:
Hopefully, when you get to know the child, you’ll see their capability and potential and push them to achieve.

But at the same time the teacher also said:

I would like to think that just because they’re Māori and Pasifika, people don’t make judgements solely off that.

T7 contemplated the broader question about teacher expectations, but spoke only from a personal perspective, where this teacher understood expectations to be task driven, in that everyone was required to finish their work. How all students achieved this might be by allowing different time periods and levels of support:

I can only speak for myself, I really don’t know. Human nature may suggest that they may do [that is have expectations for their students]. I can’t categorically say that different teachers [have different expectations] for different students. I differ in my expectations for my own students, due to their individual abilities. In a way, there’s the same expectation for everyone to complete a set task.

However a point of critique of the teacher expectation phenomenon had been thought through by T7, who said:

Your high expectations aren’t always helpful for the children [I would like to be able to say that] … for some children that doesn’t always work and they do need that extra help.

For T7, there needed to be an emphasis on supporting students through their learning and being consistent with this approach. In doing so there was a likelihood that the student would
succeed. This view was supported by T2, who stressed the need for teachers to focus on understanding the child’s individual learning needs and adapting their practice accordingly.

   It’s understanding what the child finds trickier so they can help them manage that. It might have the same outcome, but they’ve just had more help. They may need more steps to get where they want to get.

A similar response was noted by T4.

   Yes, if there is child who finds it difficult to sit through a task for 5 minutes, I wouldn’t expect the same amount of work than the child who I knew could focus for longer – I would expect more from them. Each is different, and it’s about their needs and abilities and the progress within that. I gauge it on their abilities and learning behaviours. I like to see each child achieve to the best of their ability. I want to see them all make progress, and that will be different for individuals.

According to T4, these should be the factors that influenced a teacher’s approach to all students. When asked whether some teachers may have lower expectations of Māori and Pasifika students, T4 replied:

   I wouldn’t think so, and I hope not. Again it would be on the individual needs, some may be better at different tasks. It’s on their learning behaviours and ability to focus.

However, some teachers felt that dominant perceptions of what Pasifika students can achieve required critical examination. As T8 noted:

   High expectations of Pasifika students is not consistent right throughout the education system … there are some teachers who have very low expectations of Pasifika students for so many reasons.
A major concern for T9 was the discourse and the immutable language that described Pasifika students as a group who were being underserved by the education system in Aotearoa New Zealand. The teacher explained that there were negative implications in how these groups of students are defined and then positioned as students who needed to be ‘targeted’ and ‘fixed’:

Definitely for me as a younger teacher – only been teaching for eight years – I find it a real shame that even from the college [the institution in which the teachers qualifications was completed] they identified groups like priority learners. As we know [Pasifika] are the targeted group that we need to focus on. But they still kinda value them as having low expectations just simply because they are a priority group and that’s a real disappointment. … It’s not only naming because of the priority but also just believing that is just who they are because of the [past] generations. I think that naturally the assumption is that the expectation should fit, whether it is below or well below. So it is sad that … they still have assumptions.

Based on this teacher’s experience of being in the teaching profession for a while, T10 began the interview by examining the conversations teachers have. It was comments T10 heard from colleagues that informed T10 of who the low expectation teachers were:

‘Oh, don’t worry about them’ – them meaning students – ‘as long as they are at school, that’s the main thing, just to get them here’. The comments I hear from teachers is ‘what do you expect – they don’t have any books at home, they don’t have any lunch in their bags’. And it’s almost like a miracle if our students are achieving at or above [national standards]...
These teachers’ illustrated what lay in their own minds as they critically examined their understanding of teacher expectations but in addition they also had an understanding about how teacher expectations were shaped.

**Teachers understanding of how teacher expectations are shaped**

As T8 noted above, for Pasifika students, inconsistencies in teacher expectations occurred across the schooling sectors. This participant believed that teachers tended to place students into distinct groups based on characteristics such as:

- their language,
- their cultural background,
- educational background,
- socioeconomic,
- parent status of employment,
- time in education in New Zealand.

The comment from T1 about having to ‘be aware of our prejudices, stereotypes and preconceptions’ brings to the forefront the influence of such responses to differences in shaping values that underpin teacher expectations. T1 acknowledged not being immune to being influenced in such ways.

I’m very aware I have a gender bias and [perhaps] that’s founded in evidence over 27 years of teaching. I’ve found generally boys learn in particular ways.

For this reason, the teacher added:

We need to be clear about where we’re coming from and what our prejudices are. … I think there are generalisations that can be made, in terms of learning styles and behavioural patterns and expectations – there are differences.

Teacher 3 explained why such self-understanding and critique is urgent:

Yes, they [teachers] have lower expectations for some and higher for others, mostly from what I’ve observed, [and] the feedback, interaction with parents, conversations
I’ve heard [tells me] a lot of it appears to be socioeconomic based, ethnic based, but certainly family circumstances based, is a top one. If a family is perceived to be less, we can expect less from the children, which is quite criminal.

Another teacher [T6] acknowledged that teachers do differ in their expectations and how they viewed their students, and considered the assumptions on which these could be based. One significant factor, for this teacher, was teacher views of:

What ‘baggage’ Māori and Pasifika may bring with them. And we are making assumptions from stereotypes … We sometimes look at it through white, middle class lenses and that’s not the way to do it.

T6 made a point that there were reasons for why this may be the case. The teacher recognised that:

It’s about their [the teachers’] own beliefs …

In doing so, T6 examined possible explanations for why teachers may have such biased beliefs and expectations.

Possibly ignorance, misconceptions about styles of learning, in the position of Pākehā, and ethnocentric perspectives on education …

T1 also talked about the impact of education from an historical perspective, and the need to reverse the assimilatory intentions that had driven the education system, and consequently teacher expectations, especially of Māori and Pasifika students:

I think historically, there may have been different expectations there. We have to look at every individual and every group and try to enable them to find their place and to make school fit them rather than making them fit school.
A few teachers believed that student data drove teachers’ expectations. T5 explained there were problems with that:

Māori and Pasifika are some of the ones in the low ability group, according to data. A lot of the data is eurocentric, the content in the assessments given to the children is unfamiliar to them. If it was tipped the other way, and Pākehā were assessed in a Māori/Pasifika context, it would be interesting to see how they went.

Reference to data is not the only problem according to this teacher, who acknowledged also the impact of the mismatch between the cultural contexts of home and school. This participant believed teacher expectations to be shaped mainly on data, and cultural mismatch of not understanding the child’s own value system and where they fit in the world. The cultural context of a Pasifika/Māori student may be quite different to the teachers’, who may not be recognising the skills and experiences the child’s bringing to something. The way they get to learn at home may be a different context to the way they learn at school. I notice in my maths groups that the Pasifika have an understanding and concern for ‘a whole group achievement’ whereas, some Pākehā are concerned for their own selves and are more individualistic.

T5 was concerned that some teachers allowed the data to define their expectations of students. The impact of data is a possible explanatory factor for T2 in understanding how teacher expectations may be shaped in advance of teachers having an opportunity to meet and know their students:

Possibly, I think that it’s based on data. If you’re looking at something based on data, and you don’t know the child, you would base your expectations around that.
There seemed to be a consistent message from a few teachers not to allow your expectations to be shaped by deficit views a teacher may have of a student or their family based on previous experiences. As T9 explained:

I believe that teachers haven’t really had that opportunity to just think, you know, to have that time aside to actually be like, it’s not about whether they’re one colour or not. It’s the fact that all students need to learn equally; and even though their brother or their sister may not have achieved as high as them, that doesn’t mean that is [going to be] the same for that person. I know often that teachers say comments like, ‘oh I’ve got that person in my class and I taught [a sibling] last year and … he is well below in reading or not achieving in maths.

In this case, T9 identified how teachers perceived all members of some families in fixed or stereotypical ways, and how expectations could be shaped on these perceptions. If one member of a Pasifika or Māori family was unsuccessful, it was often incorrectly assumed all would be the same, as T9 explained.

And that is not the case. Because, you know, if you had that in a European setting they’ll be like, ‘this child’s dad’ … you know, they will do that individually. But I just find that sometimes I get tired of them saying just because it’s that family, you know that the generations are the same.

This teacher added to the debate by taking note of how a teacher gathered information in order to know their students. The teacher stressed the importance of moving beyond negative views noted by other colleagues and to build a relationship first with your student.

Often teachers don’t know anything about their student so they go back and ask the previous teacher and often there’s conversation about the learners that are
underachieving, and in particular they are the priority learners which are Māori and Pasifika [yet] there’s been no relationship formed.

Another example, raised by T10, related to the way information can shape the expectations of a student coming into a new school. The conversations that were bandied around in school staffrooms informed others of what the teacher’s expectations were of particular students:

Before the child even comes into the school – I’ve heard of some cases when a child is about to be enrolled – reception has heard maybe some background about the student from their last school [and] are giving this information to the teacher or team leader, and automatically there are all these assumptions … expectations of what that student is going to be like before they even come into the school.

**Implications of teacher expectations for practice**

When T1 stated her belief that all teachers would, at some time, have held lesser expectations of some students, she was emphatic in her response that this would have an impact on teacher practice.

Absolutely, anyone who says it wouldn’t isn’t being truly honest.

T1 considered the amount and nature of the time teachers spent with students in comparison to time spent with their parents.

We are only one part of their life and are spending almost more time with them than their parents would.

The participant believed, because of the differences between the time spent at school and that spent at home, building a relationship with family is important for teacher practice:
We get the best hours of their lives. We also have to recognise they’re coming from a family background and parents have a huge effect on the children’s perceptions of themselves and what education is all about. I think parents influence children highly … due to the parents’ own beliefs. That’s why partnership is so important.

T2 believed teacher expectations were adaptable and could shift as they got to know their students better. This would depend on the student’s demonstrated ability:

At the beginning of the year you have higher expectations. You tend to go in with higher expectations and then adapt them, rather than lowering them. In an ideal world, I don’t think it would lower the teaching. Depending on the student’s ability, you adapt accordingly. You’re scaffolding to their ability, whereas with other kids it [the task] can be an independent activity.

Teacher practice therefore adapts also, and was seen by a number of teachers as key to achievement. As T4 explains:

We want every child to achieve, so we will try and cater for the different abilities and learning speeds.

For T7, this took the form of teacher ability grouping as part of the teaching practice:

In terms of planning, we have to differentiate between the different ability groupings, in terms of what they’re expected to achieve.

This strategy was designed to enable what T7 believed to be an appropriate adaptation for ensuring a challenging but achievable experience. This teacher explained that even though students are ability grouped, there is still the expectation that:
Just because a kid may have a low ability doesn’t mean the standards I set for the task are strict. I still have high expectations but at a relative level.

T3 saw student abilities to be multidimensional, but suggested that the current emphasis on mathematics, reading, and writing creates structural constraints on teachers and students when seeking to capitalise on the strengths of individual students in developing their learning. The teacher critiqued the narrowness of teaching that ignored or undermined other abilities of students such as their creative, practical, and kinaesthetic abilities, and referred nostalgically back to a time when:

All teaching and learning had multiple purposes. … Whereas now we are so hooked onto the three core curriculum areas, and there’s such a push, and we forget that children actually learn differently. So let’s not, not do reading writing et cetera but look at the kids and do it through artwork.

This teacher recalled an earlier teaching experience during which the textbook did not dominate the teaching and learning in mathematics:

[We would] get them doing outdoor activities, fishing in the river. They can do a massive amount [of learning] which they find they can transfer to something else.

According to T6, they perceived that a teacher with low expectations may invest less time in those children, dumb down the work, not spend as much time to extend the child and make the assumption of ‘that child can’t learn, so I can’t teach them’. If you have high expectations of students they do better and rise to the occasion.

The implications are considerable, the teacher explained:
Some people may fall into [reinforcing] the self-fulfilling prophecy and some kids use it as something to hide behind.

T5 added to this debate that if you are going to give students low-level work because you believed that is all a low achieving student could cope with, then there is the likelihood the students would also believe that:

I’m teaching maths to kids who are below the standard. I know they can reach higher than what the data shows. I do see some teachers teaching them [the lower students] low level things, because that’s what they expect them to do and they don’t expose them to the higher level thinking. So their expectations are based on data, creating a self-fulfilling prophecy, which results in keeping them on the easy level and not pushing them as much as other kids.

At a personal level T5 had an increased awareness of the importance of the students’ cultural knowledge in their learning, and of the teacher’s own cultural positioning:

It’s been a huge learning for me this year watching those interactions and changing how I’m interacting too, for example, when I’m saying something, I consider what effect and values I’m portraying.

T8 believed there was a shaped perception of Pasifika students and that this then influenced teacher practice. Citing a well-known New Zealand research programme, Achieving in Multicultural High Schools, that provided evidence of low teacher expectations across eight decile one schools that had high numbers of Pasifika and Māori students (Hill & Hawk, 2000), this teacher said:

It comes down to how teachers engage with Pasifika parents, how they engage with Pasifika students, the types of engagement they have with the students, what they
have prepared in their classrooms, whether it meets the academic needs, cultural needs of the Pasifika students. Some teachers tend to look down … some research have identified this.

The teacher highlighted the importance of not allowing teacher practice to be influenced by negative perceptions of their students, and added:

Teachers need to reflect seriously about their purpose in the classroom, because what they do in the classroom is either they damage or enhance their [students’] learning. So it comes down to the teacher’s philosophy of teaching, the values of teaching and the expectations of the students in front of them. And also it is up to them to ensure that the Pasifika students are [treated] the same as other students. They need to identify the needs of those Pasifika students in order to cater for them accordingly.

T8 noted of some teachers:

Their perception is that they [Pasifika students] do not perform. Why? Because they don’t push them. They don’t have high expectations. That is my perception. That is my experience …

Another teacher agreed that having high or low expectations affected teacher practice and noted what happened to practice if the teacher did not aim high. In questioning why the reading level of some students had not progressed over a six month period, T9 contemplated what might need to happen to make a shift in learning:

I think it affects their own practice because classroom data hasn’t changed and I believe that’s because [the teacher] maybe didn’t find a connection that was meeting the needs of where those students were at.
For T9, there was still considerable dissonance between the attitudes and perceptions of some teachers and current policy that points to an underlying cultural dominance about what counts in education:

It states, you know, in the Pasifika Education Plan that aiga [family] is central …

When a child comes to the classroom the teacher instantly needs to have that connection – that it is not just about that child, that it’s about going beyond and above and saying I respect [that] this child brings aiga, brings community together, in this classroom.

This teacher added that the same goes with the Māori plan, Ka Hikitia:

One of the principles is productive partnership and it states clearly that a Māori child needs to be understood [not] isolated from the whanau [family].

Good resources could only go so far for this teacher. Building relationships was seen to be crucial to practice when supporting student performance. This took time and conscious work to be effective for the student, because of the resources the families bought to the relationship. The teacher felt:

It’s a shame that the spirit and liveliness of the families are not connecting to the culture in our school. But yet we have, you know, the privileges to have really good resources but yet sometimes the connection is snobbish.

There was a strong emphasis that good teaching practice is about having cultural intelligence. However, this had to be an integral and respected part of the educational experience.
The heart of the Pasifika person is service and alofa [love] but sometimes it is not a value that is respected in the European culture.

T10 discussed personal observations when visiting other classrooms. T10 believed that the expectations the teachers have of their students had a significant effect on their practice. Some of them are trying and giving up because they don’t seem to be making any progress with their children. I don’t think they’re trying enough or they come into classrooms thinking, ‘oh, OK, a bunch of Māori and Pasifika here’.

The understanding that teacher expectation could affect teaching practice is evident from these teachers in a variety of ways. Some teachers observed low levels of practice whereas others spoke about their perceptions and own assumptions about the influence teacher expectations have on teacher practice. This next and final theme examined the teachers’ view on the implications of teacher expectations and the influence they can have on students.

**Implications of teacher expectations for Māori and Pasifika students**

There have been longstanding gaps in educational achievement for Māori and Pasifika students in Aotearoa New Zealand (Ministry of Education, 2013; Education Review Office, 2013) and, one could argue, for Māori since the time period of 1867 till the present (Bishop, 2005). Because the research had shown teacher expectations had influenced outcomes for Māori and Pasifika students, it made sense that teachers should be aware of what makes a difference for raising achievement for these groups of students. The teachers in this study identified what those influences may be.

For T1, to overcome the barriers to success that can be created when teacher expectations of their students have an effect on student learning required both awareness and commitment on the part of teachers, and a sense of belonging for students. T1 appeared to be confident in
the resources that were provided, and this reinforced the view that achievement rested largely on teacher attitude. T1 argued:

   We have everything at our fingertips nowadays to stretch everyone to the max, even people who have disabilities or differences. In terms of outcomes, individuals need to take responsibility for either deciding there are limits or limitless [possibilities], and for the belief they have in their students.

   In the first instance, T1 believed that how students perceived school will influence student outcomes: ‘I think everything. Culture, background – their cultural identity, experiences at home, whānau [family]’. Teachers therefore needed to be aware that teacher expectations could affect student experience in different ways. This awareness would be an important step in transcending what could be initial uninformed understandings of student potential, and in creating a positive learning environment. T1 continues:

   We do have differential expectations [but] I believe every student in my class has the potential to achieve what they want to if they commit to it. … I think the potential for every individual is unlimited.

However, this teacher is also locked into the meritocratic equation, and suggested that academic learning is about effort and attitude, the belief that if you try hard you would do well: ‘As far as I’m concerned, it’s about effort, [and] attitude’. But added it was also about ‘Developing that growth mentality and mind-set’.

   This same teacher saw ability as something that is nurtured, as it did not matter what family background you came from because ‘Nurture, by far outweighs any genetic potential that individuals can have to achieve’.
T2, who believed you needed to provide the appropriate form and extent of support so the expectations and outcomes for all students would be the same, saw the impact of lower teacher expectations in terms of the effort teachers would make in supporting some students.

I would hate to think that anyone around here would relax because they have lower expectations.

Other teachers, however, were more critical. T6, who believed that teachers do hold different expectations for Māori and Pasifika students, argued that if you have low expectations of students that were largely fixed, and the belief that a child does not have the ability to learn, there would be consequences:

If you tell a child they’re dumb, or give them that impression, the child won’t bother to do their best. It has a massive outcome.

So this teacher noted that teacher expectations influenced teacher practice and outcomes. This view was endorsed by T10, who believed that if a teacher had low expectations of their Māori and Pasifika students, the effort they put into their teaching of those students would be minimal. The implications are students not being challenged and little learning would occur.

I don’t think the teachers … put as much effort into their teaching to get through to our students, that is, engage Māori and Pasifika students. … I am not seeing any extra effort being put into the teaching practices of these teachers… Just giving the child a book to sit in the corner, or something to colour in, or umm a game to play that they can pass off saying it is an educational experience, but really it isn’t.

When teachers failed to place much effort in teaching their Māori and Pasifika students on the assumption that they lack potential, this was seen by T3 as being ‘a lack of resourcing in the sense of themselves’.
T3 acknowledged that there can be challenges in confronting dominant stereotypes of Māori and Pasifika students.

You have to be quite brave to say the child has the same potential as everyone else. ‘I just need to get in there a bit more and give them the same as everyone else has had’. That’s actually really difficult, and I don’t know if all teachers are prepared to do that hard work.

This participant, whose teaching career was spent mostly in schools with a high proportion of Māori students, explained further:

I didn’t have the opportunity not to have high expectations of everyone because they were all Māori and of course they were going to do it and learn, otherwise I’d be on their doorsteps, which I was. We worked with parents and whanau, so there wasn’t a low expectation.

T9 saw the very nature of ability grouping tended to reflect a rather narrow and largely fixed expectation for students in these groups which were likely to influence student outcomes.

We have to differentiate between the different ability groupings [because] the overall generic thing is getting the task completed.

However, T9 was concerned that when students appeared not to have made the expected progress despite teacher efforts, some had given up. In such instance, T9 suggested that practice could be reduced to providing activities aimed to occupy rather than educate. It was little wonder that the student’s progress and achievement would be negatively affected.
The teachers’ narratives thus highlighted some critical aspects of the influence of teacher expectations on student outcomes. These expectations were reflected in narrowly defined performance activities, ability grouping, and public displays of teacher discourse. In addition, having high or low expectations of student parental status, the extent to which building relationships is prioritised, and recognition of a student’s culture and identity were also important factors for influencing student outcomes.

Discussion

The phenomenon of teacher expectations and its implications for shaping the educational experiences and outcomes for students is not a new problem. Sustained debate of these issues was initiated among social psychologists and sociologists of education in response to the social awareness that accompanied post-World War II social movements (Clark, 1965; Keddie, 1971; Knight, 1988; Nash, 1973; Rist 1970; Rosenthal & Jacobson, 1968). This current study investigated teachers’ understanding of teacher expectations, and in particular with reference to Māori and Pasifika students. These understandings were explored through the analysis of interviews, and four themes were identified. The themes were teachers critically examining teacher expectations, how teacher expectations are shaped, and the implications of teacher expectations on teacher practice, and for student outcomes. The narratives acknowledged that teachers do have expectations for their students. Although those expectations can vary, there was a general consensus that these were lower for Māori and Pasifika students. In analysing the relevant themes, some key points became evident. Notions and understandings of teacher expectations tended to centre on the relationships that teachers developed with students, the resilience of social stereotypes and prejudicial views, the gap between policy and implementation, and the complexities and challenges for teacher practice.
Educational experiences for Māori and Pasifika in Aotearoa New Zealand

Educational experiences for Māori and Pasifika students have been largely shaped by policies and institutionalised western systems that historically have been dominated by one specific cultural group. Within constraints created by these systems, success for Māori and Pasifika students has been limited. A considerable body of literature has sought to explain the disproportionate underachievement, to suggest solutions, and provide recommendations for improving the academic achievement for these groups (Bishop, Berryman, Glynn, McKinley, Devine, & Richardson, 2001; Bishop, Berryman, Tiakiwai, & Richardson, 2003; Bishop, 2005, Hohepa, McNaughton, & Jenkins, 1996; Manu’atu & Appleton, 1999; St George, 1983; Nash, 1973; Wendt-Samu, 1998). Parts of those explanations have focused on low teacher expectations which developed from eurocentric and imperialistic ideologies of ‘race’ and ‘civilisation’, with the suggested solutions lying in the need to raise teacher expectations of their Māori and Pasifika students.

For a lengthy period, the underlying assumptions on which solutions were posited were grounded in notions of cultural and deficit thinking, which overlooked the impact of the historical subordination of the interests and learning preferences of these children within dominant group institutions (Bishop, 2005). As a result ‘solutions’ that focused on ‘fixing’ students and family deficits failed to address the underlying systemic inequalities. Some of the participant teachers in the current study still saw deficit thinking as being a concern, and appeared to believe deficit thinking shaped teacher expectations. Moving beyond deficit thinking was a struggle, according to some participants, in that first teachers needed to know about, accept, and understand how such thinking could shape teacher expectations. Given the power and resilience of past beliefs and attitudes, it is difficult to work against that thinking (Warren, 2002).
Some participants were cognisant of the fact that they worked within a Pākehā eurocentric education system and questioned whose perspectives were being recognised and validated in the system. They argued that teachers needed to be delivering a culturally responsive curriculum that would be more meaningful for their Māori and Pasifika students. Waitere-Ang (2005) addressed this very issue and explained that there were consequences for those students whose life experiences, ways of learning, and world views were not recognised or validated. She states, ‘success for such children is not a simple matter of curriculum competence. … In order to access the socially constructed fonts of knowledge, children outside the norm are dependent on their tenacity to decode the so called neutral cultural logic of the dominant group’ (p. 359).

The knowledge that underlies school practices and pedagogy is rarely examined. Applebee (1996) makes a point that the learning we do in the classroom is based on the curriculum content of known knowledge. He argued this type of knowledge is knowledge-out-of-context and sees learning as being ‘fixed and transmittable and able to be memorised by students, who are generally like the teacher’ (p. 133). Applebee provided an understanding or gave context to what was reflected in a participant’s narrative when they question what types of knowledge was being considered to engage their Pasifika and Māori and students. The development of curriculum instruction became the development of culturally significant domains for conversation. Instruction became a matter of helping students learn to participate within those domains and playing a central role in nurturing empowerment, cultural recognition and power sharing. However, some participants suggested that when teachers were influenced by culturally dominant knowledge and practices, there was a tendency for teacher expectations to be low for ethnic minority groups such as Māori and Pasifika students. In this case, participants commented that teachers
tended to ‘dumb’ down the curriculum and the implications for the students was a likelihood that the status quo of their positioning in the class would remain.

**Resilience of social stereotypes and prejudicial views**

Stereotyping is about attributing a fixed set of traits to a group of people (Hernandez-Sheets, 2005). When prejudiced behaviour is expressed, there is a tendency to have an ‘us’ versus ‘them’ attitude based on intergroup differentiation and these attitudes are predominately negative (Ashmore & Del Boca, 1981). Waitere-Ang and Adams (2005) explain prejudice as being an ‘irrational attitude towards certain people based solely on their membership in a particular group’ (p. 121). Some of the participants were very aware of the impact of stereotypes, of how they had been developed historically, and of the assumptions about groups of people that shaped teacher expectations of many students who had been traditionally marginalised. Some participants argued that a teacher with low expectations could influence how students perceived themselves. Jussim, Robustelli, and Cain (2009) note self-fulfilling prophecies tended to be more evident in students who were from ethnic minority groups. Two of the teachers in this study demonstrated that they were aware of how this process worked and its consequences. They understood how it had been conceptualised. The participants talked about how the students could buy into prejudiced messages that teachers with low expectations may be communicating in the classroom. Those messages, they suggested, could be so powerful that the student was unable to see themselves in any other way than that which the low expectation teacher portrayed. There are various theories that explained the causes of prejudice and suggested that personality, group norms, social structures, cultures, group identity and categorisation contributed to prejudices and these factors interacted in complex ways (Banks, 2006). Change that demands critical awareness

148
and interrogation of long-established and embedded attitudes and practices therefore becomes a major challenge (Warren, 2002; Weinstein, 2002).

Duckitt (1992) explained that prejudices are really resilient. What he found even more remarkable was the ease with which they can be provoked, how they can be expressed in so many different ways, and how tenacious prejudices can be. This message was evident from most of the participants. In their experience, they were able to recount instances of ways in which stereotypes not only remained, but continued to influence teacher expectations, and the implications that had for students and families. The work of Van den Bergh et al. (2010) and their differentiation between implicit and explicit prejudiced attitudes helped to explain the resilience of stereotypes. The participants in this study suggested prejudiced attitudes were not always overt. However, such stereotypical attitudes were seen as ‘common sense’, and accepted as normal. For example, participants in the current study alluded to the fact that it was ‘normal’ to consider that the children from one generation to the next would also underachieve. There were some concerns about the labelling of students as priority learners, as underachievers, and as not having the potential to be worthy of more than that. For one participant, it was not only about the shame that label had brought for Māori and Pasifika students, but also how the label could stigmatise students. Knight (1974) talked about four structural determinants of schooling which work together to compound disadvantage for some students. These were: streaming, labelling, teacher expectations, and student reputation. Knight argued that together these not only created inequalities of educational outcomes, they also created barriers to change. The participant referred to above felt shameful that the very educational institution that provided pre-service teacher education used these labels and how such labelling was also common place in the Ministry of Education. This, the participant
implied, reminded you of how powerful labels could be and how uncritically they were accepted as normal discourse.

Fiske (1996) noted sense-making is fundamentally a social process, which one of the study’s participants alluded to in the narratives in that this sense making process was something humans do naturally. With the very nature of sense making, Fiske implied categories that defined how people were understood are socially constructed. Fiske explained that when this happened members of society were inclined to appeal to a set language of images, practices, statements, metaphors and so on that were organised in particular ways. Other participants in the current study appeared to be aware of the way such sense making led to biased actions by teachers. Although there was some evidence in a recent study that explicit bias by ethnicity in teacher expectations appeared to have dissipated in New Zealand (Peterson, Rubie Davies, Osborne, and Sibley, 2016), many of the teachers in the current study suggested differently, and cited instances of biased practices from their own experiences. Peterson et al. (2016), drew on the findings of Van den Bergh et al. (2010), and showed that their data suggested a covert bias against Māori. They thought that perhaps teachers may not have been honest in expressing their explicit expectations. This was similar to the instances cited by participants in the current study which suggested that bias was expressed in a number of ways, both overt and covert.

**Gap between policy and implementation**

The participants in the current study cited the very policies that were supposed to enable all students to experience success: the Pasifika Education Plan (Ministry of Education, 2013) and Ka Hikitia (Ministry of Education, 2008). These were ministry initiatives provided to schools for raising the achievement of Māori and Pasifika students by ensuring their educational experiences are inclusive of their culture, language, and identity. However, the
participants argued that some teachers were unaware of how these policies should be interpreted, and why. Indeed, they questioned if some teachers had any conceptual clarity that went beyond stating what, to them, appeared to be the obvious in how the ministry policies should be interpreted. It was easy, one might have said, to develop a policy; however, to put it into practice required a deeper level of understanding of what the policy could offer in meeting educational and other social objectives. Commitment to emancipatory change required a deep understanding of the rationale of change and this goes beyond a simple interpretation of the policy into pedagogical practice.

Although some of the teachers critically assumed that these policies provided the basis on which culturally responsive pedagogical understandings could be developed and sustained, teachers had to ‘buy into’ the policies. However, some of the participants recognised that teachers were not neutral beings. The possibility is that teachers would view these policies through their own ‘set of lenses’, influenced by the beliefs and assumptions that have been culturally transmitted from their own cultural and ethnic histories. Wendt-Samu (2004) talked about this very possibility in that she suggested teachers have multiple ways in seeing their world and their perspectives would be influenced by whichever cultural or ethnic lens they use. In this respect it is the very nature of implementing these policies that enabled the perpetuation of indiscriminate teacher expectations of Māori and Pasifika students.

Within the current inclusive policy environment there is an expectation no student would be excluded on any grounds from meaningful education experiences. According to the Ministry of Education, inclusion means ‘valuing all students and all staff in all aspects of school life. It involves removing barriers to presence, participation, and achievement. It is one of the eight principles set out in the New Zealand Curriculum and should underpin all school leadership and decision making’ (Ministry of Education, 2012, p. 1). One of the key
elements here is that students would be able to develop a sense of belonging. This is written into the key competencies defined in the New Zealand curriculum as crucial to supporting a student’s participation, and which stated ‘students who participate and contribute on communities have a sense of belonging and the confidence to participate within new contexts’ (Ministry of Education, 2007, p. 13).

**Complexities and challenges for teacher practice**

Participants in the current study revealed that there were some teachers who provided less than challenging work to some groups of students. Brophy and Good (1974) explained one possible impact of teacher expectations is through the concepts of direct and indirect influence. An example of the former, they suggested, was when a teacher ‘dumbs down the work’ to which students perceived to be less intelligent are exposed. The latter, the indirect influence, is the learnt response of a student who, being aware of the teacher’s behaviour, does not bother to do their best. As teachers in this study noted, this meant that opportunities to learn varied according to the expectation of the teacher. Therefore the achievement outcome for students’ learning would also be differentiated. Some participants questioned the reasons for why this happened.

Keddie (1971) argued that this was not a new problem. She looked at notions of ‘ability’ and valued knowledge as being class-based. Keddie saw that, despite teachers’ best intentions not to allow their teaching to be shaped by officially defined academic student identities, or by the social positioning of families, they saw students at various levels differently and that this was reflected in the way classes were taught. Keddie argued that teachers tended to link ability with social class background, motivation, and initiative. They would pathologise the background of working class students, to see the home as problematic,
and the students as ‘disturbed’. She found that teachers looked at the failure of working class students instead of looking at the structurally classed basis of schooling.

The participants’ narratives revealed that if students did not have the relevant learning resources at home or come to school with their lunch then they were automatically considered to be low achievers. In addition, one participant believed that there were also those teachers who categorised students based on their distinct characteristics, such as ethnicity, socioeconomic status, and parents’ employment status. These beliefs are challenging, as Keddie noted, particularly if you considered that teachers are seen as pivotal for the learner, and the power that brings to the classroom teacher gives them the license to shape what goes on in classrooms.

Working within a school environment, teachers face complex and challenging ideologies that are deeply embedded in society. To be a real agent of change, teachers would do so against competing societal beliefs. The participants in the current study shared their understandings of the attitudes and assumptions that have shaped teacher expectations. These teachers, through the narratives they shared, have examined what is often not examined—those tacit assumptions influenced by deficit discourse, stereotypes, attitudes, and beliefs that have been normalised in society (Waitere-Ang, 2005). The negative discourse and stereotypical views are that Māori and Pasifika students come from poor backgrounds, they have no family support, come from a negative family environment, lack positive role models, exhibit negative behaviour, record continual absence, lack access to resources for learning, and so on (Bishop, 2005). From this long tradition of deficit representations for Māori and Pasifika, it is likely they would be disadvantaged from the beginning by a teacher’s lowered expectation as compared to those students of a European background.
The study suggested that teacher bias can be overt, but it is often unconscious, and hard to recognise, which makes it much more difficult to battle against. Although teacher expectations can be expressed as a conscious act, they can also shape teacher practice in unconscious ways (Peterson et al., 2016). To ensure that teacher expectations are not influenced by uncritical views, teachers need to be appropriately informed and prepared to challenge such norms in their practice. Teachers would have to obtain a deeper level of understanding about the ideological foundations of how such biased notions are themselves shaped (Warren, 2002; Weinstein, 2002).

In sum, the participants in the current study highlighted the need for all teachers to develop critical understandings of the nature of teacher expectations. Today, the stigma for Māori, and later Pasifika, based on colonial superiority still resonates in the education system, albeit in more subtle ways (Bishop, 2005). Stereotypical views, negative discourse, and the assumptions made of Māori and Pasifika students were, the participants argued, the very things that shaped teachers’ low expectations. To counteract these views, and to support a more positive way forward, there have been several initiatives that provided a means for schools to be culturally responsive to historically marginalised ethnic groups. Participants argued, however, that even when schools attempted to implement the initiatives into their teaching and learning, they were not always implemented successfully. To meet the complexities and challenges for teachers to have high expectations of all students relative to achievement required not just understanding, but also action. A teacher’s context shapes, in powerful ways, how he or she thinks and acts. Teachers are products of their culture and heritage regardless of their backgrounds; for some, they are part of an established norm influenced by values and beliefs of a dominant group of peoples. Indeed, few aspects of our social world are as difficult to ignore as stereotypes, which are as easy to learn as they are
difficult to forget. Without teachers’ intentional action to make a paradigm shift in their thinking about deficit views, the thinking is likely to continue and be perpetuated from one generation of teachers to the next.

To conclude, the research in Study 3 focused on teacher perceptions of teachers’ expectations, including the influence of expectations on student achievement, how students perceived teacher expectations, and what teachers understood about teacher expectations, all with a particular emphasis on Māori and Pasifika students.

The next, and final, chapter will discuss the findings of the three studies, examine the educational implications of the current findings, and discuss possible directions for future research.
Chapter 6

Discussion: Working toward equity—how is this possible?

This research was conducted in a provincial town and a large multicultural, urban city in Aotearoa New Zealand. This thesis has provided crucial insights into the teacher expectation phenomenon as it is expressed and experienced in the context of Aotearoa New Zealand, and adds to a growing number of studies that have examined teacher expectations in both national and international contexts. The three studies conducted in this thesis are independent but interconnected, and provide various dimensions from which the teacher expectation phenomenon can be examined and understood. In particular, the studies were designed to understand more about how teacher expectations influenced the learning of students, how those expectations were perceived by students, and finally, what teachers understood about teacher expectations, with a particular focus on Māori and Pasifika students. The findings from this thesis have brought together several levels of understanding about the role that teacher expectations can have in education. The analyses have shown how significant this phenomenon is, particularly for minority groups. Nonetheless the subtle and yet obvious ways in which teacher expectations permeate the thinking of educators are not always readily recognised because of the binary (high/low) nature of the ways they have been articulated in educational discourse - that is, as theoretically defined opposites that are set off against each other as high and low. The implications are that if you are a teacher who has high expectations for the students it is likely that academic achievement will increase and if the teacher is a low expectation teacher, it is likely that student achievement will decrease (Rubie-Davies, 2015).
The discussion brings together the findings from the three studies and synthesises them against theoretical and research literature introduced in Chapter 2. It is centred on the different levels of understanding that have been arisen from the research findings, as viewed through an equity lens. The first section provides a brief overview of the findings. The next section discusses student achievement and how teacher expectations of student achievement can make a difference. This is followed by an in-depth discussion of the influence that teacher expectations may have on student learning opportunities, of how teachers understand teacher expectations, and of the possible tensions and contradictions that may derive from a teacher having high or low expectations of students. The final section looks at the limitations of the studies and the implications that arise from the findings.

**Overview of the findings**

Study 1 investigated if teachers varied their expectations according to the ethnic characteristics of a student relative to achievement. The proposition that teachers did vary their expectations according to student ethnic characteristics was rejected when achievement was controlled. After controlling for achievement, the evidence suggested that the teachers’ expectations were in general accurate. However, if a teacher had high expectations of a student, the student made significant gains in achievement in reading by the end of the year. Conversely, if the teacher’s expectations were low, achievement progress was also low. The findings showed that Pasifika students were significantly below European/Pākehā in terms of average achievement, and typically made approximately 15 points less progress by the end of the year than New Zealand European students. Māori also showed lower average achievement than New Zealand European students. A further analysis was conducted in which achievement was not controlled for and this finding showed that teachers’ expectations
were significantly lower for Māori and Pasifika students than for European Pākehā and Asian students.

Study 2 examined students’ perceptions of teacher classroom behaviour that would inform the students of whether the teacher thought they were clever or not. It was not possible to ask students their perceptions of teacher behaviours specifically towards Māori and Pasifika students for ethical reasons. However, given that Maori and Pasifika students appeared to be the subject of low expectations by teachers, it was argued that the behaviours exhibited towards those for whom they had low expectations may be some of the behaviours experienced by Maori and Pasifika students. The study revealed students used a number of factors to interpret differential teacher behaviour towards high and low achievers. Students perceived a teacher as a low expectation teacher by the lack of independence, support, and negative feedback students received. What students perceived as a teacher holding low expectations for a student was revealed by teacher behaviours such as not asking the student to show others what to do, or not trusting the student. The teacher would ask such students easy questions, and not wait for the student to answer, and would expect the student to complete tasks without being distracted by others.

The quantitative findings emanated from a prearranged set of scenarios of differential teacher behaviour, while interviews with students provided a more in-depth analysis of what students observed. Student personal accounts of what was perceived in classrooms gave further scope to ascertain if other behaviours were more relevant than those from the scenarios. The interviews also provided an understanding of how, from the behaviour of the teacher, students could identify whether they were clever or not so clever in the classroom. The questions provided an opportunity for students to talk about how the teacher treated others and to identify how the students knew they were doing well at school or, conversely,
not doing well. Responses to questions revealed the students’ perceived understandings of how clever and not so clever students were treated in the classroom by the teacher, the possible outcomes for the students of that treatment, and how the students understood cleverness. The key findings suggested that students were not only sensitive to teacher behaviour in the classroom, but could express with confidence whether a teacher thought a student was clever or not and describe the consequences of that behaviour for the clever and the not so clever students. In addition, the students could describe particular characteristics of someone who was clever as opposed to someone who was not. The quantitative data found that students perceived high achievers as being more competitive, popular, friendly, focused, independent, and successful than low achieving students. The students also perceived high achievers as more likely to be leaders. In the interviews, students, in general, also perceived some similar characteristics for high achievers. Of note is the fact that student characteristics such as year level, age, gender, or their own ethnicity did not influence students’ perception of teacher behaviour or the descriptive characteristics of clever and not so clever students.

In Study 3, the semi-structured interviews allowed interpretive questions to capture in the teachers’ own words their understandings of teacher expectations, particularly in the context of Māori and Pasifika students. The questions probed whether teachers differed in their expectations, why that may be the case, and the influences that differences in teacher expectations may have on teacher practice and student outcomes. Evidence of the findings suggested that the teacher’s explanations were based more on circumstantial or anecdotal understandings of teacher expectations. This was instead of an understanding underpinned by theory and practice that would enable the teachers to articulate and provide greater scope to their understanding of teacher expectations.
Study 1 suggested there was no bias in terms of teacher expectations about students of different ethnicities once achievement differences were taken into account, however, the ANOVA showed that expectations were lower for Maori and Pasifika students. In Study 2 students demonstrated that they were well aware that teachers are positively biased in their expectations toward students who are smart and negatively biased toward those students who are not so smart. Further, they perceived that the teachers were assigning lower level learning activities to those believed to be not so smart. Therefore, it may be that when engaging in practice, teachers act on implicit biases that have been socially conditioned over time. These implicit biases may result in lower level learning activities being set for students for whom they have low expectations, which, in the New Zealand context, means that low level tasks are more frequently assigned to Maori and Pasifika students. As a result the outcomes suggest that some aspects of classroom practices limit the opportunities for some students to learn.

In contrast with Study 1, in which the teacher expectation measure was more vulnerable to deliberate adjustment of underlying expectations, the design of the questions for teachers in Study 3 reduced this possibility by enabling the teachers to comment on the phenomenon of teacher expectations openly without having to implicate themselves or their practice in critique. The study also provided support for what the students had identified in Study 2, in that comments from the teachers resonated with students’ perceptions of classroom practices and processes that reflected implicit bias. Teachers’ comments also provided insights into how implicit biases may have been developed and sustained. As a result it is possible to understand why, despite all theoretical- and practice-based developments in education, deficit understanding of students has continued to be significant in shaping teacher expectations and student outcomes.
The differences in student achievement

Differential teacher expectation treatment in the classroom will not be the only cause of differences in student performance. However, the findings from the thesis have demonstrated how teacher expectations can be transmitted through teacher attitudes and behaviour and that these can affect student achievement. Attempts to determine the factors, such as student characteristics, that influence teacher expectations have long been advanced by researchers in this field (Alexander & Entwisle, 1988; Baron et al. 1985; Dusek & Joseph, 1983; Rist, 1970). These researchers have argued that low teacher expectations based on characteristics such as student ethnicity, socioeconomic status, gender, and race have been detrimental to those students who have already been disadvantaged by wider socially based structures, such as membership of a minority ethnic group.

The influence of ethnicity on teacher expectations, and its frequent intersection with socioeconomic status, has been identified by Bishop and Berryman (2006), Clarke (1965), Dusek and Joseph (1983), and Weinstein (2002). In Aotearoa New Zealand, the number of Māori and Pasifika with lower socioeconomic status is disproportionate to the total population (Carpenter & Osborne, 2014). Indigenous Māori and also Pasifika peoples are minority groups in Aotearoa New Zealand, and for minority groups there tends to be a similar pattern of lower teacher expectations. This association has been identified not only in this thesis but in the literature internationally. Low expectations for some groups have been found by researchers in the United States (Gay, 2000; Ladson-Billings, 1995; Rist, 1970; Sleeter, 1993); Western Europe (De Boer, Bosker, & Van Der Werf, 2010; Van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010); and in Aotearoa New Zealand (Rubie-Davies et al., 2006; Turner et al., 2015).
There have been mixed findings from other studies conducted in Aotearoa New Zealand that have examined teacher expectations of Māori and Pasifika students, and when achievement was controlled for. These studies showed teacher expectations were lower for Māori but not Pasifika (Rubie-Davies et al., 2006; Turner, et al. 2015). On the other hand, Study 1 had findings similar to those of Peterson et al. (2016), in that when achievement was controlled for, ethnic variations in teacher expectations were not evident. Peterson et al. suggested this may have been different if implicit expectations had been examined more thoroughly. That is, when the explicit expectation of a teacher is measured, Peterson et al. (2016) suggested the teacher may consciously be revealing what is socially accepted but unconsciously thinking quite the opposite of a member’s ethnic group. Thus it may be that a teacher has lower expectations of a minority ethnic group, but to state that would not be an acceptable response. If teachers do have low expectations of students, this can have significant implications for the students; as research has shown the opportunity for students to do well is determined to some extent by teacher expectations (Rubie-Davies, 2015; Rubie-Davies et al., 2006).

**Maximising students’ opportunity to do well**

Teacher expectations play a vital role in maximising learning opportunities for students. What the student will be taught, how their learning needs will be met, how learning will be organised and instructed, and what resources will be made available are likely to influence whether a student gets a limited curriculum or a broad and challenging one, and that can then impact on student achievement (Brophy & Good, 1970; Keddie, 1971; Rubie-Davies, 2015; Weinstein, 2002). Evidence has suggested that the pattern of low teacher expectations is linked to the achievement differences between ethnic minority and dominant ethnic groups (Dusek & Joseph, 1985; McKown & Weinstein, 2008; Rubie-Davies, 2015; Van Den Berg et. al., 2015).
al., 2010). There are various ways in which differential expectations of ethnic minority groups contribute to their lower achievement when compared to that of non-ethnic minority groups. McKown and Weinstein (2008) suggested three areas of causality. The first is through instruction, in which students whose teachers have high expectations will receive greater exposure to high-quality instruction and to a broader curriculum. The research that forms the basis of this thesis found that some teachers reported low levels of task work given to Māori and Pasifika students and the work was made easy. Student participants perceived teachers as differentiating the curriculum for high and low achieving students in a way that disadvantaged low achieving students. The students knew that low achieving students were not provided with full exposure to the curriculum that was cognitively challenging and so too did some of the teacher participants in the study. A limited curriculum has significant implications, as Bishop (2005) argued, because when this practice occurs students are siphoned off into courses that do not give access to the highest level of education and skilled employment.

McKown and Weinstein (2008) argued that the second reason that achievement differences occur is the likelihood that students may internalise the perceived cues of the teacher’s high or low expectations. In this case, students either become highly motivated to engage in learning, or they do not, and they achieve consistent with the teacher’s perceived expectation (Weinstein & Middlestadt, 1979).

McKown and Weinstein suggested the third reason differential expectations of ethnic minority groups contribute to their lower achievement when compared to that of non-ethnic minority groups is that differences in academic achievement are aligned to stereotypical views teachers may have of ethnic minority groups and this could influence a teacher to have low expectations of such students. Notions of negative stereotypical influences have been
explained to be detrimental for Māori and Pasifika achievement (Bishop, 2002; Bishop & Berryman, 2006; Wendt-Samu, 2015) and some teacher participants noted that stereotyped views of Māori and Pasifika could not only shape teachers’ low expectations of these minority groups, but could also influence the student’s own views of their capabilities. Steele and Aronson (1997) found that belonging to a group that is negatively stereotyped can be detrimental to some members of that group. They argued that when students were judged on the basis of a stereotype, in this case the stereotype that Māori were not smart, that could become so threatening and create such an anxiety that the student would actually fulfil that stereotype. This thesis has demonstrated that the power of the intersection of stereotypes and teacher expectations does not go unnoticed by teachers or students.

**Student perceptions of the teacher**

Study 2 found that students were able to perceive differences in the way teachers behaved with high and low achievers. Students reported that teachers provided less support to lower achievers, had lower expectations of them, and gave them less independence and more negative feedback. Students also perceived differences in teacher behaviour based on students’ gender, with male students demanding more attention and teachers seeming to interact more with male than female students. This practice seemed evident in other research that suggests teachers are less likely to criticise girls than they are boys, and girls tend to receive less attention by the teacher than boys (Brophy, 1985; Dusek & Joseph, 1985; Saft & Pianta, 2001). In Study 2, the students could differentiate the type of support high and low achievers were receiving from the teacher, which became obvious through the type of work the teacher gave students. A low achiever may be told they were doing well but that did not necessarily mean the teacher meant the student was doing well academically. When the teacher gave support, it was perceived as helping students with easier work that would not be
too difficult or challenging for the student to complete. The study shows that students do notice that teachers behave quite differently with high achievers, who were perceived as being favoured in a number of ways in the learning environment. More importantly, students could identify from a teacher’s behaviour when working with students whether that teacher thought the students were clever or not so clever in the classroom. This ranged from accolades given by the teacher to high achievers, through to teachers who, as students reported, humiliated some students and made them feel ashamed. Some teachers directly told students whether they were capable or not, and ability grouping of students was a clear marker for indicating how well students were doing in their learning. These sorts of behaviours all informed the student about their cleverness in the classroom. Weinstein and her colleagues in the United States (Weinstein, Marshall, Brattesani, & Middlestadt, 1982; Weinstein & Middlestadt, 1979; Weinstein, 2002) also found that students were aware of differences in teacher behaviour towards high and low achievers.

Even though the demographic characteristics of students in Aotearoa New Zealand and the context in which they learn is markedly different from those of schools in America, it seems the perceptive student is very much part of the daily life of classrooms locally and internationally. These findings are important for several reasons, none more so than the implications they have for students from minority ethnic groups. These are the groups of students that have been shown to be the recipients of teachers’ lower expectations (Bishop, 2005; Rubie-Davies et al., 2006; Turner et al., 2015), that receive more negative feedback, and are accorded less independence, less challenging task work, and less support. The findings from this thesis, then, suggest it is vital that teachers have a good understanding of the teacher expectation phenomenon, of the research findings, and of the implications of low teacher expectations for student learning. Indeed, the students in this study had clear
perceptions of teacher expectations and could describe with profound accuracy what the teacher behaviours looked like, felt like, and sounded like.

‘I always have high expectations of all my students …’

Given the important role that teachers play in educating students to become effective participants in society, it made sense to gather teacher understanding of teacher expectations. In Study 3, there appeared to be an implicit assumption that having expectations for students is what you do as a teacher; you have expectations for your students and you want them to do their best (Rubie-Davies et al., 2006). The sentiment expressed in the heading above resonates, because during my years as a teacher and working with teachers, it has not been uncommon to hear teachers state ‘I always have high expectations for my students’. From a research perspective, the investigation was aimed at exploring more deeply what teachers understood about teacher expectations and high expectations in particular.

The study sought to fill a gap in the literature on teacher expectations which has typically focused on the academic performance of students and what the expectations of teachers may be influenced by; for example, ethnicity. That is, if a student’s ability is based on the ethnic characteristics of the student, then the teacher’s expectation is essentially a spurious criterion. Ethnic characteristics of a student cannot determine the academic ability of a student (Bishop, 2005; Knight, 1974; Waitere-Ang, 2005).

This thesis examined teachers’ understanding of teacher expectations. Little has been done in this area, particularly in Aotearoa New Zealand. Those that show some similarity are studies by Turner et al. (2015), who interviewed teachers to examine their notions of teacher expectations, and Bishop et al. (2003), who collated a series of collaborative stories from teachers in an effort to understand their teaching behaviours and practices. The participants in
the current research noted that teachers tended to have lower expectations for Māori and Pasifika students, and their understandings of teacher expectations were insightful. For example, they could explain how teacher expectations may be based on deeper level teacher beliefs and values. Study 3 highlighted what teachers needed to do to really know whether they indeed have high expectations for all their students. When the narratives of the teachers were delved into, what they understood about high expectations was exposed in a dialogue woven with tensions and contradictions that teachers faced in their quest to expect the best for all of their students. These tensions and contradictions will be explored in the next section.

**Tensions and contradictions**

Teachers work with the notion that their ideological beliefs are shaped by the environment and these inform their beliefs about teacher expectations. There are also the ideological beliefs that are imperceptibly espoused by the dominant group (Henry, Knight, Lingard, & Taylor, 1992). The contradictions may lie in the dissonance between a teacher’s espoused expectations and those expectations unconsciously held by the teacher. This came out strongly in the findings. Teachers will be swayed by their own beliefs about teaching and how students learn. For example, one teacher did not make distinctions among their students in terms of their own expectations. The teacher understood that all students can learn and that students learn in different ways. It could be argued that this is a learned response about the theory of teaching and learning and what may be current at the time (Good & Brophy, 2008). Evidence suggests that a learned response such as this may be a teacher’s first response and one shaped by dominant views about teaching and learning that are socially generated (Bishop, 2005; Waitere-Ang, 2005).
It seemed evident that for some teachers the learned response conflicted with their perception of students in the classroom. This thesis argues that the learned response is a practised response, learned from socially established norms. Particular discourses that are overlaid with multiple and consistent images and representations of certain groups seem to produce hidden messages, as Waitere-Ang (2005) has argued ‘about what is normal and what is not’ (p. 350). For example, there are long-standing stereotypical representations of Māori and Pasifika peoples portrayed as stupid, lazy, from poor socioeconomic backgrounds, and with families who do not care (Bishop, 2005; Bishop & Berryman, 2006). These stereotypical representations have been argued to disadvantage Māori and Pasifika students and may shape teachers’ lowered expectations. As Turner et al (2015) argued and demonstrated, the selective nature of what gets portrayed in the media, for example, can have a powerful role in shaping and perpetuating stereotypes. When teachers become influenced by stereotypical messages in the media, their expectations may become lowered for particular groups (Nairn, Pega, McCreanor, Rankine, & Barnes, 2006). This means there is a possibility that the moment Māori and Pasifika students enter school, they may have teachers whose attitudes towards them are already biased. When a teacher has low expectations of their students, there is the likelihood that the students may not achieve as well as others, and could be subjected to inequitable practices and teacher behaviours that favour one group over another. Teachers have all been exposed to stereotyping of multiple kinds. They are continuously exposed to dominant discourse which creates societal norms (Waitere-Ang, 2005). For a teacher to change her or his practice to deliberately recognise and cater specifically for Māori and Pasifika students, the teacher may have to counteract conscious or unconscious stereotypes related to these ethnic groups. If the teacher holds, at any level, the belief that Māori students are not likely to achieve highly, that teacher has the complex task of recognising his or her beliefs and potentially changing his or her expectations.
Limitations of the research

Limitation rests in the very topic of this thesis, teacher expectations. When gathering the teacher expectation data it was important to disguise the topic so as to mitigate the possibility of the participants artificially inflating their expectations. This was difficult to do and it was possible that teachers would have felt the researcher would be measuring their expectations of students in a judgemental way. This could have been one reason why the results did not show teacher bias when controlling for achievement. In theory, when a teacher is being asked to assess where they expect their students to be at the end of the year, they may have been scoring based on their explicit assumptions but implicitly be assuming something that was lower. Although there has been some research in Aotearoa New Zealand by Peterson et al. (2016) to measure teachers’ explicit and implicit biases, directions for further research in this area could provide additional evidence of the likely biases.

Another limitation of the thesis is having a less than complete representation of students. Those students who participated were from mid to low decile schools and students were mostly from low socioeconomic backgrounds. The reason for this was that greater numbers of Māori and Pasifika students attended mid to low decile schools. To have had students from high decile schools where the majority of students were from high socioeconomic backgrounds would have meant a more representative sample of the student population. In a higher decile school with Māori and Pasifika students, the question of context influencing teachers’ learned responses (Good & Brophy, 2008; Waitere-Ang, 2005) could have been investigated in terms of possible expectation differences between high and low decile schools.

Further to this limitation is the fact that it was decided to minimise the focus on student and teacher variables where possible. It was important, particularly for Study 2 and
3, to protect the ethnicity of teachers and students, in that their ethnicity may be subjected to stereotypical notions that are already portrayed for Māori and Pasifika peoples (Penetito, 2010; Wendt-Samu, 2015). In that respect, the voices of all the teachers and students are as important as the one they stand next to, whatever ethnicity. Therefore the research is not underpinned by the teacher, and to a lesser extent student, variables such as ethnicity, and deliberate research decisions and choices of methodology were made. For instance, the thesis could have examined ethnicity, age, gender and socioeconomic status of teachers. In Study 3, it was decided to protect the possible identification of the teachers for ethical reasons relating to anonymity and confidentiality.

**Implications, and directions for future research**

The current research explored aspects of teacher expectations that demonstrated the effects of this phenomenon and the compounding factors that can either advantage or disadvantage particular students, which in turn can have important implications for succeeding at school. Such a phenomenon creates barriers to achieving equality of education for all students in Aotearoa New Zealand and can compound the negative implications of other common, but marginalising processes of schooling (Knight, 1974). Indeed, as discussed earlier, in many other countries, indigenous and minority groups in general do not do as well in education as their white counterparts. This is despite an increased awareness of the mechanisms that deter equality (Knight, 1974; Waitere-Ang, 2005; Weinstein, 2002). While the findings indicated that teachers’ conscious beliefs were relatively neutral, the findings in Study 2 and 3 suggested that residual, subconscious biases are likely to affect teachers’ attitudes and behaviours within their practice. Study 2 demonstrated the benefit of considering student voice, and the level of insight that can be gained about what might work to reduce inequities in classrooms. The findings suggest that interventions or policies that
target teacher beliefs about students would help to decrease student achievement disparities. Further, action that allows students to contribute their voice to changes in policy and practice is likely to bring about meaningful change for students and their learning environment.

Future research could investigate teachers’ understanding of their own expectations which could extend knowledge on the mechanics related to teachers’ learned responses and teachers’ internalised stereotypes. Further study may lead to greater insight into not just what forms teacher expectations, but the possible triggers that can lead to a change in teacher mindset. A great deal of research shows how influential teacher expectations can be. Many students know, as evident from this research and that of others (Weinstein, 2002; Bishop, et al. 2003), that they can achieve highly. Anecdotally, and from this research, teachers also know of the influences of teacher expectations yet teachers continue to differentiate their expectations. This is even when there have been interventions put in place to shift teacher expectation practices (Babad, 1990; Good & Brophy, 1974; Rubie-Davies, 2015; Weinstein et al., 1995; Weinstein, 2002) to shift teacher expectation practices. In addition, there are Ministry of Education policies and a website in Aotearoa New Zealand that outlines the importance of teacher expectations. The Education Review Office reviews of schools in Aotearoa New Zealand emphasise the need for teachers to have high expectation for all their students. Some teacher education programmes have introduced components that prepare teachers for teaching about the influences of teacher expectations. Although all these initiatives, interventions, policies and teaching programmes do show some levels of success, the current thesis suggests there must be other factors mitigating against commitment to sustained change. Despite everything teachers have been told, taught, read and understood about teacher expectations, it seems, as evident from this thesis, that they are not taking that understanding into the classroom. This is why future research could draw on and or further
develop the demonstrated degree of success that has been achieved through implementing a teacher expectation intervention in some contexts (see Weinstein, 2002; Rubie-Davies, 2015). The benefits of embedding programmes at the teacher education and professional development levels, building on that reported in Alton-Lee (2015), could provide further understanding for teachers that would not just make a shift in practice but in theory and also mindset.

Student participants in this study were predominately from lower decile schools, which indicate many would likely be from low socioeconomic families. Differential expectations based on a student’s socioeconomic status have been found to be influential in forming the teacher’s expectations of their students (Bishop, 2006; Rosenbloom & Way, 2004; Timmermans et al., 2015; Van den Berg et al., 2010; Weinstein, 2002). There has been a concerted effort to highlight the inequalities between the rich and poor (Carpenter & Osborne, 2014) in this country. There is little research that has measured the differential expectations of the indigenous population and others who come from low socioeconomic backgrounds in Aotearoa New Zealand. This thesis suggests that teachers may be influenced by socioeconomic status; further research in this area may provide evidence about why certain ethnic groups do not do so well in school. This would be an important study simply because of the compounding effects of teacher expectations that could accrue for students from a low socioeconomic background who are also indigenous or from a minority ethnic group. The findings from such a study would have important implications for the education sector in Aotearoa New Zealand. It is evident that there are some students who are being underserved by the education system. When faced with such educational inequity and the lack of substantive and sustaining progress being made to address the inequity in the education system, the time for change is long overdue. Addressing the negative implications
of teacher expectations is a central factor in attaining educational equality. It is the contention of this thesis that the phenomenon of teacher expectations must be central to any intervention when seeking to address the disparities and inequities embedded in education.

**Conclusion**

The present studies have brought together important understandings about the effects and implications of teacher expectations, providing a broad lens through which to view the complexities of this phenomenon. These three studies set out to explore the notions of teacher expectations and their influences on student outcomes. The general theoretical literature on this subject, and specifically in the context of Aotearoa New Zealand, is growing and it is the intention of this thesis to build on the literature. The thesis sought to answer three questions: Are there variations in teachers’ expectations depending on the ethnicity of their students? What are students’ perceptions of their teacher’s behaviour toward high achieving versus low achieving male and female students? And what are teachers’ understandings of teacher expectations and in particular for Māori and Pasifika students?

The main research findings are chapter specific and were summarised within the respective chapters. Using a multi-layered approach to examine teacher expectancy effects in the classroom has been insightful. Teachers tended to have lower expectations for minority groups in Aotearoa New Zealand, and in particular for Māori and Pasifika students, even though achievement was not controlled for. Of note, is that students were cognisant, with convincing accuracy, of the differential treatment they receive from teachers. Their perception of teachers’ behaviour provides a telling narrative of the kinds of experiences these students face in the daily life of classrooms. Students know that teachers treat high and low achievers differently and can recognise this through particular behaviours of the teacher. These behaviours consist of differentiating the curriculum that sees the teacher providing
lower level task work for low achievers and more challenging work for high achievers. This in itself is compelling, as Weinstein (2002, p. 295) argues ‘the danger of a significantly differentiated curriculum is that such individualized treatments rest most often on perceptions of ability—perceptions that reflect societal prejudices about race, gender, class, language and disability’.

It is important not to understate the power of a student’s voice. The teachers’ narratives from Study 3 showed teachers had some understanding of their expectations. Study 2 showed that students had a good understanding of their teachers’ expectations and surprisingly, in Study 3 teachers tended to grapple with this phenomenon. There is still some work to do that would enable teachers to gain a more in-depth understanding on the significance and implications of teacher expectations.

The thesis has made several contributions to the field of knowledge in teacher expectations and in education. The first contribution is within the context of Aotearoa New Zealand. A small number of researchers (Peterson, et al., 2016; Rubie-Davies, 2015; Turner, et al., 2015) have measured the influences of teacher expectations and this thesis adds to a body of knowledge in education that has for many years reported the need for teachers to have high expectations of all their students (Ministry of Education, 2012). The ethnicity statistics (Ministry of Education, 2014) demonstrate on average that Māori and Pasifika have not progressed as well as their European Pākehā and Asian students. The thesis highlights the possible links between teacher expectations and ethnicity as a factor in contributing to lower teacher expectation. By adopting a mixed methods approach across three studies, the study has provided an opportunity to corroborate data from various sources in a context-specific overview of a complex phenomenon that requires urgent attention in Aotearoa New Zealand.
The thesis also contributes to the field by giving voice to students in seeking to bring about change in the practice of teachers who express their expectations of students in the classroom. The students had shown that they can describe in detail what the teachers’ expectations are and what those expectations tell them about how well they do at school. The thesis also makes an important initial contribution to an aspect of knowledge in the field of teacher expectations by examining teachers’ understandings of teacher expectations and the possible implications of what that may mean for teacher practice.

Across the thesis there is a strong message that teacher expectations have not been fully explored or deeply understood by teachers. This is particularly clear when students look to their teachers for providing them with the skills, knowledge and understanding of becoming effective citizens in a diverse and complex society. Student knowledge of teachers’ implicit expectations will require teachers to challenge what has gone unnoticed and unexamined by them. Such challenging action could lead to addressing the inequities of achievement in schools. To have high expectations that lead to improved student performance would, as this thesis has shown, go a long way to meeting the needs of those not so well served in education and to closing the educational gap so that there is equity for all students. The voice of one student encapsulates the purpose of this study: as he said, if he were the teacher, he would expect himself to do his very best and would never give up on the kids.
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Appendix A: Information and consent forms

Appendix A1: Participant information sheet for principals and boards of trustees

PARTICIPANT INFORMATION SHEET

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO

To: Principal/Board of Trustees

Project description and invitation
My name is Nane Rio and I am enrolled in a PhD course at the University of Auckland in the Faculty of Education. I would like to invite your school to participate in my research with the aim of improving the learning opportunities for New Zealand children in primary classrooms. Your school is being invited to participate with others around Auckland and the Bay of Plenty. The data collection for this project will run throughout 2011.

When students come to the classroom, they come with data/information that inform the teacher about what they have already learnt. Teachers also make an overall judgement based on other relevant information they may have gathered about their students. To maximize opportunities for learning teachers have to make choices that best suit their students; and there are many. For example, making choices about whether and how students are to be grouped for learning, making choices for ensuring the resources and activities are relevant for the curriculum taught and the students. In addition, being able to develop the right kind of relationship with students is important, as is fostering a classroom climate that ensures students are motivated and engaged.

Project Procedure:
Your school’s participation will involve teachers:
Completing a survey questionnaire at the beginning of the year that will ask the teacher to estimate the progress they think their students will make by the end of the year. This should take approximately 15 minutes.

Providing the reading groups of your students at the beginning, middle and end of the year. This should take only five minutes each time as your reading group lists (with student first names only) can be emailed to me each time.

Students in year 4-8 classes of teachers who agree to be part of the study will also be invited to participate in the research. Parents/Caregivers will be asked for consent and the children are required to complete an assent form. The student’s participation will involve:

Completing two different types of questionnaires and each administration should take approximately 30-45 minutes of class time. This will be done at the beginning and near the end of the year.

Completing an asTTle reading test developed by the researcher that will take around 40 minutes of class time. The researcher will return the asTTle reading results to the school.

Some students may also be invited to take part in an interview that would take approximately 30 minutes of class time.

The first questionnaire focuses on student perceptions of the classroom environment, and the second is a self-perception scale which asks them how they feel about reading, maths and physical education. The self-perception scale will also ask about their friendships at school. This questionnaire will be read to them by the researcher or an assistant should the student choose to participate. I will also be interviewing some students who agree to be interviewed and the interview will focus on their perceptions of classroom environments they have been in. Following the data collection the teachers who have been part of the study, and you, will be sent a sheet that summarises the results of the study and will be invited to a presentation in relation to the findings.

Data Storage:

All data, including signed consent forms will be stored in a locked filing cabinet in the school of Te Puna Wananga at the Faculty of Education, The University of Auckland or in password-protected computer files. Only the researcher named in this application will have access to raw data. The signed consent forms and the transcripts of individual participants will be kept separate from the research data in a locked cabinet in the school of Te Puna Wananga Faculty of Education. All data will be stored for six years then destroyed.

Right to withdraw:

At any point throughout the research project, up until December the 1st 2011 you will be able to withdraw any information traceable to the school, teachers and students without giving a reason.

Anonymity/confidentiality:

The researcher or someone else will transcribe the audiotapes and that person will sign a confidentiality agreement that has been developed for the research project. The school, students and the teachers will not be identified in any way and names will not be used in the
final study. All data collected will be number-coded once relevant information has been recorded, e.g., age of child, ethnicity, gender. At this point, all identifiable information will be removed from questionnaires. The data collected from this study will be used for educational and publication purposes; however no students, teachers or the schools involved will be identified by name. The confidentiality of the data will be maintained throughout the time it is required to be stored (6 years) after which time it will be destroyed.

Benefits:

As a participating school, you will receive no direct material benefit or financial remuneration from participation in this study. However, information obtained from this research may have important implications for the practice of teachers, educators and researchers interested in improving the opportunities to learn for children in primary schools. Further you will be provided with asTTle reading data for your children at the beginning and end of year. The researcher is willing to answer any questions you may have as well as those of the participating teachers, caregivers of the children involved or the children themselves.

Contact details:

If you are willing to participate in this research please complete the attached consent form and post the teachers as well as your consent form to Nane Rio using a self addressed envelope. If you have any queries or wish to know more please phone or contact me at

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For any queries regarding ethical concerns regarding this study please contact:
The Chair, The University of Auckland Human Subjects Ethics Committee,
The University of Auckland, Research Office – Office of the Vice Chancellor
Private Bag 92019, Auckland 1142.
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE ON OCTOBER 13 2010 FOR (3) YEARS REFERENCE NUMBER
2010/455
Appendix A2: Consent form for principals and boards of trustees

CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher: NANE RIO

From: The Principal/Board of Trustees,

I have read the Participant Information Sheet and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I understand that the school may withdraw at any time, and may withdraw any data traceable to the school up to 1st December 2013.

I give my assurance that participation or non-participation will not affect the teacher’s or student’s relationship with the school in any way.

I understand that someone else other than the researcher will transcribe and code the information and that the transcriber and coder will sign a confidentiality agreement.

I understand that all the data collected in this research project will be stored in a locked cabinet for six years and then destroyed.

I understand there may be a possibility that the data collected from this research project may be used for publication.

SIGNED: _____________________________________________________________

NAME: ______________________________________________________________ (Please print clearly)

DATE: _______________________________

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER 2010/455
PARTICIPANT INFORMATION SHEET

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO

To: The classroom teacher

Project description and invitation:
My name is Nane Rio and I am enrolled in a PhD course at the University of Auckland in the Faculty of Education. I would like to invite you to be a participant in my research with the aim of improving learning opportunities for New Zealand children in primary classrooms. At present, I am a Deputy Principal for a school located in Auckland and like teachers I want to ensure all students are given opportunities to maximize their learning.

When students come to the classroom, they come with data/information that inform the teacher about what they have learnt previously. Teachers also make an overall judgement based on other relevant information they may have gathered about their students. To maximize opportunities for learning teachers have to make choices that best suit their students; and there are many. For example, making choices about whether and how students are to be grouped for learning, making choices for ensuring the resources and activities are relevant for the curriculum taught and the students. In addition, being able to develop the right kind of relationship with students is important, as is fostering a classroom climate that ensures students are motivated and engaged.

Project Procedure:
Your participation will involve:

- Completing a survey questionnaire at the beginning of the year that will ask you to estimate the progress you think your students will make by the end of the year. This should take approximately 15 minutes.
- Providing the reading groups of your students at the beginning, middle and end of the year. This should take only five minutes each time as your reading group lists (with student first names only) can be emailed to me each time.
Students in your class will also be invited to participate in the research. Parents/Caregivers will be asked for consent and the children will be required to complete an assent form. The student’s participation will involve:

- Completing two different types of questionnaires and each administration should take approximately 30-45 minutes of class time. This will be done at the beginning and near the end of the year.
- Completing an asTTle reading test developed by the researcher that will take around 40 minutes of class time. You will be given the asTTle reading results for all your students.
- Some students in your class may also be invited to take part in an interview in class time that would take approximately 30 minutes.

The first questionnaire focuses on student perceptions of the classroom environment, and the second is a self-perception scale which asks them how they feel about reading, maths and physical education. The self-perception scale will also ask about their friendships at school. This questionnaire will be read to them by the researcher or an assistant should the student choose to participate. I will also be interviewing some students who agree to be interviewed and the interview will focus on their perceptions of classroom environments they have been in. Following the data collection you will be sent a sheet that summarises the results of the study and you will be invited to a presentation in relation to the findings.

Data Storage:
All data, including signed consent forms will be stored in a locked filing cabinet in the school of Te Puna Wananga at the Faculty of Education, The University of Auckland or in password-protected computer files. Only the researcher named in this application will have access to raw data. The signed consent forms and the transcripts of individual participants will be kept separate from the research data in a locked cabinet in the school of Te Puna Wananga Faculty of Education. All data will be stored for six years then destroyed.

Right to withdraw:
The Principal has given permission for the research to occur in the school and has also provided an assurance that your participation or non-participation will not affect your relationship with the school. At any point throughout the research project, up until December the 1st 2011 you will be able to withdraw any information traceable to you without giving a reason.

Anonymity/confidentiality:
The researcher or someone else will transcribe the audiotapes and that person will sign a confidentiality agreement that has been developed for the research project. The school, students and the teachers will not be identified in any way and names will not be used in the writing of my thesis. All data collected will be number-coded once relevant information has been recorded, e.g., age of child, ethnicity, gender. At this point, all identifiable information will be removed from questionnaires. The data collected from this study will be used for educational and publication purposes; however no students, teachers or the schools involved will be identified by name. The confidentiality of the data will be maintained throughout the time it is required to be stored (6 years) after which time it will be destroyed.

Contact details:
If you are willing to participate in this research please complete the attached consent form and return it to the Principal who will return the information to the researcher using a self-
addressed envelope. If you have any queries or wish to know more please phone or contact me at:

Nane Rio  
Te Puna Wananga  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 48188  
My email address is n.rio@auckland.ac.nz  
My supervisors are:

Professor Liz McKinley,  
Te Puna Wananga/Starpath  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 82554  
e.mckinley@auckland.ac.nz

Associate Professor Christine Rubie-Davieschool of Learning, Development and Professional Practice.  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 82974  
c.rubie@auckland.ac.nz

Head of Department:  

Dr Jenny Lee  
Te Puna Wanaga  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 48735.  
jenny.lee@auckland.ac.nz

For any queries regarding ethical concerns regarding this study please contact:  
The Chair, The University of Auckland Human Subjects Ethics Committee,  
The University of Auckland, Research Office – Office of the Vice Chancellor  
Private Bag 92019, Auckland 1142.  
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER 2010/455
Appendix A4: Consent form for teachers

**THE UNIVERSITY OF AUCKLAND**
**FACULTY OF EDUCATION**

Epsom Campus
Gate 3, 74 Epsom Avenue
Auckland, New Zealand
Telephone 64 9 623 8899
Facsimile 64 9 623 8898
www.education.auckland.ac.nz
The University of Auckland
Private Bag 92601, Symonds Street
Auckland 1035, New Zealand

**THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS**

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

**Researcher:** NANE RIO
**From:** The classroom teacher,

I have read the Participant Information Sheet and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I understand that I may withdraw at any time, and may withdraw any data traceable to myself up to 1st December 2013.

I understand that participation or non-participation will not affect my relationship with the school in any way.

I agree to the children in my class being involved in the study.

I understand that someone else other than the researcher will transcribe and code the information and that the transcriber and coder will sign a confidentiality agreement.

I understand that all the data collected in this research project will be stored in a locked cabinet for six years and then destroyed.

I understand that the data collected from this research project may be used for publication.

I agree to participate in the Research Project conducted by Nane Rio.

**NAME:**
(Please print clearly)

**SIGNED:**

**DATE:**

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER 2010/455
Appendix A5: Participant information sheet for parents

PARENTAL INFORMATION SHEET

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO
To: The Parents/Caregivers

Project description and invitation:

My name is Nane Rio and I am enrolled in a PhD course at the University of Auckland in the Faculty of Education. I would like to inform you that I will be working in the school which your child/children attend. This letter is to tell you the purpose of my visit and work. I am inviting the school your child attends to participate in my research with the aim of improving the learning opportunities for New Zealand children in primary classroom.

When students come to the classroom, they come with data/information that inform the teacher about what they have learnt. Teachers also make an overall judgement based on other relevant information they may have gathered about their students. To maximize opportunities for learning teachers have to make choices that best suit their students; and there are many. For example, making choices about whether and how students are to be grouped for learning, making choices for ensuring the resources and activities are relevant for the curriculum taught and the students. In addition, being able to develop the right kind of relationship with students is important, as is fostering a classroom climate that ensures students are motivated and engaged.

Project Procedure:

Your child or children in year 4-8 classes of teachers who agree to be part of the study will be invited to participate in the research. The researcher will be asking for your consent and your child/children will be asked to complete an assent form. Their participation will involve:

- Completing two different types of questionnaires and each administration should take approximately 30-45 minutes. This will be done at the beginning and near the end of the year.
- Completing an asTTle reading test developed by the researcher that will take around 40 minutes. The researcher will return the asTTle reading results to the school.
• Your child may also wish to take part in an interview that would take approximately 30 minutes.

The first questionnaire focuses on student perceptions of the classroom environment, and the second is a self-perception scale which asks them how they feel about reading, maths and physical education. The self-perception scale will also ask about their friendships at school. This questionnaire will be read to them by the researcher or an assistant should the student choose to participate. I will also be interviewing some students who agree to be interviewed and the interview will focus on their perceptions of classroom environments they have been in.

Data Storage:
All data, including signed consent forms will be stored in a locked filing cabinet in the school of Te Puna Wananga at the Faculty of Education, The University of Auckland or in password-protected computer files. Only the researcher named in this application will have access to raw data. The signed consent forms and the transcripts of individual participants will be kept separate from the research data in a locked cabinet in the school of Te Puna Wananga Faculty of Education. All data will be stored for six years then destroyed.

Right to withdraw:
The Principal has given permission for the research to occur in the school and has also provided an assurance that your participation or non-participation will not affect your relationship with the school. At any point throughout the research project, up until December the 1st 2011 you will be able to withdraw any information traceable to you without giving a reason.

Anonymity/confidentiality:
The researcher or someone else will transcribe the audiotapes and that person will sign a confidentiality agreement that has been developed for the research project. The school, students and the teachers will not be identified in any way and names will not be used in the final study. All data collected will be number-coded once relevant information has been recorded, e.g., age of child, ethnicity, gender. At this point, all identifiable information will be removed from questionnaires. The data collected from this study will be used for educational and publication purposes; however no students, teachers or the schools involved will be identified by name. The confidentiality of the data will be maintained throughout the time it is required to be stored (6 years) after which time it will be destroyed.

Benefits:
Information obtained from this research may have important implications for the practice of teachers, educators and researchers interested in improving the opportunities to learn for your child and other students attending primary schools in Aotearoa New Zealand. Further, the provision of asTTLe results to your child’s teacher will enable the teacher to plan specifically for your child’s needs in reading.

Contact details:
The researcher is willing to answer any questions you may have, as well as those of your child involved in the research. If you are willing to allow your child to participate in this research please complete the attached consent form and return it to school where the researcher will either collect the consent form or leave a self-addressed envelope with the
school to be returned by post. If you have any queries or wish to know more please phone or contact me at:
Nane Rio
Te Puna Wananga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48188
My email address is n.rio@auckland.ac.nz

My supervisors are:
Professor Liz McKinley,
Te Puna Wananga/Starpath
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 82554
e.mckinley@auckland.ac.nz

Associate Professor Christine Rubie-Davies
School of Learning, Development and Professional Practice.
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 82974
c.rubie@auckland.ac.nz

Head of Department:

Dr Jenny Lee
Te Puna Wanaga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48735.
jenny.lee@auckland.ac.nz

For any queries regarding ethical concerns regarding this study please contact:
The Chair, The University of Auckland Human Subjects Ethics Committee,
The University of Auckland, Research Office – Office of the Vice Chancellor
Private Bag 92019, Auckland 1142.
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER
2010/455
Appendix A6: Consent for parents

CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher: NANE RIO
From: The Parents/Caregivers,

I have read the Participant Information Sheet and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I understand that my child/children may withdraw at any time, and I may withdraw any data traceable to my child/children up to 1st December 2013.

I have been assured that participation or non-participation will not affect my child’s/children’s relationship with the teacher or the school in any way.

I understand that my child/children may choose to be interviewed and that this will be audiotaped.

I give permission for my child to complete questionnaires and a test on reading.

I understand that someone else other than the researcher will transcribe and code this information and that the transcriber and coder will sign a confidentiality agreement.

I understand that all the data collected in this research project will be stored in a locked cabinet for six years and then destroyed.

I understand that the data collected from this research project may be used for publication.

SIGNED: ____________________________________________

NAME: ______________________________________________
(Please print clearly)
DATE: ____________________

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER 2010/455
STUDENT PARTICIPANT INFORMATION SHEET

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO

Project description and invitation:
My name is Ms Rio I would like to invite you to be part of my research that I am doing at The University of Auckland. I want to find out what will help you achieve the best that you can at school. I would like to hear from you about how well you think you do in school and how you know that.

Project Procedure:
If you want to be part of my study you will:

Fill in two forms and each one should take around 30-45 minutes of class time. You will do one at the beginning of the year and one near the end of the year. I will not show your answers to anyone at your school. Only I will look at your answers, and the teachers at the university might look at them as well. But they will not know who you are. We promise not to tell anyone else what you write. I will read all the questions in the form out to you and all you will have to do is circle or tick the answer that is best for you. It is not a test; I just want to find out what you feel about your learning and the things you see that happen in your class.

Complete an asTTle reading test in class time and that will take around 40 minutes. This test will show how good you are at reading and I will be showing your teacher how well you did. This will help your teacher to know what to teach you next. I might show my teachers at university as well.

Choose to take part in an interview that will take around 30 minutes of class time. I would like to interview 50 children altogether. I would audio-record your answers when I interview you but I would not let your teacher or anyone else at your school know what you said. I would be the only one who knows what you said and my teachers at university might also listen to what you said. As well, someone at my university will listen to what you say and write it down but they won’t tell anyone what you said either. We will all promise not to tell anyone what you said.
Data Storage:
To keep your forms safe I will put them in a locked filing cabinet at The University of Auckland. If you do an interview with me I will put the audio files onto my computer. My computer has a password that only I know. All the information you give me will be kept for six years then destroyed.

Right to withdraw:
Your principal has given permission for me to do this in your school and has said that if you want to take part in my study or do not want to take part the principal will be happy with you just the same as always. If you decide you do not want me to use your information in my study you can phone me or email me to tell me and I will take your information out. But you will need to do this before the 1st December 2013.

Anonymity/confidentiality:
Information you give to me will be kept a secret. Your name will not be identified at any time or anywhere.

Contacting me:
My phone number and email are on the end of this letter if you want to ask me any questions. You can ask your teacher to phone or email me and I will come to the school to answer any of your questions. If you want to be part of my study please fill in the assent form at home and then bring it back to school.

Thank you,

Nane Rio
Te Puna Wananga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48188
My email address is n.rio@auckland.ac.nz

My supervisors are:

Professor Liz McKinley,
Te Puna Wananga/Starpath
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 82554
e.mckinley@auckland.ac.nz

Associate Professor Christine Rubie-Davies
School of Learning, Development and Professional Practice.
The Faculty of Education
The University of Auckland
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c.rubie@auckland.ac.nz
Head of Department:
Dr Jenny Lee
Te Puna Wānanga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48735.
jenny.lee@auckland.ac.nz

For any queries regarding ethical concerns regarding this study please contact:
The Chair, The University of Auckland Human Subjects Ethics Committee,
The University of Auckland, Research Office – Office of the Vice Chancellor
Private Bag 92019, Auckland 1142.
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER
2010/455
Appendix A8: Assent form for students

ASSENT SHEET
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

If you want to take part in my study please write your name, your school and the date on the lines below.

Thank you 😊
Ms Rio.

Name: _________________________________________

School: _________________________________________

Date: _________________________________________

If you want to be interviewed by Ms Rio please circle either Yes or No:

Yes ☐ No ☐

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON OCTOBER 13 2010 (3) YEARS REFERENCE NUMBER 2010/455
CONFIDENTIALITY AGREEMENT

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

**Researcher:** NANE RIO  
**Supervisor:** Liz McKinley  
Christine Rubie-Davies  

**Coder:**

I agree to code the data for the above research project. I understand that the information contained within them is confidential and must not be disclosed to, or discussed with, anyone other than the researcher and her supervisor(s).

Name: _____________________________

Signature: __________________________

Date: _______________________________
PARTICIPANT INFORMATION SHEET
The Principal/Board of Trustees

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO

Project description and invitation:
My name is Nane Rio and I am enrolled in a PhD course at the University of Auckland in the Faculty of Education. I would like to invite you to be a participant in my research with the aim of improving learning opportunities for New Zealand children in primary classrooms. At present, I am a Deputy Principal for a school located in Auckland and like all teachers I want to ensure all students are given opportunities to maximise their learning.

When students come to the classroom, they come with data/information that informs the teacher about what they have learnt previously. Teachers also make an overall judgment based on other relevant information they may have gathered about their students. To maximize opportunities for learning teachers have to make choices that best suit their students; and there are many. For example, making choices about whether and how students are to be grouped for learning, making choices for ensuring the resources and activities are relevant for the curriculum taught and the students. In addition, being able to develop the right kind of relationship with students is important, as is fostering a classroom climate that ensures students are motivated and engaged.

Project Procedure:
Your school’s participation will involve a teacher:

being part of an interview which will take approximately 30 minutes. During the interview, the researcher will prompt the teacher with questions related to how they cater for the learning of different students in order to facilitate the discussion.

Data Storage:
All data, including signed consent forms will be stored in a locked filing cabinet in the School of Te Puna Wananga at the Faculty of Education, The University of Auckland and/or in password-protected computer files. Only the researcher named in this application will have access to the raw data. The signed consent forms and the transcripts of individual participants
will be kept separately from the research data in a locked cabinet in the school of Te Puna Wananga Faculty of Education. All data will be stored for six years then securely destroyed.

**Right to withdraw:**
The Principal has given permission for the research to occur in the school and assurance that the participation or non-participation of the teacher will not affect their relationship with the school. The school will be able to withdraw from the project up until the interview takes place. However, once the teacher has provided the data, the school will not be able to withdraw the data as it will be difficult to identify individual participants. If there are any parts of the discussion the teacher feels uncomfortable contributing to, they will not need to participate in that part. The teacher can also leave the interview at any time.

**Anonymity/confidentiality:**
The researcher or someone else will transcribe the audiotapes and that person will sign a confidentiality agreement that has been developed for the research project. The school, and the teacher will not be identified in any way and names will not be used in the writing of my thesis. The data collected from this study will be used within my thesis and also possibly for conference presentations and for academic articles. The confidentiality of the data will be maintained throughout the time they are stored (6 years) after which time they will be destroyed.

**Contact details:**
If you are willing for the teacher to participate in this research please complete the attached consent form and post the teacher’s as well as your consent form to Nane Rio using a self-addressed envelope. Once the data analysis has been completed you will be contacted and invited to a meeting at a place of convenience and told the purpose of the research and a summary of the findings. If you have any queries or wish to know more please phone or contact me at

Nane Rio  
Te Puna Wananga  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 48188  
My email address is n.rio@auckland.ac.nz  
My supervisors are:

Professor Liz McKinley,  
Te Puna Wananga/Starpath  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 82554  
e.mckinley@auckland.ac.nz

Associate Professor Christine Rubie-Davies  
School of Teaching and Learning  
The Faculty of Education
Head of Department:

Dr Jenny Lee
Te Puna Wanaga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48125.
jenny.lee@auckland.ac.nz

For any queries regarding ethical concerns regarding this study please contact:
The Chair, The University of Auckland Human Subjects Ethics Committee,
The University of Auckland, Research Office – Office of the Vice Chancellor
Private Bag 92019, Auckland 1142.
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE ON 5 DEC FOR (3) YEARS REFERENCE NUMBER 2011/7686
CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS
The Principal/Board of Trustees

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher: NANE RIO

I have read the Participant Information Sheet and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I understand that the school may withdraw at any time up until the commencement of the interview, and that the teacher may leave the interview at any time they choose.

I give my assurance that participation or non-participation will not affect the teacher’s relationship with the school in any way.

I understand that someone else other than the researcher may transcribe and code the information and that the transcriber will sign a confidentiality agreement.

I understand that all the data collected in this research project will be stored in a locked cabinet for six years and then destroyed.

I understand that the data collected from this research project may be used for publication at conferences or in academic articles as well as in the researcher’s doctoral thesis.

SIGNED: __________________________________________

NAME: __________________________________________
(Please print clearly)

SCHOOL: _______________________________________

DATE: APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 5 DEC FOR (3) YEARS REFERENCE NUMBER 2011/7686
PARTICIPANT INFORMATION SHEET
Class Teacher

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher name: NANE RIO

Project description and invitation:
My name is Nane Rio and I am enrolled in a PhD course at the University of Auckland in the Faculty of Education. I would like to invite you to be a participant in my research with the aim of improving learning opportunities for New Zealand children in primary classrooms. At present, I am a Deputy Principal for a school located in Auckland and like all teachers I want to ensure all students are given opportunities to maximise their learning.

When students come to the classroom, they come with data/information that informs the teacher about what they have learnt previously. Teachers also make an overall judgment based on other relevant information they may have gathered about their students. To maximize opportunities for learning teachers have to make choices that best suit their students; and there are many. For example, making choices about whether and how students are to be grouped for learning, making choices for ensuring the resources and activities are relevant for the curriculum taught and the students. In addition, being able to develop the right kind of relationship with students is important, as is fostering a classroom climate that ensures students are motivated and engaged.

Project Procedure:
Your participation will involve:

being part of an interview which will take approximately 30 minutes. During the interview, the researcher will prompt with questions related to how teachers cater for the learning of different students in order to facilitate the discussion.

Data Storage:
All data, including signed consent forms will be stored in a locked filing cabinet in the School of Te Puna Wananga at the Faculty of Education, The University of Auckland and/or
in password-protected computer files. Only the researcher named in this application will have access to the raw data. The signed consent forms and the transcripts of individual participants will be kept separately from the research data in a locked cabinet in the school of Te Puna Wananga Faculty of Education. All data will be stored for six years then securely destroyed.

**Right to withdraw:**
The Principal has given permission for the research to occur in the school and assurance that the participation or non-participation of the teacher will not affect their relationship with the school. The school will be able to withdraw from the project up until the interview takes place. However, once the teacher has provided the data, the school will not be able to withdraw the data as it will be difficult to identify individual participants. If there are any parts of the discussion the teacher feels uncomfortable contributing to, they will not need to participate in that part. The teacher can also leave the interview at any time.

**Anonymity/confidentiality:**
The researcher or someone else will transcribe the audiotapes and that person will sign a confidentiality agreement that has been developed for the research project. The school, and the teacher will not be identified in any way and names will not be used in the writing of my thesis.
The data collected from this study will be used within my thesis and also possibly for conference presentations and for academic articles. The confidentiality of the data will be maintained throughout the time they are stored (6 years) after which time they will be destroyed.

**Contact details:**
If you are willing for the teacher to participate in this research please complete the attached consent form and post the teacher’s as well as your consent form to Nane Rio using a self-addressed envelope. Once the data analysis has been completed you will be contacted and invited to a meeting at a place of convenience and told the purpose of the research and a summary of the findings. If you have any queries or wish to know more please phone or contact me at

Nane Rio  
Te Puna Wananga  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 48188  
My email address is n.rio@auckland.ac.nz  
My supervisors are:

Professor Liz McKinley,  
Te Puna Wananga/Starpath  
The Faculty of Education  
The University of Auckland  
Private Bag 92019  
AUCKLAND. Tel. 09) 6238899 extn. 82554  
e.mckinley@auckland.ac.nz
Associate Professor Christine Rubie-Davies
School of Teaching and Learning
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 82974
c.rubie@auckland.ac.nz

Head of Department:
Dr Jenny Lee
Te Puna Wanaga
The Faculty of Education
The University of Auckland
Private Bag 92019
AUCKLAND. Tel. 09) 6238899 extn. 48125.
jenny.lee@auckland.ac.nz

For any queries regarding ethical concerns regarding this study please contact:
The Chair, The University of Auckland Human Subjects Ethics Committee,
The University of Auckland, Research Office – Office of the Vice Chancellor
Private Bag 92019, Auckland 1142.
Tel. 09) 3737 599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 5 DEC FOR (3) YEARS REFERENCE NUMBER 2011/7686
Appendix A13: Consent form teacher interview sheet for the teacher

CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Class Teacher

Teacher perception and the achievement of primary school children in Aotearoa New Zealand.

Researcher: NANE RIO

I have read the Participant Information Sheet and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I understand that I may withdraw at any time up until the commencement of the interview, and may leave the interview at any time I choose.

I understand that participation or non-participation will not affect my relationship with the school in any way.

I understand that there will be an audio record made and that someone else other than the researcher may transcribe and code the information and that the transcriber will sign a confidentiality agreement.

I understand that all the data collected in this research project will be stored in a locked cabinet for six years and then destroyed.

I understand that the data collected from this research project may be used for publication at conferences or in academic articles as well as in the researcher’s doctoral thesis.

I agree to participate in the Research Project conducted by Nane Rio.

NAME: ________________________________________________________________

(Please print clearly)

SCHOOL: _____________________________________________________________

SIGNED: ____________________________________________________________

DATE: APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE N 5 DEC FOR (3) YEARS REFERENCE NUMBER 2011/7686
Appendix B: Teacher Assessment Survey

TEACHER SURVEY

ACADEMIC RATING SCALE
(Beginning of Year)

Name: ______________________  School: ______________________

Class Level: _________________

Compared with other students of the same age in Aotearoa New Zealand, please indicate below the level of achievement you predict each child in your class will reach by the end of Term 4 according to the following criteria:

Relative to the curriculum levels provided in the curriculum documents for my year group (Year 4, Year 5, Year 6, Year 7, year 8) I believe that this child will achieve the following level by the end of this year:

1. Very much below average
2. Moderately below average
3. Just below average
4. Average
5. Just above average
6. Moderately above average
7. Very much above average
CLASS LIST FOR PREDICTED END OF YEAR ACHIEVEMENT

Please provide first name only for each student. Where you have two or more children with the same first name please code each with first name and first initial of surname.

<table>
<thead>
<tr>
<th>Class List</th>
<th>Year level</th>
<th>Age in years and months as at January</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 2 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 5 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix C: Teacher Treatment Inventory (TTI)

Instrument

TTI INSTRUMENT

Your answers will not be shown to anyone, not even your teacher. Please answer honestly.

FIRST NAME ONLY ______________________________________________________

CIRCLE ONE:       Boy            Girl

AGE __________________________

SCHOOL__________________________________________________________

Circle your class level:  Year 4      Year 5      Year 6      Year 7      Year 8

Circle the ETHNICITY you most closely identify with. If your ethnicity is not listed, write it next to “Other”:

   NZ European/ Pakeha
   Māori
   Pasifika
   Asian
   Other___________________________________________________________

PLEASE NOTE:

Girls complete the yellow questionnaires and boys complete the green questionnaires.
READ THE DESCRIPTION

Shontelle is someone who does not do very well in her school work. In fact she is always in the lowest group and often gets low marks in her tests. A lot of people think Shontelle is not very brainy.

Shontelle is not a real student in your class but pretend that she is. AFTER READING the description of the pretend student read the following statements. Circle **ONE** of the numbers that describes how you think your teacher would work with Shontelle.

**Examples:**
Below is an example of how Sina answered her questions.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1. The teacher likes to work with Shontelle.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Sina circled 3 and answered **OFTEN** because that is the closest answer to how Sina thinks the teacher works with Shontelle.

2. The teacher tells Shontelle off for not doing her work.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Sina circled 2 and answered **OCCASIONALLY** because sometimes the teacher tells Shontelle off for not doing her work but mostly she doesn’t tell Shontelle off.

3. Shontelle is allowed to do anything she likes when she finishes her work.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

For this sentence you have to choose the answer you think is best in your classroom. First you must decide either **NEVER** or **ALL OF THE TIME** or somewhere in between. If you think Shontelle is allowed to do what she likes when she finishes her work all of the time then you would answer **ALL OF THE TIME** and circle 4. If you think this never happens then you would answer **NEVER** and circle 1. If your answer is somewhere in between then you would choose one of the other two numbers.

If you **want to change** an answer you should cross out the circle and make a new circle around another number on the same line.

For all the sentences be sure that your circle is on the same line as the right sentence. You should have only one answer for each sentence. **Do not leave out any sentences.** Once you have started **please do not talk. Please ask for help if you need it.** Turn over the page and begin.
Please circle the number which is the most correct statement for you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Occasionally</th>
<th>Often</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teacher asks other students to help Shontelle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. The teacher does not explain what the rules are to Shontelle when she is being told off.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Shontelle is granted special privileges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Shontelle is allowed to do things on her own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. The teacher is more concerned that Shontelle learns something than that she enjoys herself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. The teacher asks Shontelle to show others what to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. The teacher lets Shontelle do as she likes as long as Shontelle completes her work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Shontelle spends more time playing around than doing her class work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. The teacher asks Shontelle questions that demands facts for answers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10.</td>
<td>The teacher watches Shontelle closely when she is working.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>The teacher waits a long time for Shontelle to answer a question before asking someone else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>The teacher trusts Shontelle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>The teacher asks for work to be handed in before Shontelle has had a chance to finish.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>The teacher knows that Shontelle won’t complete her work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>The teacher tells Shontelle off for not paying attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>The teacher lets Shontelle do what she wants most of the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>Shontelle is expected to do her work with no mucking around.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>When Shontelle is doing work, the teacher tells her exactly what to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>When Shontelle is reading, the teacher criticises her behaviour instead of how she reads.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>When Shontelle is stuck, the teacher gives her some help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>The teacher asks if Shontelle understands what she</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
is supposed to be doing.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22. The teacher asks Shontelle easy questions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. The teacher doesn’t ask Shontelle what she likes doing outside of school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24. The teacher does not spend time talking with Shontelle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. Shontelle does not get to choose the book she will read during reading time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. Shontelle has little choice about what she can do during class time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. The teacher carefully explains the work to Shontelle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28. The teacher shares Shontelle’s work with the class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29. The teacher embarrasses Shontelle for not knowing the right answer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>30. The teacher praises Shontelle when she answers a question correctly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>31. The teacher criticises Shontelle’s wrong answer by telling her she could do better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Please turn over for the next part of the survey.
PLEASE RE-READ THE DESCRIPTION BELOW

Shontelle is someone who does not do very well in her school work. In fact she is always in the lowest reading group and often gets low marks in her tests. A lot of people think Shontelle is not very brainy.

**CIRCLE** A NUMBER OUT OF FOUR FOR WHERE YOU THINK SHONTELLE RATES FOR EACH OF THE DESCRIPTIONS BELOW.

For example the first description is POPULAR. If you circle 1 out of 4 then you think Shontelle is not popular at all. If you circle 4 out of a possible 4 then Shontelle is a very popular person. If you think Shontelle is in between then you would circle one of the other numbers.

**Rate where you think Shontelle is:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Never</th>
<th>Occasionally</th>
<th>Often</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Friendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A leader</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Competitive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Focused</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Independent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Successful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>