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STUDENT SUCCESS: WHAT MATTERS MOST FOR HIGH ACHIEVING MĀORI AND
NON-MĀORI STUDENTS AT SECONDARY SCHOOL?

Hana Brigalia Turner-Adams

A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Education, The University of Auckland, 2018.

ABSTRACT

This mixed method thesis focussed on the schooling experiences of Māori and non-Māori secondary school students who achieved highly in the New Zealand National Certificate of Educational Achievement (NCEA) and explored the factors which contributed to their academic success. The research in this doctoral thesis contributes to the body of knowledge focused on academic success for high achieving students within the context of English medium secondary school education in New Zealand. The thesis also makes contributions to the Māori student success literature and the broader field of Indigenous and minority student education.

The three research studies within this thesis brought together students' and teachers' perceptions about academically successful students, ideal and non-ideal teachers, teacher-student relationships, engagement with school, and how these concepts were associated with academic achievement. Study One utilised open-ended questionnaires and two-sample Z-tests to explore the attributes of an academically successful student from the perspective of 583 secondary school students and 274 teachers. Study Two investigated how students and teachers defined an ideal and non-ideal secondary school teacher, and further examined whether there were differences in perceptions of what was 'ideal' and 'non-ideal' for students, teachers, and by ethnicity. Study Three utilised confirmatory factor analysis and structural equation modelling to evaluate associations between teacher-student relationships, student engagement, and achievement for 636 high achieving Year 12 and 13 students. Focus groups with 25 students were also used to examine high achieving students' perceptions of their relationships with their best and worst teachers, and their reported engagement with school.

Findings revealed that hard work and effort, and motivation and self-regulation were reported most frequently by all ethnic groups as contributing to students' academic success.

For Māori and Pasifika students, the motivation to achieve and work hard came from wanting to make a better life for their families, whereas Asian students had a sense of obligation and duty to their families to be successful. In contrast, Pākehā students were competitive and mainly focussed on achieving personal, individualistic goals. In their connections with others, Māori and Pasifika students were more likely to report that academically-supportive peer relationships contributed to academic success whereas teacher participants reported more frequently than students about the importance of a student's home background. A further finding was that a teacher-student relationship was not as critical to students' academic success as effective teaching. Teachers who had positive relationships with students but did not contribute to their learning and achievement were not considered 'ideal'.

This thesis provided several insights into the effective teaching and learning of academically successful Māori and non-Māori students in senior secondary school, and it is the first research study to investigate ideal teachers for high achieving Māori students. Additionally, no other study has investigated high achieving students from other ethnic groups together with Māori to see if their perceptions of academic success differed.

Although some findings in this thesis were specific to Māori, who occupy a unique position as tangata whenua in New Zealand, there are also implications for educators who work with Indigenous and minority students in other countries. Internationally, Indigenous and minority students experience many of the same inequities in education that are faced by Māori, and the findings presented in these studies may provide further insights into the effective teaching of Indigenous and minority students and ways in which disparities in education could be addressed.

DEDICATION

For my husband, Mat

ACKNOWLEDGEMENTS

First and foremost, I acknowledge my tūpuna who cleared the path for me to take this journey, and who guided me throughout this doctorate. I also recognise my beautiful mum, who is always with me, and my grandfather, Dr Maharaia Winiata (PhD), who I thought of often during these past four years.

Thank you to the University of Auckland for awarding me a Doctoral Scholarship. The financial support it provided allowed me to complete my studies full-time.

To the school principals who gave me access to their schools, and to all the students and teachers who gave their time so generously to participate in this research: Your voices were crucial to telling the stories that underpin this thesis, and none of it would have been possible without you.

I was extremely fortunate to have Professor Christine Rubie-Davies and Associate Professor Melinda Webber as my supervisors. I admire you both and appreciate all you have taught me. Christine, thank you for your help, support, and excellent feedback. You pushed me out of my comfort zone and challenged me to learn lots of new and complex things. I have grown to love statistics, especially structural equation modelling! Melinda, you always had kind words for me when I was feeling at my worst. Thank you too for all your support, guidance, and great advice.

Barb, having a friend like you to share this journey has been one of the highlights of doing a PhD, and I feel so blessed by your friendship. You are amazing, I love you heaps, and I cannot thank you enough!

Special thanks also to my wonderful teacher friends who provided research help and moral support during this PhD - Catherine Salmons, Tracy Taylor, Jacqueline Passi, and Nicola Riley. To my fellow PhD students and teaching colleagues in the School of Learning, Development and Professional Practice and Te Puna Wānanga, you gave me great advice,

shared ideas, helped me make sense of my research, listened to my struggles, and just generally made the PhD a much more enjoyable experience.

Thanks to my whole whānau both in New Zealand and in Australia for cheering me on and for helping me to get to the end of this PhD. You helped remind me, Aunty, that it's only a PhD! Special thanks also to Dad for instilling in me the importance of hard work.

To my little Adams family of Mat, Mackenzie and Jackson - You three deserve the most thanks for living with me day in and day out for the entire duration. To Jackson (the best son ever), I started my master's degree when you were five, and now you're 10, so it feels like you've grown up me always studying. I love your kind heart, your determination, tenacity and persistence. One day you might read this thesis and find out that I have not been going to university for the past four years and teaching people how to cook!

To Mackenzie (my best girl), thank you for putting up with my non-stop studying, for showing interest in my work, and for being such a helpful listener and advisor. I'm so proud of the strong and talented young woman you have become. I look forward to supporting you along whatever path that you choose to follow, even if it's not a PhD!

Last (but not least), to my Mat: Thank you for all the things you did to make my life easier during this thesis: For your kindness, for your cooking, for the housework and grocery shopping, for your thoughtfulness, for your support, and most importantly, for your love.

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GLOSSARY OF TE REO MĀORI

Ako	To teach and to learn
Aotearoa	The Māori name for New Zealand
Hapū	Sub-tribe/pregnant
Hui	Meeting/gathering
Iwi	Tribe
Kaupapa Māori	A Māori-centric approach or customary practices
Kotahitanga	Unity, togetherness, and solidarity. Used metaphorically in the Ka Awatea research study to mean inclusion
Manaakitanga	A gesture of goodwill and hospitality. Used metaphorically in the Ka Awatea research study to mean unbridled care
Māori	Indigenous people of Aotearoa, New Zealand
Marae	‘Marae’ refers to the open area in front of the carved ancestral meeting house where formal greetings and discussions take place. ‘Marae’ is also used to describe the complex of buildings situated around the actual marae
Maunga	Mountain
Pākehā	A non-Māori New Zealander of European or British descent
Taha hinengaro	The literal translation is ‘Thoughts and feelings side’. In Te Whare Tapa Whā model it relates to mental health which is the capacity to communicate, think and feel
Taha tinana	The literal translation is ‘Physical side’. Taha tinana in the context discussed in this thesis refers to the dimension of

	physical well-being in Te Whare Tapa Whā model which is the capacity for physical growth and development
Taha wairua	The literal translation is ‘spiritual side’. In Te Whare Tapa Whā, it relates to spiritual health which is the capacity for faith and wider communication
Taha whānau	The literal translation of ‘taha whānau’ is ‘family side’. Taha whānau in the context discussed in this thesis refers to one of the dimensions of well-being in Te Whare Tapa Whā model which relates to individuals being part of a more extensive social system
Te Ao Māori	The Māori world
Te Ao Pākehā	The Pākehā world
Te Arawa	Te Arawa is the name of one of the waka (canoe) that arrived in New Zealand from Hawaiki. People who descended from the Te Arawa waka formed a group of iwi (tribes) in the Rotorua area
Te Tiriti o Waitangi	The Treaty of Waitangi was an agreement signed in 1840 between 540 Māori chiefs and representatives of the British Crown
Te Whare tapa whā	Four-sided house and the name of Mason Durie’s Model of Māori well-being
Tikanga	Correct procedures and customs based on values and practices that have developed over time
Tuakana-teina relationship	In te reo Māori, tuakana-teina describes the relationship between older (tuakana) and younger (teina) same-sex

siblings. However, in education, the term is used to describe a learning relationship where a student who is an expert in one area helps or teaches a younger or less expert student

Tūpuna	Ancestors
Wairuatanga	Spirituality
Waka	Canoe
Whakapapa	Genealogy
Whakawhanaungatanga	The process of establishing relationships and relating well to others
Whānau	Extended family. Used metaphorically to mean a group of people who are connected and care for each other.
Whanaungatanga	A reciprocal relationship developed through shared experiences and working together which provides people with a sense of belonging.
Whenua	Whenua means land, and it also means placenta. Māori are tangata whenua of New Zealand, which means born of the whenua, that is, of the placenta and of the land where their ancestors lived, and their placenta is buried.

GLOSSARY OF ABBREVIATIONS AND EDUCATION TERMS

Area schools	Area schools are small schools which are in either rural areas or small towns in New Zealand and provide education for students from Year 1 to Year 13.
Composite schools	Composite schools provide education to students from Year 7 to Year 13 and include the final two years of primary education as well as five years of secondary school education.
External achievement standard	An ‘external’ is the second type of graded assessment in NCEA that are externally assessed, exam-style achievement standards. Students have one opportunity to complete ‘externals’ at the end of the school year. External achievement standards are marked by subject specialists appointed by the New Zealand Qualifications Authority.
Indigenous	Indigenous is capitalised throughout this thesis. Indigenous is a political term that “evokes shared historical memory, cultural meanings, and particular political interests. By spelling ‘indigenous’ with a lower case “i” we un/knowingly reproduce dominant writing traditions that seek to minimise and

	subjugate Indigenous knowledge and people” (Decolonization: Indigeneity Education & Society, 2018, p. 1)
Internal achievement standard	An ‘internal’ is one of two types of graded assessments (called achievement standards) in NCEA that are internally assessed and marked by teachers within the student’s school during the year.
NCEA	The National Certificate of Educational Achievement (New Zealand’s main national qualification that students complete in each of their final three years of secondary school and are called NCEA Level 1, Level 2 and Level 3)
NRI-SPV	The Network of Relationships Inventory: Social Provisions Version
Secondary schools	Secondary schools follow on from either Intermediate schools (Year 7-8) or full primary schools (Year 1-8) and provide education to students from Year 9 to Year 13.
SEI	Student Engagement Instrument

CHAPTER ONE: INTRODUCTION

Students achieving academic success at school is a fundamental goal of education (Madjar & McKinley, 2013). It leads to increased access and choice in post-secondary education, and higher-level job opportunities in later life (Ensminger & Slusarcick, 1992).

The National Certificate of Educational Achievement (NCEA) is New Zealand's main national qualification for secondary school students and begins for most students when they are in Year 11 (aged 15-16). Students need high grades in NCEA to gain admission to university and other tertiary institutions, and to succeed in university, it is recommended that students achieve more than the minimum number of credits required (Madjar, McKinley, Deynzer, & Van der Merwe, 2010) so that they can access entry to the programme of their choice. Students who only met minimum requirements for University Entrance found they had not done sufficient preparation needed to cope with academic study at university level (Madjar et al., 2010).

Despite improvements in the numbers of students who have achieved NCEA in the past decade, overall achievement levels for Māori and Pasifika students, and students from low socioeconomic areas continue to lag behind those of Asian and Pākehā students. Moreover, Māori and Pasifika receive fewer Certificate endorsements in NCEA than Pākehā, Asian, and students in higher socioeconomic areas. In 2016, only 15.3% of students in low decile schools achieved Certificate endorsement with Excellence in NCEA Level 1 and 2, compared to 51.8% of students in high decile schools, and only 16.4% of Māori and 12.5% of Pasifika students achieved Certificate endorsement with Excellence at NCEA Level 1 or 2, compared with 42.1% of Pākehā and 54.3% of Asian students (New Zealand Qualifications Authority, 2017).

The New Zealand government has admitted that the State schooling system has systematically failed to meet the needs and aspirations of Māori and Pasifika students and

their whānau/families (Controller Auditor-General, 2016; Ministry of Education, 2012, 2013c). Further research at the secondary school level is needed to identify how these students' educational outcomes can be improved.

Importance of the Research Topic

The main aim of this thesis was to identify critical factors that contributed to the academic success of high achieving secondary school students, and whether students from different ethnic groups perceived and experienced success in different ways. This research is important because it focuses on students who have successfully navigated their way through primary school, intermediate school, and a significant part of their secondary school education. Despite the government's intense focus for more than a decade to try and address the disparities and inequalities in the New Zealand education system, the gap in achievement between Māori and non-Māori students has mostly remained unchanged (New Zealand Qualifications Authority, 2018). Research about students who succeed in the education system is important to find best practices that ensure students from all ethnic groups reach their educational potential and obtain the qualifications necessary to make a smooth transition into tertiary education or the workforce.

Prior research about Māori students and those from ethnic minorities has often concentrated on their poor educational outcomes (Donaldson, 2012; Fletcher, Parkhill, & Harris, 2011; Lock & Gibson, 2008). Therefore, a shift of focus to students who are high academic achievers will provide valuable data for whānau, teachers, school leaders, and other stakeholders in education about what can be learnt from these students about the teaching and learning practices which have been most effective.

My drive for undertaking this research is related to being Māori, and to my experiences as a student, a teacher, and now a researcher in secondary school education. I come from a whānau who have always placed a high value on education. My mum was a

teacher and my maternal grandfather, who was the first Māori to gain a PhD from an overseas university (in 1954), was also a teacher. My Dad has his master's degree too, so it seemed a normal progression that one day I too would go to university.

I grew up with an idealised view of Māori in education, partly due to my grandfather's PhD but also because of mum and others in our whānau who were intelligent and 'well-read'. I imagined that others in our hapū (sub-tribe) felt the same way, so I was saddened to read in my cousin's doctoral thesis recently (Woller, 2016), that "generations of hapū whānau believed that education success was achievable only by a few and that failure was normal and a result of their inherent lack of ability" (Woller, 2016, p. 33).

When I reached high school in Hamilton in the mid-1980s, I became rapidly aware of teachers' negative and racist attitudes towards Māori (and often Pasifika students too). I am conscious that my fair skin made my journey through education far easier than it was for other Māori. Because I did not look Māori, I was not treated poorly or discriminated against like other Māori students. And even though all my teachers met my mum, they still perceived that I was Pākehā.

When I started teaching in secondary schools in the late 1990s, racism and discrimination were widespread. Some teachers were overt in sharing their beliefs that Māori students were not going to achieve or succeed at school. My Master's research (Turner, 2013) which was conducted 15 years after I began teaching confirmed what I had observed as a student and as a teacher; that teacher expectations were lower for Māori students than for other ethnic groups, and that teachers' beliefs about Māori were also more negative than for other students. For this PhD research, I wanted to change the rhetoric and tell a more positive story, one that focussed on Māori students who were achieving well above average in the New Zealand education system, despite facing structural and societal inequalities, and discrimination. However, there is still much work to be done in the New Zealand education

system before 'Māori achieving educational success as Māori' is normalised, and all students have equitable opportunities to reach their potential.

Ethical Considerations

The research studies in this thesis were undertaken with the approval of the University of Auckland Human Participants Ethics Committee (UAHPEC) and in compliance with the University of Auckland's Code of Conduct for Research. Copies of all the forms and associated measures that the UAHPEC approved for use in the research can be found in the Appendices. As students in the research were all aged 16 years or above, the UAHPEC deemed them capable of giving consent. However, a Participant Information Sheet was provided to schools to distribute to parents, so they were informed that their child was participating in the research.

All participants across the three studies were given Participant Information Sheets informing them about the study before participating, which explained the research, told them of the time commitment required, as well as what their participation involved. Informed consent was obtained from the focus group participants, but consent forms are not completed for participation in an anonymous questionnaire. For the anonymous online questionnaires, there was an electronic consent tick box on the first page and participants were advised that by submitting the online questionnaire they agreed to take part in the research. Similarly, for students who completed a paper and pencil version of the questionnaire, there was a consent tick box on the front page of their questionnaires. Students were informed that placing their completed questionnaire in the drop-box in the school office indicated their consent to participate.

Participants were also informed that their participation in the research was voluntary, and the point at which they could withdraw from the study and withdraw their data. For anonymous online questionnaires, participants had the right to withdraw from participation at

any time before the point that they submitted the questionnaire. Due to the nature of anonymous responses, data were unable to be removed after the point of submission. For the focus group participants, students were informed they could withdraw at any time, but once the recording of the focus group started, it was not possible to remove their data.

Assurance was sought from school principals that should teachers or students choose or not choose to be part of the research their relationship with the principal would not be affected. Equally, the teachers' jobs and students' grades would not be affected by choosing or not choosing to participate.

The Organisation of the Thesis

This thesis is organised into six chapters. The remainder of this chapter provides an overview of the thesis organisation. Chapter Two provides a review of New Zealand and international literature related to student academic success. The first section focuses on the attributes and beliefs of high achieving students, and the external factors that contributed to their success. Disparities in educational achievement and the factors that increased and diminished academic success are also explored. The second section focuses on students' connections with others, including the teacher-student relationship. The main theoretical frameworks related to teacher-student relationships are also discussed in this section. The third section focuses on student engagement, the main types of engagement, and factors that increase or decrease engagement. The associations between engagement with school and student achievement, and between teacher-student relationships and engagement will also be discussed. The final section focuses on teacher factors related to student achievement and academic success, including attributes and behaviours of an ideal and non-ideal teacher, and effective teaching practices that promote engagement, positive teacher-student relationships, and achievement. Teacher expectations and beliefs, differential treatment, and disparities in

students' opportunities to learn will also be explored. The research questions for each of the three studies are presented at the end of the literature review.

Chapter Three presents the method, procedures, and findings, and a discussion of the first study which investigated the attributes of academically successful students. Study One was a mixed methods study which utilised open-ended questionnaire responses and two sample Z-tests to explore students' and teachers' perceptions of an academically successful student. Demographic data were also collected about the participants. Thematic analysis was utilised with NVivo to discover key themes related to students' and teachers' perceptions of academically successful students. Once all the data had been coded, two sample Z-tests were calculated on the number of responses made to each code to determine if there were statistically significant differences by student ethnicity, teacher ethnicity, or between students and teachers.

Chapter Four presents the method, procedures, findings, and a discussion of the second study which investigated ideal and non-ideal secondary school teachers. Study Two utilised open-ended questionnaires and examined the attributes and behaviours of ideal and non-ideal teachers from the perspective of 583 high achieving students and 274 teachers. As in Study One, thematic analysis was used with NVivo to discover the themes related to students' and teachers' perceptions of ideal and non-ideal secondary school teachers. Following the completion of data coding, two sample Z-tests were calculated to see if there were statistically significant differences between students', teachers', or ethnic groups' perceptions of ideal and non-ideal teachers.

Chapter Five presents Study Three, a mixed methods design that utilised confirmatory factor analysis and structural equation modelling to evaluate associations between teacher-student relationships, student engagement, and achievement. Multiple group invariance testing also established factorial equivalence across the ethnic groups. Quantitative data

management and analysis were performed using Statistical Package for Social Sciences (SPSS), version 24.0 and Analysis of Moment Structures (AMOS), version 25. Focus groups with 25 students were utilised to examine high achieving students' perceptions of teacher-student relationships with ideal and non-ideal teachers, and engagement. The transcripts from the focus groups were analysed using thematic analysis in NVivo to extract key themes related to student engagement and achievement, teacher-student relationships and achievement, types of teacher-student relationships, and student achievement and success in NCEA. The full method, procedures, findings, and a discussion related to Study Three are also provided in Chapter Five.

Chapter Six, the final chapter, provides a discussion of the findings that emerged from the three studies. An overview of the three studies and a general discussion is also presented. The limitations of the thesis are identified with suggestions for further research. The chapter concludes with the implications for education that resulted from the research, recommendations for stakeholders in education, and examines how this doctoral research provides significant contributions to the field of academic success in the secondary school context.

A Note about Te Reo Māori (Māori Language) used in this Thesis

Translations for Māori words and phrases are provided in parentheses in the thesis text the first time they appear. A glossary is also included at the beginning of the thesis for quick reference.

CHAPTER TWO: LITERATURE REVIEW

This literature review provides an overview of the theoretical and empirical literature related to academic student success at secondary school. The review is in four sections:

The first section investigates students' perceptions of success and the research related to the attributes and beliefs of high achieving, academically successful students. External factors that students attribute to their success, including teachers, parents, and whānau, and peer relationships will be investigated, and research related to the disparities in educational achievement and factors that hinder student achievement and success will also be explored.

The second section of the review focuses on students' connections with others, including teacher-student relationships. The main theoretical frameworks related to teacher-student relationships are discussed including the extended attachment perspective and self-determination theory. Teacher-student relationships for different ethnic groups will be discussed, as well as associations between teacher-student relationship, achievement, and engagement.

The third section focuses on student engagement, the main types of engagement, and factors that increase or decrease engagement that have been researched in the literature. The associations between engagement with school and student achievement, and between teacher-student relationships and engagement will also be explored.

The final section focuses on teacher factors related to student achievement and academic success. The literature that has investigated the attributes and behaviours of an ideal and non-ideal teacher for different groups of students will be reviewed along with effective teaching practices, (e.g., culturally responsive teaching) that promote engagement, positive teacher-student relationships, and achievement. Teacher expectations and beliefs, discrimination, and differential treatment will also be explored.

Academically Successful Students

This section of the review focuses on the attributes of high achieving students and students' perceptions of the factors that contribute to their academic success. This literature review does not specifically focus on the construct of giftedness, although research about gifted students and definitions of giftedness does refer to high achievement and academic success.

Attributes and behaviours of students who are high achieving and academically successful. The research literature highlights several attributes, behaviours, and attitudes that academically successful students share. These include hard work and effort (Macfarlane, Webber, Cookson-Cox, & McRae, 2014; Meyer, McClure, Walkey, McKenzie, & Weir, 2006), resilience (Finn & Rock, 1997; Griffin & Allen, 2006; Hassinger & Plourde, 2005; Macfarlane et al., 2014), self-regulation and motivation, high self-belief, intelligence, and help-seeking behaviour (Schenke, Lam, Conley, & Karabenick, 2015).

Hard work and effort. Students who achieve at high levels academically often attribute their success to hard work and effort (McClure et al., 2011; Meyer et al., 2006). McClure et al. (2011) found that students who attributed their best marks in NCEA to effort attained higher GPA scores than students who attributed their best marks to family and friends. Meyer et al. (2006) also found that students with a *Doing My Best* orientation earned more credits in NCEA than students who were *Doing Just Enough*. Students who were *Doing My Best* valued work that led to Merit or Excellence grades, they wanted a good education, and tried to get Merit or Excellence grades even if the additional marks were not required to reach their goal. *Doing My Best* students also were more likely to complete achievement standards, rather than unit standards, and were focused on attending university, whereas *Doing Just Enough* students did more unit standards than achievement standards and

were less interested in attending university. *Doing Just Enough* students were more interested in getting a job following school or ‘hanging out’.

Asian students, who are the ethnic group that achieve at the highest levels in New Zealand (New Zealand Qualifications Authority, 2018) perceive that they are more hard-working when compared to other ethnic groups (Bablak, Raby, & Pomerantz, 2016; P. Wong, Lai, Nagasawa, & Lin, 1998) and that the effort they put in will lead to achievement (Shavitt, Torelli, & Riemer, 2010). The belief in Confucianism by Asian students and their families means they view intelligence as malleable and that expending hard work and effort on academic tasks will lead to higher achievement and academic success (Liu & Xie, 2016; Stevenson, 1992). The theory that intelligence is not fixed is associated with a growth mindset which is the idea that students have some control over their achievement at school and that subject knowledge, understanding and grades will improve if students are willing to expend enough time and effort (Dweck, 2010). Hattie (2009) connected the behaviour of hard work and effort to the personality variable, conscientiousness, and reported it had an effect size of $d = 0.44$. Conscientious students appeared to be more motivated towards high academic achievement and were typically well-organised and self-disciplined.

Academic identity. Students who are willing to engage in sustained periods of purposeful study, and who are self-efficacious (Bandura, 1977) are reflecting what could be described as academic identity (Webber, 2011; Worrell, 2016). Worrell (2016) and Whiting (2006) proposed that a student’s academic identity included:

- (1) Self-belief – the belief that students are “competent and capable [and] intelligent or talented in school settings” (Worrell, 2016, p. 321).
- (2) Aspirations and long-term goals – when students are hopeful for the future and are cognizant of what they need to do now to achieve their future goals.

- (3) Belonging to a learning community – when students “feel comfortable and confident in academic settings” (Whiting, 2006, p. 4).
- (4) A positive ethnic identity – when students’ academic commitment is compatible with their ethnic identity (Webber, 2011; Worrell, 2016) and they do not have to change who they are or act differently to succeed.

For students from Indigenous and ethnic minorities, the forging of an academic identity is multifaceted because it involves negotiating and fitting into two cultures/ethnicities; their home culture and the culture of the school, which may operate in opposition to each other (Howard, 2003).

Resilience. Resilience frequently appears in the literature about successful students (Finn & Rock, 1997; Macfarlane et al., 2014) as these are students who achieve academic success at school despite having to overcome adverse situations or difficulties. Wang, Haertel, and Walberg (1994) defined educational resilience as "the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by early traits, conditions, and experiences" (p. 46).

McMillan and Reid (1994) identified a range of factors that appeared to be representative of resilient students and which contributed to their academic success. These factors included the student’s characteristics and behaviours; how they made use of their time and the types of activities they were involved in; family factors; and the student’s level of belongingness at school. Resilient students’ personal attributes appeared to stimulate positive reactions in others which enabled them to ask for and receive help when they needed it, a characteristic which was useful in education. Other personal characteristics included a positive outlook, respect towards others, enthusiasm for learning, and a high level of self-motivation.

Resilient students also used their time wisely and were actively involved with the school, extra-curricular activities, clubs, sports, and other community organisations. Reis, Colbert, and Hébert (2004) in their study of resilience in low-income, high ability students identified that involvement in extra-curricular activities was a protective factor as students who were kept busy were less likely to underachieve. In Macfarlane, et al.'s (2014) study with high achieving Māori secondary school students, it was also reported that students with high levels of resilience were more likely to be involved in extracurricular activities. Resilient students also had access to at least one caring adult in their lives who were positive role models, and who provided them with attention, support, and guidance (Macfarlane et al., 2014; McMillan & Reed, 1994; Reis et al., 2004). The support could be provided by the student's parent or by other family members.

In terms of school factors that were related to success, resilient students were reported to be involved in at least one school-related activity which increased their sense of belonging and engagement with school. Students also connected with teachers and other school personnel who could provide them with academic and emotional support, but who also had high expectations and encouraged them to succeed (McMillan & Reed, 1994)

Self-regulation and motivation. Self-regulation and motivation are two interconnected concepts that are associated with academic achievement (McCoach & Siegle, 2001, 2003). Self-regulation has been defined as “students’ self-initiated, strategically guided, and self-sustained efforts to learn” (Zimmerman & Kitsantas, 2014, p. 145). Motivation is a concept that explains why people think and behave as they do and is “used to describe those processes that can (a) arouse and instigate behaviour; (b) give direction and purpose to behaviour; (c) continue to allow behaviour to persist; and (d) lead to choosing or preferring a particular behaviour” (Wlodkowski, 1978, p. 12). Wlodkowski theorised that in student learning, motivation involved a series of steps:

Energy → volition → direction → involvement → completion.

In practical terms, “a student who has the capacity to act (energy), makes a choice (volition) which includes a certain purpose (direction) which when continued (involvement), leads to finishing the learning task (completion)”. Deci, Vallerand, Pelletier, and Ryan (1991) critiqued Wlodkowski’s (1978) theory of motivation as being more concerned with the direction of the motivation and outcome but not addressing how or why the student was energised to be motivated in the first place. In contrast, self-determination theory (Deci et al., 1991) addressed the energy issue by proposing that the motivation to act came from three basic psychological needs: the need for competence, relatedness, and autonomy (or self-determination). They proposed motivation was maximised when students had the opportunity to satisfy these needs. Self-determination theory is described in further detail in the section on teacher-student relationship theoretical frameworks.

Students who display self-regulatory and motivational behaviours were more likely to be high achievers than students who did not exhibit these behaviours (Bembenutty, 2007; Zimmerman & Kitsantas, 2014). A study by McCoach and Siegle (2001) proposed that students with self-regulation behaviours, who were highly motivated and had high academic self-perceptions were more likely to be high achievers than students with lower academic self-perceptions, motivation, and self-regulation.

Māori student success and high achievement. Research about Māori student achievement is particularly important given the ongoing inequality in the New Zealand education system which has resulted in lower achievement levels for Māori and ethnic minority students. In 2017, 93.2% of Asian students, 81.8% of Pākehā (a non-Māori New Zealander of European descent), and 73.3% of Pasifika students in Year 11 achieved Level 1 of the National Certificate of Educational Achievement (NCEA), compared with 64.2% of Māori (New Zealand Qualifications Authority, 2018). Additionally, in 2016 19% of Māori

left school without attaining NCEA Level 1, which is more than double the rate of Pākehā (Ministry of Education, 2018a).

The research on high achieving, academically successful Māori students at secondary school is relatively recent. Mitchell and Mitchell's (1988) study of Māori high achievers in School Certificate in the late 1980s is one exception. The secondary school studies which focus on Māori student success have also predominantly been qualitative studies (Claxton, 2016; Macfarlane et al., 2014; McRae, Macfarlane, Webber, & Cookson-Cox, 2010; Mitchell & Mitchell, 1988). Successful Māori students share similar intra-personal behaviours and attributes to non-Māori high achievers including hard work and effort, self-motivation, resilience, and self-efficacy (Macfarlane et al., 2014). Students also attribute their success to external factors, such as teachers, whānau and peer support.

In what appears to be the first study to focus on academically successful Māori students, Mitchell and Mitchell (1988) profiled Māori who had achieved highly in School Certificate Mathematics and English. The attributes and qualities of the students in the study included intelligence, independence, and confidence in their identity and of their place in society. Students were well-supported by their whānau, enjoyed school, had positive perceptions of teachers, were well-liked by teachers and peers, and were able to resist negative peer pressure. Students set clear learning goals, were well-organised and were assertive about asking teachers for what they needed for their learning (Mitchell & Mitchell, 1988, pp. 121-122).

Twenty-six years after Mitchell and Mitchell (1988), Macfarlane et al.'s (2014) study explored relationships between student success and Māori identity in secondary schools in the Rotorua/Waiariki area (Rotorua is a small city of approximately 58,000 people, located in the centre of the North Island of New Zealand). The study identified eight key qualities for

academic success which were central to the education of high achieving Māori students in Te Arawa.

- (1) Identity—in Te Ao Māori (the Māori world), in Māori language and tikanga (customs), and whenua (land).
- (2) Diligence—discipline, motivation and attentiveness.
- (3) Relationships—with teachers, peers and within whānau.
- (4) Innovation—courage, competitiveness, and curiosity.
- (5) Well-being—health, fitness, and resourcefulness.
- (6) Scholarship—application, fastidiousness, and aspiration.
- (7) Humility—puts others before self, accepts criticism, service to others.
- (8) Values—manaakitanga (unbridled care), kotahitanga (inclusion) and wairuatanga (spirituality).

Finally, Claxton's (2016) study of high achieving Year 13 Māori students, found that student success was related to having positive role models in their whānau, a positive and secure cultural identity (as Māori), teachers who related to them as Māori, and the opportunity to work with Māori teachers and students. Some students in Claxton's study were part of a bilingual unit, and they contrasted the support and connectedness they enjoyed when surrounded by Māori students and teachers compared to the isolation and lack of support they felt (from non-Māori) when they attended classes in the mainstream part of the school. Across the research on academically able Māori students, the consistent factors that students attributed to their success were a strong and positive Māori identity, and positive relationships with teachers and their peers. Within their whānau, students had supportive relationships, positive role models, and high parental expectations.

External factors attributed to students' academic success. Students also attribute their success to external factors such as their family/parents (Claxton, 2016; Kay, 2008),

teachers, (Griffin & Allen, 2006; Hassinger & Plourde, 2005; Horsley, 2009; Macfarlane et al., 2014), or peers (Alva, 1991).

Success attributed to teachers. In Horsley's (2009) study that investigated the factors that had facilitated the success of students in New Zealand Scholarship examinations, students chose 'teacher' as the factor they perceived had the greatest overall influence on their success in the examinations, ahead of their ability, and ahead of their mother, father, or peers. Griffin and Allen's (2006) study of high achieving Black students also found students attributed their success to teachers.

In the studies where students attributed their success to teachers, it appeared teachers provided students with knowledge or skills that they could not access without external support. For example, study at scholarship level (Horsley, 2009) requires advanced subject knowledge accompanied by an in-depth understanding of how the examination process works. Consequently, scholarship teachers not only provided students with specialist content knowledge but also taught strategies for answering advanced questions, followed by specific feedback to help students learn and improve. In other studies where students were the first in their family to go to university (Weinstein & Worrell, 2016), students relied on teachers to provide them with knowledge and expertise related to college preparation to which their parents did not have access.

Success attributed to whānau/family/parents. High achieving students also credited academic success to the support and encouragement they received from family members or other caregivers (Claxton, 2016; Macfarlane et al., 2014). Some groups of students, such as those from Asian backgrounds, had a strong sense of obligation to their families to achieve highly (Shavitt et al., 2010), and additionally, their parents had high expectations for their achievement. Similarly to Asian students, Māori students viewed success and achievement collectively. Success at school did not belong only to them as individuals but was also of

value and benefit to their whānau. Equally, Māori viewed failure collectively, and accordingly, students feared not doing well at school and disappointing their whānau (Macfarlane et al., 2014).

Claxton (2016) reported that the family members of high achieving students in his study had high expectations and were positive role models. Students reported that their parents expected they would achieve good grades and they provided them with consistent encouragement and reinforcement about the importance of hard work. Students also reported that family members were positive role models; their parents modelled a good work ethic, and older siblings had attended university, which had led to employment in good jobs or overseas travel. Because of having positive family role models, students were also inspired to work hard and aimed high.

Another way that students' parents and families have contributed to their academic success is through the support and management of their education. Research has found that students whose parents advocated on their behalf were placed in higher tracks (or streams at school) than students of similar ability (Gamoran, 1992). However, research by Alva (1991) failed to find a strong relationship between parental support and high academic achievement, finding instead that students reported higher levels of support from teachers and peers.

Teachers' perceptions of family and parental support. Teachers' perceptions of Māori and Pasifika students' parental support is often reported negatively, misunderstood, or misinterpreted. Spiller's (2012) study of high achieving Pasifika students found that teachers perceived Pasifika parents to be more interested in their child's class behaviour than their achievement. Pasifika parents believed that they were being supportive by telling their children to listen to the teacher and to complete their work. They did not challenge teachers about their children's achievement because they trusted teachers to do their job.

Unfortunately, the message teachers received from interactions with parents was that poor

achievement was acceptable; thus, they did not think they needed to take responsibility for the students' learning. Instead, the teacher blamed underachievement on either the low achievement level that students entered high school with or on what they perceived were Pasifika families' low valuing of education. Teachers in Turner, Rubie-Davies and Webber's study (2015) also had negative beliefs about the level of support Māori and Pasifika parents provided to their children but made predominantly positive comments about Pākehā and Asian parents. Given the value that whānau/family have in the lives of Māori and Pasifika students (Claxton, 2016; Macfarlane et al., 2014; Passi, 2011), it is vital that schools and teachers find ways to resolve the cultural gap that exists between home and school so that positive and mutually-beneficial relationships can be developed to support and improve student educational outcomes (Garcia & Guerra, 2004).

The relationship between parental support and academic achievement. Several reviews have been undertaken about parent engagement, the home-school relationship and its association with student achievement. Hill and Tyson's (2009) meta-analysis of parental involvement strategies found that academic socialisations at home had the strongest positive relations with student achievement and not school-based involvement which only had a small positive relationship. This concurs with Finn's (1993) earlier finding that although parental involvement at home, such as taking an interest in their child's school work had a positive association with academic achievement, parents contact and involvement with their child's school, such as volunteering and being on the Board of Trustees, was not positively associated with achievement.

The findings from New Zealand research on home-school partnerships and parental involvement in education are mixed. In their review of New Zealand and international literature and their empirical case-study research study of seven New Zealand schools, Bull, Brooking and Campbell (2008) concluded that there was "little evidence of a direct link

between home-school partnerships and improved student outcomes” (p. 16). This finding was related in part to the lack of longitudinal studies which had measured the impact of home-school partnerships but also due to a lack of clarity within schools about the purpose of these initiatives.

Schools had a range of reasons for developing home-school partnerships and parental involvement which included building relationships with parents, communicating with parents, individual student issues, pedagogical issues, school organisation, aligning the school and home learning environments more closely, building school/teacher understanding of family cultural practices, and sharing their respective areas of expertise. The authors suggested that if schools were clearer about what they were trying to achieve from the home-school partnership in terms of a purpose and outcomes, then approaches could be more focussed, and it may be possible for the impact of the initiative to be measured.

High achieving students’ peer relationships. Research has identified that high achieving students enjoyed being in classes where they learnt while relating to, supporting, and being supported by others (Horsley, 2009). This finding aligns with research related specifically to Māori students where the ideal learning environment for Māori has been described as a resembling a supportive whānau (family) where students had a “strong sense of connectedness and belonging, such as that created by a whānau” (R. Bishop, Ladwig, & Berryman, 2014; McMurchy-Pilkington, 2013). Glynn, Cowie, Otrell-Cass, and Macfarlane (2010) reported that for Māori students, “whakawhanaungatanga naturally occurs...they will soon form strong working relationships with each other, and take responsibility for each other’s well-being and learning, especially through a commitment to sharing their knowledge freely among members of the group” (p.120). Bishop and Glynn (1999) discussed whānau systems in school, and although they referred to mixed year-level groups, the idea of developing a family atmosphere within a class of mixed ability that involved “shared

teaching; close, personalised interactions; self-directed and cooperative learning...” (p. 83). High achieving Māori have shown a preference to be in classes with friends and would rather forego opportunities to be in advanced classes if it meant they would be unsupported and culturally isolated (Macfarlane & Moltzen, 2005; Mitchell & Mitchell, 1988). As horizontal collectivists, Māori place importance on group achievement, cooperation, interdependence, and equality amongst members of the group (Tassell, Flett, & Gavala, 2010), which explains why the success of their peer group is as important to Māori students as their own [success].

However, McInerney, Hinkley, and Dowson (1997, March) disagreed that students from collectivist cultures placed greater importance on the success of the group ahead of their own. They argued that students of all ethnic groups, whether they came from collectivistic or individualistic cultures, tended to focus on individual goals because the schooling system was set up to reward individual and not collectivist success. In secondary schools, there are some exceptions in subjects like music where students may have the opportunity to work together and are assessed for a group performance, but overall, “Achievement of individual goals is a measure of school success” (McInerney et al., 1997, March, p. 16).

There is limited New Zealand research that has focussed on the associations between peer relationships and achievement for Māori and other ethnic groups. The studies which do refer to peer learning relationships reported that students felt an increased sense of belonging and were more likely to be engaged in their learning, but this is an area for future research as no studies were located which show that peer relationships predict achievement or engagement. Although the Western education system is set up for individual success and achievement, it is important that school leaders and teachers are aware of students’ need for social support, and that peers may play an important role in assisting the learning of others in their peer group. Assessing students as a group may not always be possible, providing opportunities when students can work cooperatively, and encouraging students to problem-

solve class tasks collaboratively may contribute to students' engagement and enjoyment of learning.

The next section focuses on teacher-student relationships, the theoretical frameworks related to teacher-student relationships, types of teacher-student relationships, and associations between teacher-student relationships and engagement, and between teacher-student relationships and achievement. The final part of the section examines the literature related to teacher-student relationships and ethnicity.

Teacher-Student Relationships and Connections

By being placed in classes together, teacher-student relationships develop which may be positive or negative, close or distant (Hargreaves, 2000). Teachers have a duty of care to teach and supervise their students during the school day, and for students, schooling is compulsory in New Zealand until they are 16 years old (Education Act, 1989, s 20). But beyond compulsory interactions and official responsibilities, teachers and students also consciously decide how they will relate to each other (Noddings, 1988), and what type of relationship will ensue.

Pianta and colleagues (Pianta & Allen, 2008a; Pianta, Hamre, & Allen, 2012) have referred to students' relationships with teachers as key to promoting positive development, and students who have a positive relationship with a teacher are more likely to be successful at school than those students who do not. According to Hattie (2009), the effect of teacher-student relationships on achievement is $d = 0.72$, which is a large positive effect. Hattie reported that in classes where relationships between teachers and students were positive, students were more engaged, there were less behavioural issues, greater respect for all members of the class, and achievement outcomes were higher than in classes where teacher-student relationships were negative.

One issue related to assessing a teacher-student relationship identified by Brinkworth, McIntyre, Juraschek, and Gehlbach (2018), was that teacher-student relationships “may be positive, negative, neither or both” (p. 2). In some relationships, teachers and students related positively to each other in some situations but negatively in others or had positive and negative feelings towards each other concurrently. The absence of a positive teacher-student relationship was not necessarily related to high levels of conflict or hostility between the teacher and student. Moreover, high achieving students were less likely than low achieving students to need emotional support from teachers (Capern & Hammond, 2014) because their success sustained them. Therefore, the absence of a positive emotional relationship does not signify that a student did not receive any support at all from their teacher.

Theoretical frameworks for teacher-student relationships. There are two main theories referred to in the teacher-student relationship literature. The first is the extended attachment theory (Pianta & Allen, 2008b) and the second is self-determination theory (R. Ryan & Deci, 2000).

An extended attachment theory perspective. The extended attachment perspective of teacher-student relationships is based on attachment theory in parent-child relationships. In the same way that a secure parent-child relationship enables children to explore their environment, a secure relationship with teachers enables students to explore the school environment and become engaged with their learning (Pianta, 1999; Roorda, Koomen, Spilt, & Oort, 2011). Attachment theory has been used as a framework to explain teacher-student relationships with younger children, particularly in pre-school and primary school settings (Wentzel, 2009). Pianta (1999) found that problematic parent-child relationships also had the potential to impact negatively on the teacher-student relationship at school. For example, students who were not securely attached to their parents or caregivers had difficulty expressing emotions appropriately and also avoided developing relationships with teachers.

Other students with inconsistent caregivers may become highly dependent on their teachers and communicate inappropriately with them by whining and complaining, for example.

Self-determination theory. Self-determination theory, also called self-system theory (Connell & Wellborn, 1991), focuses on three fundamental psychological needs that must be met for students to be motivated. These are the need for competence, the need for autonomy (or self-determination), and the need for relatedness (R. Ryan & Deci, 2000). Students' need for autonomy is supported when they can make their own learning choices are trusted to be self-regulated learners, and when clear connections are made between students' interests and their schoolwork. The need for relatedness is met when students develop secure, satisfying relationships with others, when teachers show an interest in their students, and when they provide them with care and support (Deci et al., 1991). The need for competence is related to people having the capability to develop skills, proficiency, knowledge and success in tasks that are important to them. When these needs are met, students' engagement in learning will increase (Skinner & Belmont, 1993) which will lead to higher achievement outcomes (Skinner, Wellborn, & Connell, 1990).

Types of teacher-student relationships. Whereas numerous studies have highlighted the importance of positive teacher-student relationships (e.g. Hattie, 2009; Klem & Connell, 2004; Pianta & Allen, 2008b), fewer have investigated whether students always want close relationships with their teachers (Phillippo, 2012), the type of relationships students want with their teachers (Capern & Hammond, 2014), or the types of teacher-student relationships that predicted achievement for specific groups of students.

Phillippe (2012) used the term 'personalism' instead of 'relationship' to emphasise the type of teacher-student relationship where teachers supported students via individual, positive personal relationships, as opposed to a negative one. Furthermore, Pariser (2011)

described teacher-student relationships as ‘helpful’ in a study when they fell into one of four categories of either “open, close, collaborative or caring” (p. 63).

Capern and Hammond (2014) explored the differences in relationships that gifted students had with their teachers compared with students who had emotional/behavioural disorders (EBD). They found that gifted students placed the highest value on teacher behaviours which supported their academic achievement whereas students with EBD placed greater value on emotional support. Additionally, whereas gifted students appreciated teachers who were friendly and took an interest in their learning, they preferred those who maintained a professional distance and did not ask too many personal questions. In contrast, EBD students wanted closer relationships, for their teachers to know things about them outside of the school context, and for their teachers to care about their emotional wellbeing.

Pariser’s (2011) study concerning at-risk high school students aligned with Capern and Hammond’s (2014) finding of students with emotional/behaviour disorders in that the ‘high risk’ students also wanted to know about their teachers’ lives outside of school. The authors of these studies concluded that although behaviours such as respect, fairness and a sense of humour universally contributed to effective teacher-student relationships, unique groups of students were particular about the interactions they wanted with their teachers. Students from groups who were ‘at risk’ were more likely to want an emotional connection than high achieving students were.

Teacher-student relationships and engagement. Prior research has found positive associations between teacher-student relationships and engagement, and negative associations between negative relationships and engagement (Roorda et al., 2011). When students disengage from school, research has shown that it is often due to social reasons, such as not getting along with teachers (Catterall, 1998) or when teachers provided limited support and a lack of interest in students’ achievement (V. E. Lee & Burkam, 2003).

Klem and O'Connell (2004) investigated the associations between teacher support and student engagement and found that students who experienced high levels of teacher support were more likely to feel engaged with school and less likely to be disengaged. On the other hand, students who reported low levels of teacher support were more likely to feel disengaged from school and less likely to be engaged. Birch and Ladd (1997) also argued that the positive association between engagement and teacher-student relationships occurred because teachers responded more positively to students who were engaged. Consequently, students became engaged or more engaged because of the positive reinforcement they received.

In their study investigating the influence of teacher-student relationships on middle school students' attitudes to teachers and school, Huan, Quek, Yeo, Ang and Chong (2012) found that students' perceptions were predictive of their attitudes to school. When students had positive relationships with their form teachers, their attitudes towards school were also positive. However, when they experienced negativity in their relationships with their form teachers, their attitudes towards school were also negative. Other studies have found that rejection, hostility and disinterest from teachers can lead to student disengagement, decreased motivation, and a lack of connection and identification with school (Finn, 1993; Furrer, Skinner, & Pitzer, 2014).

Teacher-student relationships and student achievement. Teacher-student relationships generally have positive associations with student achievement (Roorda et al., 2011). As students' progress through the school system and they become more independent and increasingly focussed on relationships with peers, positive relationships with a supportive adult continue to be important (Feldlaufer, Midgley, & Eccles, 1988; Roorda et al., 2011). A positive relationship with a supportive adult appears to be important for senior secondary school students as they navigate difficult course work and prepare for external assessments.

Students who achieve higher grades are more likely to have positive relationships with their teachers and less likely to be engaged in conflict as teachers perceive high achieving students to be more cooperative and less defiant than lower achieving students (Gregory & Thompson, 2010; Sheets, 1996).

In their meta-analysis of 99 studies from 1990 to 2011, Roorda et al. (2011) found that the overall effect sizes for the associations between teacher-student relationships and engagement were larger than the associations between teacher-student relationships and achievement. Therefore, a positive teacher-student relationship did not necessarily predict high achievement. The authors concluded that although positive teacher-student relationships were important, the low effect sizes indicated other factors needed to be considered that may have had more of an effect on increasing student achievement.

In studies published since Roorda et al.'s (2011) meta-analysis, findings related to the associations between teacher-student relationships and achievement have continued to be mixed. Gehlbach, Brinkworth and Harris' (2012) study investigating changes in teacher-student relationships over a year among middle school students found that students' perceptions of relationship positivity declined significantly. Additionally, they found there were no significant associations between changes in teacher-student relationships and students' grades at the end of the year. They did find that teachers had more positive feelings about their students who submitted a greater percentage of homework, which aligns with other studies that have found teachers' positive expectations are often related to the amount of work completed by students rather than students' actual achievement (Dunne & Gazeley, 2008). One study (Allen et al., 2013) did find an association between teacher-student relationships and achievement. After taking into account prior achievement, the quality of teacher-student interactions predicted students' end of year achievement.

Conversely, a New Zealand study by Winheller, Hattie, and Brown (2013) explored whether students' attitudes towards mathematics (how much students liked maths and their level of confidence), and their perceptions of the teacher-student relationship, peer relationships, and learning were related to academic performance. Results showed that spending time with teachers or peers and liking mathematics had a negative effect or was irrelevant to academic performance for both primary school and high school students. The authors speculated that students may have perceived increased interactions with their teachers to have occurred because of poor results or because they were being disciplined and therefore did not view it positively. For the negative association between spending time with peers and academic performance in maths, the authors speculated that while peer relationships became increasingly important as students progressed through high school, not all interactions were conducive to learning. Maths performance was predicted primarily by student self-efficacy (and not by liking of maths). The following section examines teacher-student relationships and student achievement by ethnicity.

Teacher-student relationships and student achievement by ethnicity. There are relatively few studies investigating the associations between teacher-student relationships and achievement by ethnicity. One study in the Netherlands (den Brok, van Tartwijk, Wubbels, & Veldman, 2010) used causal modelling to investigate links between secondary school students' ethnicity, students' perception of teacher-student relationships, and the association between ethnicity, teacher-student relationships, and student achievement. The authors found the teacher-student relationship was less important for Indigenous Dutch students than it was for non-Dutch students, and that a relationship with their teacher was more important for second-generation immigrants than the first generation because of the individualist nature of the Dutch culture compared with the collectivist nature of immigrant students' cultures.

Woolley, Kol, and Bowen's (2009) study found that a supportive teacher-student relationship and academic outcomes were mediated through engagement (measured as student behaviour and level of school satisfaction). Therefore, it is important that educators consider the mediating effect of engagement when looking at raising student achievement. If the school environment is engaging, students are challenged and excited by their learning and feel like they belong, then it appears to be more likely that the social environment will lead to students improved academic outcomes (Woolley et al., 2009).

Teacher-student relationships for Māori students. Positive teacher-student relationships appear to be particularly important for students who may be at risk of school failure, such as those from ethnic minorities or Indigenous groups (R. Bishop, Berryman, Tiakiwai, & Richardson, 2003; Decker, Dona, & Christenson, 2007; Delpit, 2012; Macfarlane et al., 2014; McRae et al., 2010). Over the last decade, the importance of building positive relationships with Māori students has been emphasised in New Zealand Ministry of Education literature and within initiatives such as Ka Hikitia (Ministry of Education, 2013a), a programme focussed on raising the achievement outcomes of Māori students. For Māori, an emotional connection is important because students appear to “learn best from teachers who genuinely care about them” (Macfarlane et al., 2014, p. 122; McRae et al., 2010). Despite the New Zealand government's focus in the last decade for teachers to work on improving student relationships with Māori students, relatively small numbers of New Zealand studies have investigated either Māori teacher-student relationships (Averill, 2012; Baskerville, 2011; Hawk, Cowley, Hill, & Sutherland, 2002) or teacher-student relationships with non-Māori students.

Hawk et al.'s (2002) research investigated teachers' perspectives of teacher-student relationships with Māori and Pasifika students across primary, secondary and tertiary

settings. The authors identified seven elements that were features of effective teacher-student relationships for these groups of students:

- (1) Empathy—understanding and responsiveness to Māori and Pasifika culture.
- (2) Caring—showing warmth and connectedness towards their students.
- (3) Respect—mutual respect through teachers being accepting, caring, setting high standards and modelling appropriate behaviours and attitudes towards students.
- (4) Teachers going the extra mile—putting in extra effort, providing additional help, sometimes giving students tangible rewards, and sharing something about themselves with students.
- (5) Passion for enthusing and motivating students—including enthusiasm, showing love for their subject, making learning fun and interesting, and being positive and energetic.
- (6) Patience and perseverance—allowing students enough time to learn and being willing to explain the work until students understood.
- (7) Belief in their ability—involved teachers having high expectations and believing in their students' ability to achieve.

The findings from this research highlighted the importance that study participants placed on developing emotionally supportive relationships with students. There was less of a focus, however on links between a positive teacher-student relationship, effective teaching and student learning, and how these concepts led to the improvement of students' achievement outcomes. A weakness of the study was the lack of demographic details provided about the samples. For example, one study claimed that for Māori and Pasifika students there was no correlation found between ethnicity and teacher effectiveness or between any other teacher demographic characteristics and effective teaching. From the write-up, the study referred to qualitative methodology including interviews, focus groups,

and classroom observations. The classroom observations may have included the collection of quantitative data, but it is unclear which data measured correlations related to teacher effectiveness.

Baskerville's (2011) secondary school research studied a Year 10 Drama class of 24 students who were New Zealand European¹, Māori, Māori-European, Samoan, Fijian-Indian and German ethnicity. The study aimed to increase the understanding of others' cultural perspectives. Findings revealed that when teachers and students shared their personal stories, it increased the knowledge of the other members of the class and closer, more trusting, respectful, and increasingly positive relationships between the students, and between the teachers and the students. Students' confidence in class also increased as did the number of interactions between students who had previously not spoken to each other.

Averill's (2012) observational study focussed on whether the behaviours of mathematics teachers towards their students contributed to caring teacher-student relationships and student engagement. The researcher adapted Durie's (1998) Whare tapa whā Māori health and well-being model to 'The teacher care mathematics whare' and categorised teacher behaviours that supported students' taha tinana (the physical side), taha wairua (the spiritual side), taha hinengaro (thoughts and feelings side) and taha whānau (family side). In Averill's adapted model, taha tinana referred to physical expression where teachers incorporated movement in lessons and had an awareness of students' physical well-being. Taha wairua referred to students' identity and teachers' respectful and one-to-one interactions with students. Taha hinengaro was the classroom learning environment where teachers created a safe, purposeful, fun, engaging and mathematics-focused learning

¹ 'New Zealand European' is a term used interchangeably with Pākehā. In this research study, the author has only referred New Zealand European, so I have followed their terminology.

environment. Finally, taha whānau denoted a community where teachers focussed on nurturing both a sense of community and a sense of personal responsibility in students.

Findings revealed that students were most engaged and related best to teachers in classes where the most caring was shown towards students. However, although there were examples of teachers showing they cared for students as culturally-located individuals (R. Bishop, 2010), including pronouncing names correctly and linking mathematics to students' interests, there were very few instances of teachers using culturally-based mathematics examples, teaching mathematics through the culture of their students, or teachers acknowledging their students' cultures. Only two of the teachers were observed occasionally using one or two words in Māori or a Pacific language despite all of the teachers being experienced at teaching Māori and Pacific Islands students and one teacher being of Māori descent.

Māori students' relationships with teachers and the link to student engagement was highlighted in Te Kotahitanga (R. Bishop et al., 2003), one of the foremost New Zealand research studies into Māori achievement at secondary school (R. Bishop, 2007; R. Bishop, Berryman, Cavanagh, & Teddy, 2009; R. Bishop et al., 2003; Mahuika, Berryman, & Bishop, 2011). Bishop and colleagues found that Māori students' poor relationships with their teachers were a significant factor in their underachievement at school. Low teacher expectations, deficit beliefs, and an unwillingness by some teachers to take responsibility for student learning often exacerbated poor relationships. International research has also found that poor teacher-student relationships can lead to students having negative feelings towards school (Wayman, 2002) and may cause some students to perceive that they are treated less positively than other students because of their ethnic background.

Māori students admitted truanting from school when they did not like their teachers. Other reasons given for truancy were that subjects were too hard, or classes were boring.

Many students in Te Kotahitanga reported mostly poor relationships and students were more likely to attend classes when they had a good relationship with the teacher. Some students believed their teachers did not like Māori students at all, regardless of how they behaved and other students said teachers disrespected them by mispronouncing their Māori names, making no effort to get to know them, and by talking negatively about them to other people in the school. To be successful learners, Māori students needed to like and respect their teachers and have their teachers like and respect them (Bishop et al., 2003).

In summary, positive teacher-student relationships with Māori students at secondary school level are characterised by respect. Teachers show respect for their students by the way they speak, behave, and treat them. They are friendly, caring, and take an interest in their students which is demonstrated by acknowledging them, pronouncing their names correctly, and having high expectations for their achievement. Effective teaching practices for Māori students are discussed in a later section.

Student Engagement and Student Success

Student engagement with school “refers to the quality of a student’s connection or involvement with the endeavour of schooling and hence with the people, activities, goals, values, and place that compose it” (Skinner, Kindermann, & Furrer, 2009, p. 494).

Engagement is a multifaceted construct which has been associated with academic success at school (Archambault, Janosz, Fallu, & Pagani, 2009; Fredricks, Blumenfeld, & Paris, 2004). Primarily, three main types of engagement have been identified in the literature: behavioural, emotional, and cognitive engagement (Echeverria, 2006; Yazzie-Mintz & McCormick, 2012). A further type of engagement, ‘academic engagement’ was also identified by Appleton, Christenson, Kim, and Reschly (2006).

Behavioural engagement involves student attendance, participation in school activities, willingness to be involved in classroom activities and how students conduct

themselves in classroom tasks and events (Echeverria, 2006). One aspect of behavioural engagement, absenteeism, was found to be detrimental to academic achievement and school grades generally (Gottfried, 2010; Marburger, 2006). Frequent absences during primary school have also been associated with dropping out (Kupersmidt & Coie, 1990).

Emotional engagement is how students feel about school and the people who are at school, including teachers and other students. Emotional engagement also includes students' sense of belonging, and whether they feel they are a valued member of the school community (Echeverria, 2006). Students who feel as if they belong at school are less likely to drop out (Archambault et al., 2009).

Cognitive engagement or intellectual engagement relates to students' learning and work habits and how students connect learning at school to their future goals and opportunities (Appleton et al., 2006). Finally, academic engagement involves completing homework and how long students spend working on a task in class (Appleton et al., 2006). Echeverria (2006) viewed cognitive and academic engagement as synonymous, and this is the perspective taken in the current thesis. He stated, "Cognitive engagement includes students' commitment to understanding academic work, effort control, cognitive strategy use, flexible problem solving, and independent work style" (Echeverria, 2006, p. 14). Skinner et al., (2009) argued that although emotional engagement or being physically present in school (behavioural engagement) were important, the key to being academically successful was dependent on students' ability and willingness to engage with, expend effort, and persist with learning opportunities that were presented to them.

Māori student engagement. Several studies indicate an association between engagement and academic performance (e.g., R. Bishop et al., 2014; Klem & Connell, 2004; Webber, 2012). Webber's (2012) study of high achieving Year 9 Māori students found high levels of behavioural and emotional engagement for all students. The students reported

involvement in multiple sporting and cultural activities, and emotional connections with peers and teachers. No studies, however, were located that investigated the relationship between Māori student engagement and achievement at the senior secondary level.

As an extension of their work in *Te Kotahitanga*, R. Bishop et al. (2014) developed an observation tool to measure ‘whanaungatanga’ which comprised six items.

- “(1) Manaakitanga—cared for the student as being culturally located.
- (2) Mana motuhake 1—had high expectations of learning performance.
- (3) Mana motuhake 2—had high expectations of behavioural performance.
- (4) Whakapiringatanga—provided a well-managed learning environment.
- (5) Culturally appropriate contexts—teachers demonstrated an understanding of tikanga Māori (Māori customs and protocols) through knowing how to pronounce students’ names correctly, knowing it was tapu to sit on a table or to touch a Māori student’s head
- (6) Culturally responsive contexts—teachers used students’ cultural and life experiences as a basis from which to teach them” (R. Bishop et al., 2014, pp. 194-195).

The authors found a strong relationship between whanaungatanga and student engagement, with Māori students more likely to be engaged in lessons where teachers demonstrated high levels of whanaungatanga versus classes where there were low levels of whanaungatanga.

The Education Review Office (2010) identified ways that high performing secondary schools successfully engaged Māori students in their learning. These included: (1) increased use and knowledge of te reo Māori me ngā tikanga (Māori language and customs), both in the curriculum and by teachers; (2) increased numbers of Māori staff; (3) encouraging positive relationships between students and teachers; (4) whānau classes for Māori students; (5)

culturally relevant teaching contexts; (6) effective career guidance programmes; (7) collecting, reporting and acting on Māori student achievement data; (8) using formative assessment including feedback and feedforward; and (8) student mentoring programmes (Education Review Office, 2010, pp. 17-18). Teachers in high performing schools had high expectations for student achievement and were confident they could engage students in their learning.

Many of the high performing schools were involved in Te Kotahitanga (R. Bishop et al., 2003) or similar initiatives. Improving attendance was also shown to improve engagement. In contrast, schools that struggled to engage Māori students were characterised by an absence of initiatives like Te Kotahitanga (R. Bishop et al., 2003); a lack of understanding or acknowledgement of the educational issues for Māori; and little in the way of collecting, reporting or acting upon Māori student achievement data (Education Review Office, 2010). The next section of the chapter focusses on the literature related to ideal teachers for high achieving and academically successful students.

Ideal Teachers for High Achieving/Academically Successful Students

Descriptions of ideal teachers in the research literature. In the literature, the terms used to positively describe teachers include ‘good’ (Whitney, Leonard, Leonard, Camelio, & Camelio, 2005), ‘best’ (Kratz, 1896), ‘effective’ (R. Bishop, 2010; Cruickshank & Haefele, 2001; Haberman & Post, 1998; J. Hill & Hawk, 2000), ‘ideal’ (Cruickshank & Haefele, 2001; Pendergast, 2002), analytic, dutiful, competent, expert, reflective, satisfying, diversity-responsive, respected (Cruickshank & Haefele, 2001). In this thesis, the effective or best teachers of high achieving student and teacher participants will be referred to as an ‘ideal’ teacher.

Attributes and behaviours of an ideal teacher. The attributes of an ideal teacher that were identified in the research literature included being enthusiastic, innovative,

organised flexible, committed, relaxed, supportive (Pendergast, 2002), helpful (Pariser, 2011), being fair and a good sense of humour, (Muller, Katz, & Dance, 1999), having a positive outlook (J. Hill & Hawk, 2000), and being caring (R. Bishop, 2010; Pariser, 2011; Pendergast, 2002). Stronge, Ward, and Grant (2011) reported that students who rated their teachers as caring also tended to view them as better teachers, but Aleamoni's (1999) research on teacher evaluations in higher education, found that students did not give a high rating to lecturers unless they were proficient in all areas. Therefore, some students rated lecturers highly on warmth/caring scales but lower on instructional ability.

One professional behaviour of ideal teachers was providing timely and instructive feedback and feed-forward, which has an average effect of $d = .79$ on achievement (Hattie & Timperley, 2007). Managing classroom behaviour effectively, an ability to motivate, interest and engage students in interesting work and activities were also important attributes (Muller et al., 1999), and students particularly enjoyed interactive lessons where they were able to discuss the work with the teacher and their peers (Raufelder et al., 2016).

Horsley's (2009) mixed methods study on student success in New Zealand Scholarship examinations found that students perceived that effective teachers of Scholarship subjects had advanced curriculum knowledge and expertise, provided out of class support for students, had high expectations for student success and engaged in positive interactions and relationships with students. Webber, McKinley, and Rubie-Davies' (2016) study concurred that high expectations and explicit teaching were important for students' academic success. International studies on Asian students' learning habits (W. O. Lee, 2014; Mo Ching Mok, Kennedy, Moore, Wen-jing Shan, & On Leung, 2008) found that students valued the academic support they obtained from teachers to improve their understanding and subsequently avoided repeating mistakes in the future.

Students' preferences and perceptions of ideal teachers. The literature is awash with studies about the characteristics of ideal teachers. Some are from the perspective of teacher trainees/student teachers (Arnon & Reichel, 2007), others are from experienced teachers (W. E. Bishop, 1968; P. S. Wilson, Cooney, & Stinson, 2005), the general student population (Kratz, 1896; Matlack, 1959; Sexton, 2012), or retrospective studies with the general adult population (Chang-Kredl & Colannino, 2017). There are fewer studies about high achieving students' perceptions of their ideal teachers (Horsley, 2009) and no research studies were able to be located that predominantly focussed on ideal teachers for high achieving Māori students. However, research that has focussed on Māori student success and referred to ideal teachers has been included in this review (e.g., R. Bishop, 2010; Claxton, 2016; Macfarlane et al., 2014).

Studies on students' perceptions of their best or ideal teachers date back to the 1890s (Kratz, 1896). A study by Matlack (1959) found that the most important factors for students were teachers who were strict and able to manage their classes, had a good sense of humour, and who were able to teach. Additionally, students liked teachers who were understanding, respectful, and who praised students but did not have favourite students or teachers' pets.

An early study on academically successful students by W. E. Bishop (1968) surveyed 186 gifted and talented high school seniors from 65 different schools who were part of a "Governor's Honours Program" and asked them to identify the teacher who had been their 'best, 'most successful', and had made the greatest difference to the student's educational career. Three study groups of teachers were identified for the study. 'Identified' teachers were those selected by one or more of the students as their 'most successful' teacher. The 'validity sample' was selected at random from a list of teachers who had formerly taught in the honours program but had not been selected by any of the students as their 'most successful' teacher. The third group was a sub-sample of 30 teachers from the 'identified'

group who were selected for an intensive study. Teachers from all three groups completed the Teacher Characteristics Schedule (TCS). The sub-sample of 30 teachers also participated in a personal interview, the Wechsler Adult Intelligence Scale, Edwards Personal Preference Schedule, and provided their college transcripts.

Teachers who were successful teachers of high achieving students did not differ from other teachers in terms of sex, marital status, type of university attended, or highest degree held. The successful teachers of gifted students were high achievers themselves who scored in the upper 3% relative to the general population and had significantly higher results on the TCS than the mean score of teachers in the 'validity'. Successful teachers were focussed on achievement and success, were mature and experienced teachers, had intellectual interests such as literature and the arts, and had joined the profession for the scholarly stimulation, and because someone had told them they would be good teachers. They related more positively to students than other teachers, were more empathetic, and took an interest in their students' lives. They encouraged their students' engagement through interesting and imaginative teaching and ran well-organised, structured classes. Finally, a greater percentage of successful teachers also preferred teaching gifted and high achieving students.

Buser, Stuck, and Casey's (1974) study of high and low achieving high school students found that high and low achievers both gave teachers' subject knowledge and sense of humour the highest rated characteristic and 'listens to students' as the highest-rated behaviour. However, high achievers rated teacher's enthusiasm for their subject, willingness to accept constructive student feedback, teacher support, and availability out of class as more important than did low achieving students.

In their qualitative study, Whitney et al. (2005) asked 271 high school students from a range of different classes (from the high ability to special needs) in Grades 9 to 12, "What is good teaching and how do we know it when we see it?" (p. 30). The characteristics of good

teachers included positive affect; a sense of humour; and being caring, enthusiastic, and excited about teaching. In the classroom, students wanted teachers who knew their subject, explained clearly how to do the work, made sure all students understood, did not overload students with homework or assignments, provided feedback, marked work quickly, managed the classroom effectively, were well-prepared and organised, and provided interesting and varied lessons with student-based activities such as games. Good teachers were also those who understood their learners in terms of their lives outside of school and who made the curriculum relevant and related to the students' lives.

Effective teachers of Māori and Indigenous students. The main study in New Zealand that has focussed on the relationship between teacher attributes and behaviour and its association with student achievement is Te Kotahitanga (R. Bishop et al., 2003). Following interviews and discussions with teachers, principals, students and whānau involved in Te Kotahitanga, Bishop and Berryman (R. Bishop & Berryman, 2009) developed a teaching profile of the six key characteristics and attributes of effective teachers of Māori students. These were Manaakitanga: caring for students as Māori; Mana Motuhake: having high expectations for student achievement; Ngā Whakapiringatanga: creating a secure, well-managed learning environment; Wānanga: engaging in effective learning interactions with Māori students; Ako: using a range of teaching strategies and Kotahitanga: Using student progress to inform future teaching practice. Ideal teacher qualities identified by high achieving Māori students in Claxton's (2016) study were similar to those found in Te Kotahitanga and included encouragement, creating an environment of inter-connectedness, cultural responsiveness, and adaptive expertise, which meant teachers who were able to be adaptable to the learning needs and interests of their students.

Haberman and Post (1998) also proposed several attributes they believed 'star' teachers of diverse, low-income students possessed which, like Te Kotahitanga (R. Bishop,

2010) were centred around a teacher's cultural awareness and acceptance of their students. These included: (1) an understanding of their own culture; (2) a high level of self-acceptance; (3) relationship-building skills; (4) experience and understanding of the local school community; (5) empathy; (6) a cultural and community-based perspective of human development; (7) the ability to deal with cultural conflicts; (8) the skills to make meaningful connections between the curriculum and their students' lives, and to support and engage students in their learning. Additionally, teachers could manage and prevent violence, work in chaotic environments, and to continually reflect on and refine their practice (Haberman & Post, 1998, pp. 98-99).

Published 15 years ago, *Quality teaching for diverse students: the best evidence synthesis* (BES) by Alton-Lee (2003) was a comprehensive New Zealand-authored review of the literature related to effective teaching. The aim of the synthesis was "to contribute to evidence-based and comprehensive strategies for optimising learning opportunities for Māori and breaking patterns of system under-performance for Māori" (Alton-Lee, 2003, p. 8). Furthermore, Alton-Lee (2003) stated that "positive changes to student achievement, appropriately assessed, will continue to provide our best indicators that quality teaching has occurred" (p. 8)

The BES identified ten characteristics of quality teachers, all of which focused on student learning and achievement outcomes. The first characteristic involved quality teaching focussed on student achievement, high expectations and appropriate learning outcomes. The second characteristic involved teachers creating supportive and caring learning environments, where there were lots of opportunities for student-student and teacher-student interactions, collaborative and cooperative learning and all members of the group focussed on encouraging and supporting the achievement of all students in the class.

The third characteristic stressed the importance of making learning links between school and students' cultural contexts at home. The importance of aligning practices between home and school that optimised learning and achievement was highlighted. It was noted that "school home partnerships that have shown the most positive impacts on student outcomes have student learning as their focus" (Alton-Lee, 2003, p. 32). The value of quality homework was highlighted as having a positive association with student achievement outcomes.

The fourth characteristic emphasised the need for teachers to be responsive and aware of students' prior knowledge and life experiences, and to be receptive to teaching in flexible and interactive ways to meet the needs of their diverse learners. The fifth characteristic related to students' opportunity to learn and ensuring that all students were provided with quality teaching and students had access to and enough opportunities to practise and apply what they needed to learn. This characteristic also focuses on a coherent curriculum that addressed diversity and made relevant links to real life.

Characteristic six, "Multiple task contexts support learning cycles" (Alton-Lee, 2003, p. viii), focussed on students engaging in learning processes to enable them to remember what they had learnt. Providing students with different ways of learning content to facilitate students' learning cycles were suggested and included teacher-directed work, peer interaction, individual tasks, and cooperative groups.

The seventh characteristic focussed on the importance of aligning teaching with curriculum goals and ensuring that the school maintained "an unrelenting focus on student achievement and learning" (Alton-Lee, 2003, p. ix). The eighth characteristic involved teachers providing support to students, scaffolding tasks when appropriate, allowing students access to resources and giving students frequent feedback.

The ninth characteristic, “Pedagogy promotes learning orientations, student self-regulation, metacognitive strategies and thoughtful student discourse” (Alton-Lee, 2003, p. x) was about teaching students strategies to become self-regulated learners, the links between effort and accomplishment, engagement in reciprocal learning, and the value in learning mental strategies, and a range of different thinking skills. The 10th and final characteristic were teachers and students setting goals together that were related to learning and assessment, which meant that teachers used assessment to assist with goal setting, support student learning, and adjust their teaching based on assessment results.

Following the BES, the New Zealand government introduced Ka Hikitia which has been the biggest strengths-based Māori-focussed initiative to be introduced in New Zealand education. However, the BES is a valuable document as it identifies key international and New Zealand research on quality teaching for a diverse population.

Overall, the research on effective teachers for high achieving students has concluded that instructional teaching ability along with subject knowledge and expertise is essential. Personal characteristics such as enthusiasm and caring were also valued. For high achieving Māori students, effective teaching encompassed the earlier mentioned factors valued by all higher achievers, but positive connections, taking an interest in students’ lives and instituting cultural responsiveness was also important. The next section of the review examines culturally responsive teaching practices for Indigenous and ethnic minority students in more detail.

Culturally Responsive Teaching for Māori Students and Ethnic Minorities

Culturally responsive teaching (CRT), also known as culturally relevant pedagogy or culturally sustaining teaching, is a methodology which focuses on raising the achievement of Indigenous and minority group students who have, historically, not been well-served by the education system. Using students’ ethnic and cultural backgrounds as a context, culturally

responsive teaching connects to students “to and through [students’] personal and cultural strengths, their intellectual capabilities, and their prior accomplishments” (Gay, 2010, p. 26). CRT provides learning opportunities that are relevant, build on funds of knowledge, and make content easier for students to understand and master (Bell, 2011; R. Bishop et al., 2003; Gay, 2010). Furthermore, “Students of colour come to school having already mastered many cultural skills and ways of knowing. To the extent that teaching builds on these capabilities, academic success will result” (Gay, 2010, p. 213).

For many years, culturally responsive teaching has been upheld as a way to reduce educational disparities between Indigenous/ethnic minorities and majority groups, and to raise achievement. Culturally responsive teaching and relational pedagogy was central to Te Kotahitanga (R. Bishop et al., 2003), a research and teacher professional development project which began in the early 2000s in New Zealand and successfully raised Māori student achievement. In the USA, researchers such as Ladson-Billings have been researching and writing about culturally responsive and culturally relevant teaching for more than 20 years (Ladson-Billings, 1995a; Ladson-Billings, 1992). Ladson-Billings (1995a) has argued that academic success and achieving cultural competence are critical to culturally responsive teaching. The purpose of culturally responsive teaching is not to “merely make them ‘feel good’” (Ladson-Billings, 1995a, p. 160); students must also achieve well at school.

Achieving cultural competence means that students are competent both in their own culture and in the culture of the school, without forsaking one to attain the other. For Māori, being comfortable and competent in both Te Ao Māori and Te Ao Pākehā (the Māori world and the Pākehā world) is important. In terms of successful schooling for Māori, the phrase “Māori achieving academic success *as Māori*” encapsulates when schools and teachers promote Māori culture and values positively, so students can achieve success at school, in ways that do not come at a cost to their Māori identity and beliefs (Macfarlane et al., 2014).

In their research on culturally responsive schooling for Indigenous students in the USA, Brayboy and Castagno (2009) suggested that “community- and culture-based education would best meet the needs of Indigenous children” (p. 32). However, in their review of 40 years of research promoting the benefits of CRT, they found that very little had changed in teachers’ practice. In many cases, CRT was “too easily reduced to essentialisations, meaningless generalisations, or trivial anecdotes—none of which result[ed] in systemic, institutional, or lasting changes to schools serving Indigenous youth” (Castagno & Brayboy, 2008, p. 942).

Sleeter (2012) raised similar concerns to those of Castagno and Brayboy (2008) about culturally responsive teaching for Māori students in New Zealand. She argued CRT was often not focussed on academic achievement but instead involved “cultural celebration, trivialisation, essentialising culture, and substituting cultural for political analysis” (Sleeter, 2012, p. 569). According to Sleeter, cultural celebration of Māori involved incorporating food, songs or the teaching of simple words or phrases related to a topic. Cultural celebration was easy to incorporate into classroom lessons but should not be substituted for challenging academic content as these aspects of culture offered little in the way of learning for the Māori students and did not support their academic achievement.

Trivialising or simplifying CRT was when teachers followed a set of steps or incorporated culturally-based activities into lessons rather than as an overall approach to teaching (Sleeter, 2012) and essentialising was assuming that all members of a culture/ethnic group had the same sets of beliefs and experiences, so there was only one way to relate to and teach them. Sleeter argued that it was important, instead, that teachers got to know their students and based on that knowledge, planned appropriate and challenging programmes of work and instruction for them. This section has discussed the empirical evidence related to

culturally responsive practice. The following section will focus on the research related to non-ideal teachers.

Students' Worst or Non-Ideal Teachers

The characteristics of students' worst teachers in the research literature are categorised by professional teaching qualities, personal qualities, relational qualities, and the consequences for students. The professional teaching qualities of students' worst or non-ideal teachers included being incompetent, boring, unqualified, and lazy (Chang-Kredl & Colannino, 2017). Non-ideal teachers were also not able to make their subject relevant to students by making connections to real life (Sexton, 2012).

The personal qualities of a non-ideal teacher included being immature or inappropriate, bad-tempered, angry, or mean, biased towards or against some students, racist (Chang-Kredl & Colannino, 2017), having favourite students/teachers' pets (Sexton, 2012), being unfair and inconsistent (Chang-Kredl & Colannino, 2017), or only focussed on the money they were paid (Sexton, 2012). The relational qualities of students' worst teachers ranged from being uncaring, discouraging and unsupportive, to being verbally, physically and sexually abusive (Chang-Kredl & Colannino, 2017). Finally, the consequences for students of being taught by non-ideal teachers included students not learning anything in the non-ideal teachers' classes, and that encounters with the non-ideal teacher had led to lowered self-confidence and self-belief (Chang-Kredl & Colannino, 2017). High achieving Māori students in Claxton's (2016) study perceived that some of their teachers treated them differently because they were Māori, gave them less attention than other students, had low expectations for their achievement, and gave work that was too easy (whereas other students were given high-level tasks). This section has discussed the empirical literature related to non-ideal teachers. The next section focuses on research on teacher expectations, differential treatment and discrimination.

Teacher Expectations

Teacher expectations are “inferences that teachers make about the present and future academic achievement and general classroom behaviour of students ... either the entire class or specific individuals” (Good & Brophy, 1990, pp. 442-443). High expectations have been shown to have positive effects on student achievement, whereas low expectations are acknowledged as one factor that contributes to lower achievement and possibly student failure (Good, 1987; Good & Nichols, 2001). Notwithstanding, high expectations alone are not enough to make a difference to student achievement unless the expectations are also accompanied by high-quality teaching (Alton-Lee, 2003).

In the *Quality teaching for diverse students in schooling: Best evidence synthesis*, Alton-Lee (2003) reported that “...research over at least two decades has revealed that mainstream teachers in New Zealand hold inappropriately low expectations for, make inappropriate assessments of, and/or provide lower levels of praise for, Māori students in English medium New Zealand classrooms” (p. 6). More recent research has also reported low expectations, negative beliefs, and, discriminatory treatment towards Māori students in schools (Office of the Children's Commissioner and New Zealand Trustees Association, 2018; Turner et al., 2015) so this is still an area of concern in the New Zealand education system.

Teacher expectations by ethnicity. Teacher expectations in both the international and New Zealand research literature have generally been shown to be lower and more negative for Indigenous students and those from ethnic minorities (Rubovits & Maehr, 1973; Turner et al., 2015) than for White students (Gay, 2005; McKown & Weinstein, 2002; St. George, 1983). Ethnicity as a factor for low teacher expectations is often associated with social class, which may be because children from ethnic minorities are over-represented in schools located in low socioeconomic areas (Ministry of Education, 2015a). However, Hattie

(2003, February) reported that the difference between Māori (and Pasifika) and non-Maori student achievement could not be wholly attributed to socioeconomic status as the difference still occurred when the socioeconomic background was controlled. Although it appears that Māori students achieve better at high decile schools (McNaughton, 2011), a difference in achievement levels between Māori and non-Māori students remains at all schools and therefore at all levels of socioeconomic background.

Hattie (2003, February) also suggested that using a student's background as an excuse served to maintain deficit views and meant that teachers did not take responsibility for minority and Indigenous students' achievement, thinking instead that it was out of their control to improve the achievement of students from poor backgrounds. Whereas a student contributed 50% towards the variance in their achievement, with the brightest students generally achieving at the highest levels, a student's home background only accounted for 5% to 10% of the variance in achievement. A student's background was compared with teachers who accounted for 30% of the variance in achievement. Hattie (2003, February) argued that instead of blaming the students or their background, there was a need for high-quality instruction, high teacher expectations and more challenging learning opportunities for students.

The literature that explores teacher expectations for Māori students is limited (Rubie-Davies, Hattie, & Hamilton, 2006; Rubie-Davies et al., 2012; St. George, 1983; Turner et al., 2015) but these studies did not solely focus on Māori students. St George (1983) combined Māori and Pasifika into one group (called Polynesian) which she compared with Pākehā students. She found teacher perceptions of Polynesian students were more negative than they were for Pākehā students. Rubie-Davies and colleagues' studies (Rubie-Davies et al., 2006; Rubie-Davies et al., 2012) explored differences in expectations for Māori, Pākehā, Pasifika and Asian students at the primary school level, whereas at the secondary school level, Turner

et al. (2015) found secondary school math teachers' expectations were higher for Asian and Pākehā students than for Māori and Pasifika students. The lower expectations for Māori were due to perceived deficits in the students' home background including broken families, a lack of parental support and education, and criminal tendencies. Deficit theory is the "ethnocentric idea that students who do poorly in school are considered to be deficient in some way compared with those who do well in school" (Goh & Gardiner, 2004, p. 667). It also involves "the labelling of poor minority students and their families as disadvantaged, at risk, and uninvolved [in education]" (G. M. Johnson, 1994).

Conversely, Asian students were perceived to have high parental and family expectations. Therefore, teachers expected Asian students would achieve highly in comparison to other students (Turner et al., 2015). Although Asian students are an ethnic minority in New Zealand, they are perceived differently to Māori and Pasifika students in New Zealand, and this is partly due to their high achievement at school. Asian students, even those from disadvantaged backgrounds are considered conscientious and industrious (S. J. Lee, 1994; Rubie-Davies et al., 2006; M. G. Wong, 1980). The positive perception of Asian students is an advantage to them. As the recipients of high teacher expectations, they are treated better by teachers and given more opportunities to learn, which leads to higher engagement and achievement in school (Good, 1987; Good & Nichols, 2001).

Hauser-Cram, Sirin, and Stipek (2003) found that teachers rated students as less capable and had lower expectations of them when they perceived that the students' parents had different educational values to their own, even when achievement and socioeconomic status were controlled. In many Western countries, like New Zealand, teachers are predominantly White and middle class. Accordingly, it is possible that teachers would perceive Māori and Pasifika students to have different values to them. Consequently,

teachers may view Māori and Pasifika students as less capable and have lower expectations for them due to their perceived different values.

Finally, Cherng's (2017) American research study found that both English and maths teachers were more likely to perceive their classes were too difficult for Black and Latino students compared with White students. The maths teachers perceived classes were too difficult for Black and Latino students even when achievement was controlled, and English teachers underestimated the ability of Black, Latino and Asian students (p. 11). The author reported that maths teachers might have had lower expectations for Latino and Black students compared to White students due to racial bias and a stereotypical belief that certain ethnic groups are not as successful in maths. The ability of Asian American students in maths, however, was not underestimated as teacher beliefs Asian students' maths ability is likely to be higher due to the model minority stereotype. The author explained that the English teachers' underestimation of all non-White students was due to Black students being viewed as having less ability across all subjects, whereas Asian and Latino students were stereotypically viewed as 'foreign' second-language learners who struggled to learn English.

The next section focuses on differential treatment and discrimination of students by teachers. The areas examined are favouritism, differential treatment by ability and ethnicity

Differential Treatment and Discrimination

Favouritism and teachers' pets. In an early study on students' perceptions of ideal teachers, Matlack (1959) reported that most student participants thought teacher favouritism was intentional and it was likely to lead to resentment from both the favourite child and those who were neglected. The authors, however, thought most teachers would be unaware they were favouring some students over others. Other studies have found higher levels of class conflict and lower levels of class morale in classes where there were teacher 'favourites' or teacher's pets (Tal & Babad, 1989, 1990), especially where there was only a single teacher's

pet as it was more obvious to excluded students that another child was receiving special treatment.

Differential teacher treatment by ability. Research into the effect of differential teacher treatment at the secondary level is less common than those studying this phenomenon at primary school. Weinstein and colleagues (Brattesani, Weinstein, & Marshall, 1984; H. Marshall & Weinstein, 1986; Rhona S. Weinstein, 2002; Rhona S. Weinstein, Gregory, & Strambler, 2004; Rhona S. Weinstein, Marshall, Brattesani, & Middlestadt, 1982) have undertaken extensive research into differential teacher treatment in primary (elementary) schools. Their studies have shown that even young students are aware of differential teacher treatment, with different work given to high and low achievers (Rhona S. Weinstein, 2002; Rhona S. Weinstein et al., 2004) and higher quality and more positive feedback to high achievers than to low achievers (Rhona S. Weinstein & Marshall, 1984).

In a qualitative study (Matzin, Piek, Bell, & Barrett, 2003) a group of 7 to 14-year-old students were interviewed with questions on differential treatment adapted from questions asked by Weinstein and Middlestadt (1979). Students perceived teachers treated high achieving 'clever' students positively and low achieving 'not-so-clever' students negatively. Clever students were praised more often, rarely reprimanded, called on to answer questions more frequently, and were asked to help the teacher teach the 'not-so-clever' students. In contrast, the 'not-so-clever' students were rarely praised, often ignored, and regularly admonished. Differential treatment was not observed as the study was only based on student reports.

Although students may be able to resist the effects of differential teacher treatment and low teacher expectations, these may still lead to a negative outcome if the students choose to withdraw from the learning environment, rather than positively counteracting the

effects. Examination of students' awareness of and vulnerability to differential teacher treatment at the secondary school level is an area where more research is needed.

Teacher discrimination/differential treatment by ethnicity. As stated earlier, New Zealand research has reported that Māori students experience negative, disrespectful and racist treatment by their teachers (Alton-Lee, 2003; Office of the Children's Commissioner and New Zealand Trustees Association, 2018; Turner et al., 2015). In international research studies, teacher perceptions of ethnic minorities, such as African Americans, are more negative than they are for White students (McKenzie & Scheurich, 2004). McKenzie and Scheurich's (2004) qualitative study, involving White teachers in a low-income school perceived that a lack of educational success for students of colour was due to students' deficits, such as poor behaviour, low motivation, cultural deficits, and poor parenting combined with the parents' lack of interest and low valuing of education. Furthermore, teachers adopted a 'colour blind' view as a way of denying their racism. The White teacher participants responded that student underachievement was not related to race, but poverty. However, the teachers still made comments that showed they used race as a marker for students, talking about "White kids", "Black kids" and referring to an incident where a student's parent allegedly left their child alone for four days as a "Black situation" (McKenzie & Scheurich, 2004, p. 615). By saying that they ignored race, the teachers could deny that they treated their students differently based on skin colour, and by attributing student underachievement to poverty, they could absolve themselves of responsibility for student failure, because the poverty problem was beyond their control.

Most teachers in the study had previously worked in more affluent schools, where their teaching and behaviour was watched more closely. The teachers gave examples of things they could do at the low-income school that would not have been tolerated at a more affluent school, such as leaving school 10 minutes early or treating their students

disrespectfully (they admitted they screamed at students). At an affluent school, students would have told their parents, who would have complained.

Finally, in what could only be described as victim blaming, the teachers concluded that their bad behaviour was due to the students' bad behaviour and their family backgrounds. One teacher said, "The anger of the kids has caused me to act this way" (McKenzie & Scheurich, 2004, p. 624). Another teacher said that her five and six-year-old students had ganged up on her to make her angry and she became so angry she explained, "...I have really gotten to the point now...[that] I have to be really careful with what happens once they make me mad" (McKenzie & Scheurich, 2004, p. 625).

The teachers' bad behaviour was also attributed to the students' parents and home life. They explained they yelled at students because that is what happened to the students at home, and students only responded to yelling. One teacher said, "We are trying to teach kids how to respect adults...and what they respond to more than doing things out of respect is doing things out of fear. Which is why when you start yelling, they respond" (McKenzie & Scheurich, 2004, p. 625).

Similarly, in an earlier study by Rubovits and Maehr (1973), teacher participants were asked to micro-teach a group of four students who were allocated fake IQ scores and randomly assigned a label of 'gifted' or 'non-gifted'. Findings revealed that whereas gifted White students received more positive treatment than non-gifted White students, black gifted students received *less* positive treatment than Black non-gifted students, and overall, these students received the most criticism and the least attention of all the groups.

Relatively few studies have investigated students' perceptions of teacher discrimination at the secondary school level. However, Wayman (2002) surveyed 2409 Mexican-American and non-Latino high school students who were comprised of: dropouts, students at risk of dropping out and a control group of students. Findings revealed that

Mexican-American students were more likely to perceive high teacher bias than non-Latino White students. A quarter of the participants also perceived that teachers liked White students more than they liked the Mexican-American students. The authors suggested that this was a school culture which was not inclusive to non-White ethnic groups/cultures, biased actions by teachers, and a lack of cultural responsiveness and relationship-building by teachers.

Another study by Wong, Eccles, and Sameroff (2003) investigated whether 7th and 8th grade African American students' perceptions of racial discrimination at school predicted changes in their academic functioning and whether a positive ethnic identity offered some protection against discrimination. As anticipated, racial discrimination from teachers did harm students' academic motivation. However, for students with a positive ethnic identity, the negative effect was lower, which showed that a positive ethnic identity offered a defence against the impact of racial discrimination. Research undertaken in New Zealand has reported similar findings of how a positive cultural identity helps Māori students to deal with difficult issues like racism (Webber, 2011, 2012)

Te Kotahitanga, a New Zealand secondary school study (Mahuika et al., 2011), reported that differential treatment of Māori students by their teachers was the central cause of Māori underachievement in mainstream schooling. In interviews, Māori students said they received significantly less attention and academic feedback from their teachers than Pākehā students. The feedback they did receive from teachers was negative and related to their behaviour, rather than to learning.

Mitchell and Mitchell (1988) found low teacher expectations for high achieving Māori, with students reporting they were incorrectly grouped, usually in classes beneath their ability and they perceived poorer treatment than other students. For example, the authors reported:

...teachers spending less time with Māori students than others in the class, one teacher who ignores questions from Māori pupils, one who makes racist remarks about Māori pupils when he thinks there is no Māori present, delight/surprise being expressed by a principal at seeing a 'brown face' in the top stream...and a teacher asking a pupil whether he was going to be like all the other Māoris [sic] and fail (Mitchell & Mitchell, 1988, p. 108).

Across the research, in both New Zealand and international studies, teacher discrimination towards Indigenous and minoritised students has been and continues to be a serious problem. Ultimately, studies which involve research with Indigenous or minoritised students almost always encounter stories of students' experiences of racism and discrimination even when investigating racism was not related to the aims of the research project.

Conclusion

The research literature reviewed identified a range of factors that appeared to contribute to the academic success of high achieving secondary school students. These included student-related factors such as intra-personal behaviours and attributes, and students' connections with others, including teacher-student relationships, relationships with whānau/family, and peer relationships. Student engagement and its association with teacher-student relationships and achievement were also discussed.

The research related to teacher and teaching-related factors other than the teacher-student relationship was explored, including personal and professional teacher attributes, and pedagogical approaches that either enhanced or hindered students' academic success. The final section examined discrimination and differential treatment

Based on the findings from the literature review, the following research questions provided the foundation for this thesis:

Study One

- How do students and teachers define an academically successful student?
- Does this differ between teachers and students, or by ethnicity?

Study Two

- How do students and teachers define an ideal and non-ideal secondary school teacher?
- Does this differ between teachers and students, or by ethnicity?

Study Three

- Is there an association between students' relationships with their best and worst teachers, and their reported levels of engagement?
- Is there an association between ethnicity, prior achievement, and students' relationships with their ideal or their non-ideal teacher?
- Is there a relationship between prior achievement, student engagement, and student ethnicity?
- To what extent do students perceive that relationships with teachers and engagement with school influence their academic achievement?

The next chapter presents Study One, the first of three studies related to students' academic success. Study One was a mixed methods study which investigated the attributes of an academically successful student from the perspective of high achieving senior secondary school students and high performing secondary school teachers. The study was designed to ascertain whether students and teachers differed in their perceptions of academic success and if there were differences by student or teacher ethnicity.

CHAPTER THREE:
STUDY ONE—EXPLORING THE ATTRIBUTES OF ACADEMICALLY
SUCCESSFUL STUDENTS

The aim of Study One was to identify the attributes of an academically successful student from the perspective of high achieving senior secondary school students and high performing secondary school teachers. The mixed methods design used open-ended questionnaires to collect students' and teachers' perceptions of an academically successful student. Data from open-ended questionnaire items were analysed qualitatively using thematic analysis. The numbers of responses coded to each of the sub-themes were quantitatively analysed using two-sample Z-tests to see if there were statistically significant differences between the proportion of students, teachers, or ethnic groups' responses. Understanding the beliefs and behaviours of high achieving students will provide educators and other stakeholders with valuable information about what has worked best for these learners and what changes in schools, classrooms, and at policy level could be made to improve educational outcomes for all learners. The research questions that guided this study were:

1. How do students and teachers define a successful secondary school student?
2. Does this differ between teachers and students, or by the ethnicity of the student or the teacher?

Method

Participants

A total of 144 schools were involved in Study One, with teacher participants recruited from 89 of the 144 schools and student participants recruited from 74. Schools were high-decile ($n = 40$), mid-decile ($n = 72$), and low-decile ($n = 32$) secondary, composite, and area schools. One school did not have a decile rating. A decile rating is calculated on household

income, parents' occupation and qualifications, household crowding, and the percentage of parents on government benefits (Ministry of Education, 2013b). Decile 1-3 schools are 'low', deciles 4-7 are 'mid', and deciles 8-10 are 'high' decile schools. Decile 1 schools receive the most government funding per student, and funding decreases as the decile increases (Ministry of Education, 2013b). The higher funding provided to low decile schools is intended to make up the shortfall that higher decile schools may receive from more parents paying higher voluntary school donations, and other income sources. Larger numbers of Māori (Indigenous), Pasifika (students from the Pacific Islands), and other ethnic minorities live in low socioeconomic areas and attend low decile schools, whereas more Pākehā and Asian students attend high decile schools. The number of students in each school decile by ethnic group for the current study is shown in Table 1.

Table 1

The Ethnicity of Students in Study One by School Decile

	Māori	Pākehā	Pasifika	Asian	Other	Total
Decile 1	5	0	0	0	0	5
Decile 2	9	1	2	1	0	13
Decile 3	24	23	12	11	2	72
Decile 4	11	33	0	5	2	51
Decile 5	6	18	4	9	1	38
Decile 6	12	87	6	35	3	143
Decile 7	3	35	0	7	1	46
Decile 8	8	25	0	8	0	41
Decile 9	12	48	5	38	2	105
Decile 10	6	46	1	12	4	69
TOTAL	96 (16.5%)	316 (54.2%)	30 (5.1%)	126 (21.6%)	15 (2.6%)	583 (100%)

Teacher participants. There were 274 teacher participants in Study One (169 female and 105 male). Teachers taught across a wide range of different subject areas and were defined as high performing teachers because they had all taught students who attained NCEA Merit or Excellence course endorsement in their class. The teachers' students had also achieved a Certificate endorsement (Merit or Excellence) in NCEA at Levels 1 or 2. The ethnic breakdown of the teachers is shown in Table 2. Most teachers were Pākehā. Teacher participants indicated their teaching experience from a choice of five different periods: Less than one year up to 5 years' experience, 6 to 10 years, 11 to 17 years, 18 to 24 years, and 25 years or more experience. There were 39 teachers with up to five years teaching experience, 66 with 6 to 10 years' experience, 72 with 11 to 17 years' experience, 47 with 18 to 24 years' experience and 50 teachers with 25 years' or more teaching experience.

Most teachers in the study had a bachelor's degree or a more advanced qualification. Six teachers had a Diploma of teaching (2.2%), 155 teachers had a bachelor's degree and/or a Graduate Diploma (56.6%), 55 had a Postgraduate Diploma (20%), and 58 teachers had a master's degree or other higher degree (21.2%), including six teachers with doctorates.

Table 2

The Ethnicity of Teacher Participants in Study One

	Number of teachers	Percentage
Māori	43	15.7%
Pākehā	212	77.4%
Pasifika	3	1.1%
Asian	6	2.2%
Other ethnicities	10	3.6%
Total	274	100%

Student participants. The 583 high achieving student participants for Study One were in Years 12 or 13 and aged 16 years or older. The definition of a high achiever for this thesis was a student who had attained NCEA at Level 1 or Level 2 with either Merit or Excellence Certificate endorsement. There are three levels of NCEA and students generally work through levels 1 to 3 in years 11 to 13, completing one level each year. Each year students study several courses/subjects, and in each subject, students are assessed against a specific number of standards. Students complete internal and external assessments to measure how well they meet each standard. When a standard is achieved, students gain credits, and in each level of the NCEA, students must achieve a certain number of credits to gain an NCEA certificate for that level (New Zealand Qualifications Authority, n.d.-a).

To achieve NCEA Level 1, students must achieve 80 credits at any level, including literacy and numeracy. The literacy and numeracy requirement is a minimum of 10 literacy credits from specified assessment or unit standards and a minimum of 10 numeracy standards from specified assessment or unit standards. To achieve NCEA Level 2, students need to achieve 60 credits at level 2 or above plus 20 credits from any level (and meet Level 1 literacy and numeracy requirements). To achieve NCEA Level 3, students must achieve 60 credits at Level 3 or above, 20 credits from level 2 or above, and the Level 1 literacy and numeracy credits must also be met (New Zealand Qualifications Authority, n.d.-a).

Students who achieve highly at each level of NCEA can achieve with Merit or with Excellence certificate endorsements. Course endorsements are also awarded for students who achieve highly in individual subjects. For an NCEA certificate to be endorsed with Excellence, a student must gain 50 credits at Excellence at the level of the certificate or above. If a student gains 50 credits at Merit (or at Merit and Excellence level), then their NCEA certificate may be endorsed with Merit. Course endorsements are awarded for a course if, in a single school year a student achieves 14 or more credits at Merit or Excellence,

and at least three of the credits are externally assessed, and three credits are internally assessed standards (New Zealand Qualifications Authority, n.d.-a).

Of the 583 students, 480 were female, and 103 were male. The higher number of female participants in the study may be attributed to female students achieving more NCEA endorsements each year than male students (New Zealand Qualifications Authority, 2018).

Measures

Student questionnaire. The student questionnaire was in two parts (see Appendix H). In Part 1, demographic data were collected including the student's school (for decile analysis), year level, age, gender, student and parents' ethnicity, and the highest level of education of either parent. In Part 2 of the questionnaire, student participants completed an open-ended question where they were asked to describe an academically successful secondary school student, including their characteristics, beliefs, behaviours, skills and habits, and what had helped them succeed. An online, anonymous, open-ended questionnaire was selected as it enabled effective and efficient collection of data from a large number of student and teacher participants from schools throughout New Zealand (Fricker & Schonlau, 2002). Another benefit of online questionnaires is that they provoke more honest answers from participants who may answer in more socially acceptable ways during a face-to-face questionnaire with an interviewer (Fricker & Schonlau, 2002). An open-ended questionnaire has the benefit of eliciting a wide range of spontaneous and varied answers from participants whereas with closed questions limits participants to answers that are provided by the researcher (Reja, Manfreda, Hlebec, & Vehovar, 2003).

Teacher questionnaire. Teachers completed an open-ended question like the student questionnaire including the characteristics and attributes of an academically successful secondary school student, their beliefs, behaviours, skills and habits, and what helped a

student succeed. Teachers also provided demographic data including their school, gender, ethnicity, age-range, qualifications, and years of teaching experience.

Procedures

Contact information was obtained for all secondary schools from the Education Counts website (<https://www.educationcounts.govt.nz>). Once approval was obtained from the University of Auckland Human Participants Ethics Committee (UAHPEC; Reference No. 015102), principals were contacted in writing to obtain consent to access their schools. After consent was granted, the researcher forwarded participant information sheets and consent forms to schools for distribution to eligible teachers and students. Approval was also provided by the UAHPEC to recruit participants through other networks including teacher subject associations, Faculty of Education websites and social media pages, participant recruitment websites (e.g., <https://researchstudies.co.nz>), and to contact teachers directly if their email addresses were accessible in the public domain.

Most students completed the questionnaire online via a link to Qualtrics. Schools who requested hard copy questionnaires were provided with them, and some participants in schools near to the researcher were offered a paper version of the questionnaire (see Appendix H). Only 1% of students completed a hard copy version of the questionnaire. The questionnaire, which collected data for Studies One, Two, and Three took approximately 30 minutes to complete with some students taking less time and other students taking longer.

The teachers' questionnaire took approximately 15 minutes to complete. Teachers were provided with a link via email to complete the Qualtrics survey online and also had access to a hardcopy version of the questionnaire if they preferred one method over the other. Every teacher completed the online version of the questionnaire (see Appendix I).

Data Analysis

Qualitative analysis. The open-ended responses from the student and teacher questionnaires were downloaded to an Excel spreadsheet, checked for errors, and uploaded to NVivo. Responses from students' paper questionnaires were transcribed verbatim and added to the online responses on NVivo. All data were analysed using a thematic analysis approach which is "a method for identifying, analysing, and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). Thematic analysis is a flexible method of analysing data that suits research questions (such as those in the current study), which are related to people's experiences, perceptions, or viewpoints. There are six phases in the analysis process. These are "(1) Familiarisation with the data; (2) Generating Initial codes; (3) Searching for themes; (4) Reviewing the themes; (5) Defining and naming themes; and (6) Producing the report" (Braun & Clarke, 2006, p. 87). The descriptions of the data analysis process outlined below followed the guidelines of Braun and Clarke (2006).

The first phase involved familiarisation with the data and was achieved by reading and re-reading the questionnaire responses, extracting interesting quotes, and noting initial ideas in memos. In the second phase, codes relevant to the research topic and research questions were developed. Two of the first codes made to describe academically successful students were 'Hardworking' and 'Well organised'. Data extracts were tagged in each of the participants' responses and placed into each of the codes.

In the third phase, codes were sorted into themes, and data extracts were allocated to themes. At this point, some codes became themes or sub-themes, and others were discarded. For example, the code 'stressed and tired' was discarded in this phase as it was decided that Whereas being stressed and tired may be a side-effect of academic success, it did not fit into the themes as a learning-related behaviour or a personal quality or ability. 'Hardworking'

became ‘hard work and effort’ and ‘completes homework and does extra study outside of classes’ was merged into the ‘hard work and effort’ code.

In the fourth phase, themes were reviewed and involved determining whether the themes answered the research questions. Themes were also divided, joined together or rejected in this phase. A second, independent coder was given 10% of the student questionnaire responses and asked to code them into the themes that had been identified by the researcher. Overall there was 90% agreement between the researcher and the independent coder. Two themes, ‘behaviours of academically successful students’ and ‘skills of academically successful students’ were discussed in more detail and as all of the codes in these two themes appeared to relate to achievement and learning, a decision was made to merge these two themes and rename them ‘Achievement- and learning-related behaviours. Other minor differences in coding were discussed until agreement was reached about their placement by the researcher and the second coder. The final three themes and 21 codes are shown in Table 3.

Table 3

Themes and Codes of an Academically Successful Secondary School Student

Themes	Codes
Achievement and learning-related behaviours	Hard work and effort
	Engagement with school and class activities
	Questioning teachers and asking for help
	A study–life balance
	Setting and achieving goals

Themes	Codes
Personal attributes and abilities	Perseverance and persistence
	Seeking and accepting feedback
	Motivation and self-regulation
	Organisation and time management skills
	A positive attitude
	Intrinsic value (Enjoys learning)
	Self-belief and self-confidence
	Respect
	Intelligent or naturally gifted
	Open-mindedness and reflection
	Resilience
	Problem-solving, independent and critical thinking skills
Connections with others	Literacy and numeracy
	Supportive home background
	Academically-supportive peer relationships
	Positive connections with teachers

The fifth phase was where each theme was analysed, and a story developed from each one, and the final phase involved writing up the results. Here, data extracts were woven into

a narrative that told the story of the data and produced an argument about the research questions (Braun & Clarke, 2006). The sixth phase, the production of the study findings, is reported in the results section of this chapter.

Two sample Z-tests. Two sample (or two proportion) Z-tests were used to determine whether the proportions of responses made for each of the codes in the qualitative data differed by student ethnicity, teacher ethnicity, or between students and teachers. A Z-test involves testing two hypotheses, the null hypothesis and the alternate hypothesis:

- The null hypothesis (H_0) for the test is $H_0: p_1 - p_2 = 0$ where p_1 is the proportion from the first population and p_2 is the proportion from the second. The null hypothesis is that there is no difference between the two population proportions.
- The alternate hypothesis (H_1) for the test is $H_1: p_1 - p_2 \neq 0$. The alternate hypothesis is that the proportions from the first population and second population are not the same.

Calculation of Z-scores for Study One was completed using an online calculator (Stangroom, 2018), but a Z-score can also be calculated manually (Deviant, 2018) using the formula:

$$Z = \frac{(\hat{p}_1 - \hat{p}_2) - 0}{\sqrt{\hat{p}(1 - \hat{p}) \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

p_1 = Number of 'positive' results in group 1 divided by the total population of group 1

p_2 = Number of 'positive' results in group 2 divided by the total population of group 2

n_1 = Total population of group 1

n_2 = Total population of group 2

$p = (p_1 + n_1) / (p_2 + n_2)$

Once Z is found, it is compared to a table of known values to see if it falls within the “rejection range”. Table 4 presents an example of a Z -test table of known or critical values. These values are found in the table of the standard normal distribution which is in the appendices of most general statistics textbooks (e.g., see Field, 2013, pp. 887-892). For a two-tailed Z -test, the z -score associated with a 5% $\alpha/2$ is 1.96.

If the z -score from the Z -test is larger than 1.96 (the score from the known values table), then the null hypothesis is rejected, and it is confirmed that there is a statistically significant difference between the proportion of responses from the two groups. If the z -score from the Z -test is smaller than 1.96 (the score from the known values table), then the null hypothesis is not rejected which means that the difference between the proportions of responses from the two groups is not statistically significant.

Table 4

Table of Critical or Known Z-score Values

Confidence Level	Alpha	Alpha/2	z-score alpha/2
90%	10%	5.0%	1.645
95%	5%	2.5%	1.96
98%	2%	1.0%	2.326
99%	1%	0.5%	2.576

Results

This part of the chapter presents an analysis of the qualitative data related to teachers’ and students’ perceptions of an academically successful student. Three themes related to an academically successful student were identified. These were: (1) Achievement and learning-related behaviours; (2) Personal qualities and abilities; and (3) Students’ connections with

others. Responses were analysed by ethnicity for Māori, Pākehā, Asian, Pasifika, and from ‘Other’ ethnicities. For each of the codes, the qualitative results are presented along with statistically significant findings from two-sample Z-tests, where applicable.

Achievement and Learning-Related Behaviours of an Academically Successful Student

There were seven achievement- and learning-related behaviours of academically successful students identified in the students’ and teachers’ questionnaires: (1) hard work and effort; (2) engagement with school and class activities; (3) questioning teachers and asking for help; (4) a study–life balance; (5) setting and achieving goals; (6) perseverance and persistence; and (7) seeking and accepting feedback. The numbers and percentages of students and teachers who responded about each of the sub-themes are shown in Table 5.

Hard work and effort. Working hard, putting time and effort into studying, and possessing a good work ethic were identified by 86.6% of students and 69.2% of teacher participants as contributing to student success. A two-sample Z-test showed that students were significantly more likely than teachers to report that hard work and effort were related to academic success ($Z = 10.651, p = <.001$). There were also statistically significant differences by student ethnicity with Māori students significantly more likely than Pākehā ($Z = 2.419, p = 0.02$) and Pasifika students ($Z = 3.533, p = 0.0004$), and Asian students significantly more likely than Pākehā ($Z = 3.751, p = 0.0002$) and Pasifika students ($Z = 4.871, p = <.001$) to report that hard work and effort were related to academic success.

Participants from all student ethnic groups responded that successful students regularly did additional study in the form of homework, tutorials and extra classes, further reading, learning new concepts, practice tests, and writing trial essays. One student said, “... you should be willing to dedicate as much time as you need to the things you want to do well in, for example, staying up late to finish off the Excellence section of an internal instead of giving up and sleeping” [S-218, Pākehā, decile 8].

Table 5

Students' and Teachers' Perceptions of the Achievement- and Learning-Related Behaviours of an Academically Successful Student

	Students						Teachers					
	All students N = 583	Māori n = 96	Pākehā n = 316	Pasifika n = 30	Asian n = 126	Other n = 15	All teachers N = 274	Māori n = 43	Pākehā n = 212	Pasifika n = 3	Asian n = 6	Other n = 10
Achievement- and learning-related behaviours												
Hard work and effort	505 86.6%	90 93.8% ²	258 80%	24 70.6%	125 99.2%	8 53.3%	146 69.2%	21 48.8%	113 53.3%	0 0.0%	3 50%	9 90%
Engagement with school and class activities	117 20.0%	22 22.9%	59 18.7%	6 20%	29 23.0%	1 6.7%	69 25.2%	10 23.3%	57 26.9%	0 0.0%	0 0.0%	2 20%
Questioning teachers and asking for help	106 18.2%	19 19.8%	52 16.9%	4 13.3%	28 22.2%	3 20%	76 27.7%	10 23.3%	63 29.7%	0 0.0%	1 16.7%	2 20%
A study–life balance	95 16.3%	9 9.4%	46 16.5%	6 20%	31 24.6%	3 20%	9 3.3%	3 7.0%	6 2.8%	0 0.0%	0 0.0%	0 0.0%
Setting and achieving goals	79 13.5%	13 13.5%	42 13.3%	6 20%	17 13.5%	1 6.7%	52 19%	13 30.2%	37 17.5%	0 0.0%	2 33.3%	0 0.0%
Perseverance and persistence	61 10.5%	13 13.5%	27 8.5%	5 16.7%	13 10.3%	3 20%	58 21.2%	6 14.0%	49 23.1%	1 33.3%	1 16.7%	1 10%
Seeking and accepting feedback	11 1.9%	4 4.2%	4 1.3%	0 0.0%	3 2.4%	0 0.0%	44 16.1%	5 11.6%	38 17.9%	1 33.3%	0 0.0%	0 0.0%

² Percentages in each of the rows were calculated on the number of students from each ethnic group who made a response to the sub-theme.

Students also emphasised that whereas it might appear to others that they were ‘smart’, their school success was not exclusively related to ability. One explained, “I believe good grades result from partly intelligence but mostly hard work...that is what I truly did. I am not Einstein; I just work hard” [S-571, Asian, decile 10]. Another student used the analogy of getting promoted in a sports team to explain how academically successful students got to where they wanted to be with hard work. He said,

If you were trying out for a sports team, and there were four grades from A to D...If they were put into C, and they wanted to be in B, they would work to move up and improve their skills because they know it’s possible and that it takes hard work to do so [S-458, Māori, decile 2].

A notable difference between the ethnic groups was the consistency and regularity with which Asian students reported that they completed extra work. A common response from Asian students was that they studied every single day. For example, “[They] revise the work they did that day within 24 hours...it is vital if the student wants to remember the things s/he learned ... They need to get into the habit of looking over their notes every night” [S-505, Asian, decile 3]. None of the other ethnic groups reported the same level of study and revision.

The responses that teachers made about hard work and effort aligned with the students’ responses. They included references to extra study outside of class, a good work ethic, and sustained effort. One teacher said, successful students “... follow up classroom learning with homework to consolidate their learning” [T-058, Pākehā, decile 10] and “...sustained effort throughout the year is necessary for success” [T-148, Pākehā, decile 10]. Another teacher explained that successful students “...may not be academically gifted, but they know the value of hard work [T-026, Pākehā, decile 6].

Engagement with school and class activities. There were 20% of student participants who related engagement to academic success compared with 25.2% of teachers. Student participants referred to attending school and classes regularly, stating that they did not “wag [truant] classes” [S-314, Māori, decile 6], they listened to teachers and peers and were attentive during lessons. For example, “An academically successful student will never be tardy... and will always be at school with the same willingness to learn every day” [S-262, ‘Other’ ethnicity, decile 6]. Student engagement was also demonstrated by participation in class, students’ contribution to discussions, and the completion of classwork. Successful students also seemed less likely to be distracted. He or she “doesn’t chat or use their cell phone in class, [and they] focus on their work” [S-190, Pākehā, decile 6].

Regular attendance at school and in classes featured highly for teacher participants. One teacher stated that an academically successful student “has a high attendance rate throughout the entire year [and] will make an effort to catch up if absent” [T-058, Pākehā, decile 10]. Other responses included students being focussed in class and actively participating, but primarily, teachers linked engagement to attendance.

Questioning teachers and asking for help. There were 18.2% of students and 27.7% of teachers who reported in their questionnaires that successful students questioned teachers or asked for help. Teachers were significantly more likely than students to report that questioning was related to academic success ($Z = 3.202, p = .001$). Teacher participants said students asked questions to get clarification about work problems or to improve their grades. For example, “They ask lots of questions and find out what they must do better to get Merit or Excellence” [T-029, Māori, decile 3]. Academically successful students admitted when they needed help. One teacher said that they were, “Proactive about learning, ask questions, and ask for help when concepts [are] not understood” [T-272, Pākehā, decile 10]. Students reported that questions were asked to obtain more information if they did not agree

with the teacher, or when they were confused or needed help. They viewed teachers as a resource who was there to assist them. For example, “If ever they do not understand or are even slightly confused they will seek help and try to understand [the work] ...” [S-137, Asian, decile 9].

A study-life balance. The importance of maintaining a study–life balance was reported by 16.3% of students and 3.3% of teachers, with students significantly more likely than teachers to report this balance was related to academic success ($Z = 5.432, p = < .001$). There were also statistically significant differences by student ethnicity, with Asian students more likely than Māori ($Z = 2.844, p = .004$) and Pākehā students ($Z = 2.261, p = .02$) to report that a study–life balance was related to academic success. Students reported that keeping a balance in their lives meant not expending all their time and energy on studying. They believed it was important to take breaks, get enough rest each night, enjoy a social life, and participate in extra-curricular activities. One participant said students needed to, “Figure out how to balance their work and ‘freedom’/spare time, to keep healthy, enough rest, not over-worked, some stress-free/relaxation time but do not procrastinate” [S-381, Asian, decile 7]. For Māori students, a study–life balance involved a holistic approach. Success was achieved when all aspects of their well-being were considered. One student said, “...to succeed academically is of no benefit if you haven’t succeeded in every other aspect of life. For example, spiritually, emotionally, mentally, physically and, for a Māori student, most importantly, culturally!” [S-197, Māori, decile 3].

Setting and achieving goals. There were 19% of teachers who responded about setting and achieving goals compared with 13.5% of students. A two-sample Z test showed that teachers were significantly more likely than students to report that setting and achieving goals was related to academic success ($Z = 2.07, p = 0.0385$). Student participants responded that being goal-driven, knowing what they wanted in life, or having “an undying need to

improve” [S-290, Asian, decile 8] was important for academic success. Some goals students had related to short-term success while they were still at school. For example, “I think to be an academically successful school student you need to plan and set goals for what you want to accomplish throughout the year, such as setting the goal of getting Excellence endorsed in a particular subject” [S-218, Pākehā, decile 8]. Other goals related to medium or long-term plans beyond school. For example, a high achieving student is “...academic across all of his subjects because he wants to get into Auckland University” [S-238, Māori, decile 3].

Teacher participants also responded about the types of goals students had. One said, “[Students] have goals they have set up for themselves; small, immediate ones (I am aiming to get an E [Excellence] in this paper), and big, long-term goals (I want to be an engineer)” [T-128, Asian, decile 4]. Another teacher referred to goals that were based on students’ collectivistic responsibility or a desire to “... better themselves and/or their whānau” [T-171, Māori, decile 8].

Perseverance and persistence. Perseverance and persistence were identified by 21.2% of teachers and 10.5% of students. A two-sample Z-test showed that teachers were significantly more likely than students to report that perseverance and persistence were related to academic success ($Z = 4.226, p = <.001$). Student participants referred to tenacity and not giving up when they experienced tough circumstances or difficult work. One student explained that school “...brings a lot of challenges, academically and socially, and they just need to be able to persevere through the worst [S-413, Pasifika, decile 6]. Teacher participants discussed the importance of students having “a never-give-up attitude” [T-118, Pākehā, decile 7]. Academically successful students would also “... persevere at tasks, if they initially struggle, and will do so ‘till they reach the highest level possible [T-029, Māori, decile 3]. To summarise, participants said that academically successful students were

tenacious and did not give up even when they encountered tough circumstances or difficult work.

Seeking and accepting feedback. Only 1.9 % of student participants responded in their questionnaires about seeking and accepting feedback compared with 16.1% of teachers. A two-sample *Z*-test showed that teachers were significantly more likely than students to report that seeking and accepting feedback was related to academic success ($Z = 7.903, p = < .001$). Teacher participants reported that academically successful students sought and accepted feedback, acted on advice, took on board criticism, and engaged in discussions about what they had learnt. One teacher said students, "...listen to and process advice and feedback, but can also pose alternative points of view and if necessary defend them" [T-173, Pākehā, decile 7].

Summary. This part of the chapter presented the findings that were related to the achievement- and learning-related behaviours of academically successful students. Hard work and effort were referred to by student participants as committing to extended periods of study, attending extra classes, and doing homework, further reading, and writing practice essays. Teacher participants provided similar responses about sustained effort, a good work ethic and commitment to study outside of class, and many commented that hard work and effort were more important than academic ability.

Participants referred to engagement as attending school and class regularly, involvement in class activities, being focussed and attentive to teachers and peers in lessons, and completing classwork. About questioning teachers and asking for help, teacher participants said students asked questions to get clarification about work they did not understand or when they wanted to improve their grades. Academically successful students viewed teachers as a resource to help them when they needed more information or when they were confused about their work.

Asian students made the most responses about a study–life balance, whereas Māori students referred to a holistic approach to wellbeing which involved a spiritual, physical, emotional, mental, emotional (and cultural) balance. Students’ short-term goals were related to achievements in a subject or over one year and medium to long-term goals related to obtaining entry into university or what they would do beyond school. Teacher participants shared similar responses, referring to small, immediate goals, such as achieving well in an assessment task and bigger, long-term goals related to making a significant difference for their whānau. Perseverance and persistence meant being tenacious and not giving up when students encountered tough circumstances or difficult work. Finally, teacher participants reported that academically successful students sought feedback, engaged in discussions about what they had learnt and acted on advice. Seeking and accepting feedback was referred to by only a very small number of participants concerning students’ academic success.

Personal Qualities and Abilities of an Academically Successful Student

The key personal qualities and abilities of an academically successful student that were reported by participants in their questionnaires were: (1) Motivation and self-regulation; (2) Organisation and time management; (3) A positive attitude; (4) Intrinsic value (enjoys learning); (5) Self-belief and self-confidence; (6) Respect; (7) Intelligence and natural ability; (8) Open-mindedness and reflection; (9) Resilience; (10) Problem solving, independent, and critical thinking skills; and (11) Literacy and numeracy. The numbers and percentages of students and teachers who responded about each of the sub-themes are shown in Table 6

Table 6

Students' and Teachers' Perceptions of the Personal Qualities and Abilities of an Academically Successful Student

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Personal qualities and abilities												
Motivation and self-regulation	368 63.0%	59 61.5%	208 65.8%	18 60%	72 57.1%	11 73.3%	240 87.6%	42 97.7%	186 87.7%	3 100%	3 50%	6 60%
Organisation and time management skills	216 37.0%	29 30.2%	104 32.9%	14 46.7%	65 51.6%	4 26.7%	133 48.5%	13 30.2%	115 54.2%	1 33.3%	1 16.7%	3 30%
A positive attitude	135 23.1%	24 25%	69 21.8%	11 36.7%	28 22.2%	3 20%	41 15%	7 16.3%	29 13.6%	1 33.3%	2 33.3%	2 20%
Intrinsic value (enjoys learning)	97 16.6%	16 16.7%	54 17.1%	4 13.3%	21 16.7%	2 13.3%	84 30.7%	13 30.2%	69 32.5%	0 0.0%	2 33.3%	0 0.0%
Self-belief and self-confidence	69 11.8%	14 14.6%	33 10.4%	6 20%	11 8.7%	5 33.3%	89 32.5%	13 30.2%	74 34.9%	2 66.7%	0 0.0%	0 0.0%
Respect	70 12.0%	17 17.7%	30 9.5%	5 16.7%	16 12.7%	2 13.3%	19 6.9%	7 16.3%	11 5.2%	1 33.3%	0 0.0%	0 0.0%
Intelligence or natural ability	64 11.0%	9 9.4%	39 12.3%	1 3.3%	13 10.3%	2 13.3%	22 8.0%	3 7.0%	18 8.5%	0 0.0%	1 16.7%	0 0.0%

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Open-minded and reflective	28 4.8%	6 6.3%	9 2.8%	2 6.7%	11 8.7%	0 0.0%	64 23.4%	10 23.3%	53 25.0%	0 0.0%	1 16.7%	0 0.0%
Resilience	31 5.3%	10 10.4%	12 3.8%	1 3.3%	8 6.3%	0 0.0%	29 10.6%	4 9.3%	24 11.3%	0 0.0%	0 0.0%	1 10%
Problem-solving, independent- and critical-thinking	16 2.7%	4 4.2%	8 2.5%	1 3.3%	3 1.7%	0 0.0%	63 23%	4 9.3%	57 26.9%	0 0.0%	0 0.0%	2 20%
Literacy and numeracy skills	4 0.7%	0 0.0%	3 0.9%	0 0.0%	1 0.8%	0 0.0%	48 17.5%	3 7.0%	41 19.3%	0 0.0%	0 0.0%	4 40%

Motivation and self-regulation. More than half the students (63%) and 88% of teacher participants identified motivation and self-regulation as key characteristics of successful students. A two-sample Z-test showed that teachers were significantly more likely than students to report that motivation and self-regulation were related to academic success ($Z = 7.387, p = <.001$). There were also differences between the student groups with Pākehā students significantly more likely than Asian students to report that motivation and self-regulation were related to academic success ($Z = 2.374, p = 0.0176$).

Student participants described successful students as self-motivated, fiercely competitive, and not requiring “someone coaching them along every step of the way” [S-037, Pākehā, decile 8]. Other students were competitively motivated by a desire to do as well as, or better than, others. They were “...driven to achieve their very best and usually aim[ed] to meet or succeed [sic] the standards set by other academically successful students” [S-072, Asian, decile 10].

For some Māori students, the motivation to achieve in education came from a desire to improve their personal circumstances. One student had “the drive to want to do better in life and not have to live in poverty” [S-361, Māori, decile 4]. Another said, “...people need to have qualifications in order to have a good life; otherwise they may not have all the opportunities in life that they possibly could have” [S-424, Māori, decile 3]. Students also did not want to settle for mediocrity. Instead, “they should strive for greatness and not just be happy to pass or accept what they are given” [S-458, Māori, decile 2].

Teacher participants described academically successful students as intrinsically self-motivated, driven, dedicated, competitive, proactive, ambitious, and success-orientated. They “care about passing and achieving and do not want to accept failure” [T-066, Pākehā, decile 4]. Teachers also reported that students aimed for the highest grades possible and “...are never okay to ‘settle’ for less than what they are being pushed for. In fact, for these students,

an Excellence is not enough if there is an Excellence plus, plus on offer...” [T-001, Pākehā, decile 8].

Organisation and time management. There were 37.0% of students and 48.5% of teachers who referred to organisation and time management in their questionnaires. The difference in response rate was statistically significant with teachers more likely than students to report that organisation and time management were related to academic success ($Z = 3.193$, $p = 0.0014$). There were also statistically significant differences by ethnicity with Pākehā students more likely than Asian students ($Z = 3.23$, $p = 0.0012$), Asian students more likely than Māori students ($Z = 3.194$, $p = 0.0014$), and Pākehā teachers more likely than Māori teachers to report that organisation and time management skills were related to academic success ($Z = 2.871$, $p = 0.0041$).

Student participants reported that successful students were punctual, handed work in on time and “are able to prioritise their time so that they achieve the best that they can” [S-128, Pākehā, decile 9]. High achievers also planned. For example, “... often makes a list of things to do and ticks them off as they get things done, knows what is coming up such as assessments or other activities” [S-010, Pākehā, decile 8]. Teachers described academically successful students as not only well-organised but also self-disciplined, prepared, punctual, and efficient. One teacher said, “They know their timetable. They have diaries...They keep all their paperwork neatly where they can access it; they have good systems” [T-105, Pākehā, decile 3].

A positive attitude. The association between academic success and positivity were identified by 23.1% of students and 15% of teachers, with students significantly more likely than teachers to report that a positive attitude was related to academic success ($Z = 2.757$, $p = 0.0058$). Student participants reported that students were happy and optimistic. One student said, “A good attitude makes getting through school a lot easier” [S-185, Pākehā, decile 6].

A second participant explained that successful students accepted difficulties would be encountered at school but "...as things get tough they try to keep the best attitude possible..." [S-165, Pākehā, decile 9]. Teachers reported that academically successful students had a positive attitude or mindset, a sense of humour, and the ability to laugh. They were positive "...towards school and teachers" [T-129, Pākehā, decile 7] and "...don't tend to complain as much" [T-197, Pākehā, decile 5].

Intrinsic value (enjoying learning). Intrinsic value was mentioned by 16.6% of students and 31% of teacher participants, with teachers significantly more likely than students to report that it was related to academic success ($Z = 4.702, p = <.001$). Teacher participants said high-achieving students had a love of learning, inquisitiveness and curiosity, and enthusiasm "beyond what is required to just pass" [T-271, Pākehā, decile 10]. Another teacher said students, "love the content for its own sake, not grade driven but rather, into the ideas" [T-167, Pākehā, decile 7]. Teachers also talked about students' personal investment in class. One said her students, "Take an interest in the topic beyond the school walls and see a relevance to their lives in the topic" [T-195, Māori, decile 6].

Student participants also perceived that successful students both enjoyed school and loved learning. One student said, "They have a high level of curiosity in class" [S-356, Pasifika, decile 2]. Another said high-achieving students were "dedicated and passionate about the classes they are taking (if a student doesn't enjoy a subject, they are more likely to not do well in it)" [S-246, Asian, decile 6].

Self-belief and confidence. Self-belief and confidence were identified by 11.8% of students and 32.5% of teachers, with teachers significantly more likely than students to report that it was related to academic success ($Z = 7.269, p = <.001$). Teacher participants who responded to this sub-theme commented on student confidence and belief that they could achieve. One teacher said, "The confidence is very important because not knowing things

can be scary. Believing that you can and will understand and learn new things allows you to continue ...” [T-195, Māori, decile 6]. Māori teachers also connected self-belief and self-confidence to students having a positive ethnic identity. For example, one said, “Identity is known, and they are comfortable in their own skin” [T-245, Māori, decile 5]. Another said students were “connected culturally and ethnically” [T-103, Māori, decile 3] and were “...grounded in both Te Ao Māori and Te Ao Pākehā” [T-003, Māori, decile 7].

Common responses from student participants included: “... a belief that they can achieve the things they set out to achieve” [S-410, Pasifika, decile 3] and “confidence in their ability [S-237, Pākehā, decile 6]. Students did not perceive they could succeed at school without self-belief. One student commented, “An academically successful secondary student, first of all, has a winning mindset, because you can’t succeed if you do not have the frame of mind to do so” [S-458, Māori, decile 2]. For other students, belief in themselves was needed to carry them through when others did not believe in them. One student said, “‘Self-worth’, I personally think, drives a student to be the best and almost adds an ‘I’ll prove you wrong’ to the people who disagree.” [S-071, Other, decile 10].

Respect. Respect was a quality mentioned by 12.0% of student participants and 6.9% of teachers, with students significantly more likely than teachers to report that it was related to academic success ($Z = 2.138, p = 0.0325$). There were also statistically significant differences by ethnicity with Māori students more likely than Pākehā students ($Z = 2.115, p = 0.0349$) and Māori teachers more likely than Pākehā teachers to report that respect was related to academic success ($Z = 2.589, p = 0.0096$).

Student participants said respect was demonstrated by being polite, courteous, and well-mannered to “both their peers and teachers or elders” [S-320, Māori, decile 3]. Several students emphasised respect for teachers and elders. One said, “A successful person respects those with more knowledge and seeks to attain as much off of these people as possible” [S-

003, Pākehā, decile 10]. Respect also involved students' peers. For example, high achievers were "respectful of other people and their learning" [S-296, 'Other' ethnicity, decile 6].

Teacher participants' responses echoed students with regards to respecting teachers and others. One said, "They have respect for academia and see their teachers as academic mentors rather than as authoritative figures" [T-259, Pasifika, decile 4]. Comments also included respect for things, for example, "Value and care for all resources given" [T-195, Māori, decile 6] and "respect for [the] learning environment" [T-063, Pākehā, decile 10].

Intelligence or natural ability. There were 11% of students and 8% of teachers who indicated academic success was related to intelligence, ability or giftedness. Students described this characteristic as natural ability, talent, being smart, "...blessed with brains" [S-339, Pākehā, decile 10] or having "a solid IQ" [S-125, decile 9, Māori]. Other students' inferred intelligence was something children inherited from their parents. One student said, "...genetically [they] have the brains and right attitude to study and achieve excellence" [S-287, Pākehā]. Teacher participants' responses about intelligence or natural ability were like students', and several commented on innate or inherent intelligence. One teacher said, "[Some students] have a great deal of natural ability and can succeed because of that rather than hard work" [T-260, Pākehā, decile 10] which appeared to infer that some students achieved less than others due to a lack of ability, and that hard work was not necessarily needed for student success.

Open-mindedness and reflection. Only 4.8% of student participants referred to academically successful students being open-minded. Comparatively, there were 23.7% of teachers who described successful students as flexible, adaptable, willing to learn from their mistakes and "open to their point of view being challenged" [T-035, Pākehā, decile 7]. One teacher said her students "embrace new ideas and change—they make changes (in behaviour, strategies, and beliefs) when they know they need to, in order to be successful" [T-018,

Pākehā, decile 7]. A two-sample Z-test showed that teachers were significantly more likely than students to report that open-mindedness and reflection were related to academic success ($Z = 8.183, p = <.001$).

Resilience. There were 10.6% of teachers, and 5.3% of students who reported that resilience was related to academic success, with teachers significantly more likely than students to report that resilience was related to academic success ($Z = 2.818, p = 0.0048$). Teacher participants reported that academically successful students were willing to “...give things a go [and] when they get knocked down, they get up and go again” [T-103, Māori, decile 3]. Teachers also reported that academically successful students who were resilient did not consider “... letting ‘failures’ set them back, but see them as opportunities to learn and improve” [T-012, Pākehā, decile 9].

When student responses were analysed by ethnicity, 10.4% of Māori students had made responses about resilience compared with 3.8% of Pākehā, with Māori students significantly more likely than Pākehā students to report that resilience was related to academic success ($Z = 2.45, p = 0.0143$). Resilient students did not “...let failure hold them down” [S-369, Māori, decile 7] or “...let setbacks disappoint them” [S-370, Māori, decile 10]. Another student reported that resilience included optimism for a better future: “They should have a positive attitude to be able to deal with problems faced in both school and at home. Although things are tough, they should have faith that it will work itself out and things will get better...” [S-458, Māori, decile 2].

Problem-solving and independent or critical thinking. There were 23% of teacher participants, and 2.7% of students who made responses about academic success relation to problem-solving and independent or critical thinking, with teachers significantly more likely than students to report that problem solving, and independent or critical thinking was related to academic success ($Z = 7.673, p = <.001$). Teachers described students as perceptive,

intuitive, and able to think for themselves and use their initiative. One teacher said successful students were "...resourceful and can use several different vehicles to obtain the necessary required information" [T-177, Pākehā, decile 3]. There were also statistically significant differences by teacher ethnicity. Pākehā teachers were more likely than Māori teachers to report that problem solving, and independent or critical thinking was related to academic success ($Z = 2.465, p = 0.0069$).

Literacy and numeracy skills. There were 17.5% of teachers who identified high levels of reading, writing, and numeracy as important for academic success compared with 0.7% of student participants. A two-sample Z-test showed that teachers were significantly more likely than students to report that literacy and numeracy were related to academic success ($Z = 9.6259, p = <.001$). Teacher participants said academically successful students were numerate and literate, read widely, and had high levels of comprehension. They were "articulate and could structure their thinking clearly" [T-173, Pākehā, decile] and were able to "write with clarity" [T-123, Pākehā, decile 5].

Summary. This section of the chapter has presented the findings related to the personal qualities and abilities of an academically successful student. Participants identified 11 personal qualities and abilities of an academically successful student. These were: (1) Motivation and self-regulation; (2) Organisation and time management; (3) A positive attitude; (4) Intrinsic value (enjoys learning); (5) Self-belief and self-confidence; (6) Respect; (7) Intelligence and natural ability; (8) Open-mindedness and reflection; (9) Resilience; (10) Problem-solving and critical thinking skills; and (10) Literacy and numeracy skills.

High numbers of teacher and student participants linked motivation and self-regulation to academic success. Academically successful students were competitive and driven and wanted to do as well as or better than other students. Māori students, in particular, were driven by a desire to succeed in education to improve their personal and family

circumstances and to lift themselves out of poverty. Teacher participants viewed academically successful students as intrinsically self-motivated, ambitious and dedicated. They were students who did not accept failure and aimed for the highest grades possible.

Academically successful students were perceived to be highly organised. They were punctual, planned ahead and prioritised their time so that work was handed in by deadlines. Teacher participants described well-organised high achievers as self-disciplined, prepared and efficient. Student participants related academic success to being positive, happy and optimistic, and having a good attitude even when school was tough or difficult. Teacher participants said academically successful students had an upbeat attitude towards school and their teachers, complained less, and had a good sense of humour.

Students' intrinsic value was referred to by teacher participants as having a love of learning and rather than being grade driven, a desire to find out more than what was needed to pass an assessment. Student participants also reported that successful students enjoyed school, loved learning, and were passionate about the classes they were taking.

Self-belief and self-confidence were perceived by teacher participants to be important attributes of academically successful students. Māori teachers also related self-belief and self-confidence to a positive ethnic identity and discussed students being comfortable and grounded in both Te Ao Māori and Te Ao Pākehā. Student participants perceived that self-belief was critical to academic success with students needing to have the confidence to believe they would do well, especially when others did not believe in them. Some students commented that high self-belief gave them the impetus to prove to those who did not believe in them that they could be successful.

Māori students and teachers responded significantly more frequently about respect than Pākehā students and teachers. Student participants referred to respect as being polite and well-mannered to peers, teachers, and elders. Students emphasised the importance of

having respect for those with more knowledge and respecting other students' learning. Teacher participants concurred with students about respect for teachers and other learners. They also commented that respect for resources and the learning environment was important.

Student participants referred to intelligence or giftedness as natural ability, smartness, or a high IQ, and some thought ability was inherited from parents. Teacher participants' responses were similar, and several referred to innate intelligence and the idea that students succeeded because of ability rather than hard work. Teacher participants also described successful students as open-minded, adaptable, and willing to learn from their mistakes. However, only 5% of student participants referred to open-mindedness as being related to academic success.

Teacher participants reported that academically successful students were resilient, were willing to have another go if they failed at something, and saw their failures as opportunities to learn. Māori students responded significantly more frequently about resilience and academic success than Pākehā students. Resilient students did not let failure hold them back or let setbacks disappoint them; they were hopeful about a positive future.

Teacher participants viewed academically successful students as good problem-solvers and critical thinkers who were perceptive, intuitive, and independent. Pākehā teachers responded significantly more frequently to this sub-theme than Māori teachers.

Teacher participants referred to the importance of literacy and numeracy skills for academic success, stating that students who had high levels of comprehension were able to structure their thinking, and could write clearly. Very few students made responses about literacy and numeracy relating to academic success. The next section will focus on the connections that academically successful students have with others, including peer, teachers and whānau/family, and how these connections relate to student success.

Academically Successful Students' Connections with Others

The connections that academically students had with others are listed in Table 7. For student participants, the key connection was with peers, through academically-supportive peer relationships. The two connections identified by teacher participants were a supportive home background and positive connections with teachers.

Academically supportive peer relationships. There were 10.4% of students and 4.4% of teachers who commented about the benefits of academically supportive peer relationships. The difference in responses between teachers and students was statistically significant ($Z = 4.866, p = <.001$). Students who responded about academically supportive peer relationships were predominantly Pasifika and Māori. Pasifika students reported significantly more frequently than Pākehā ($Z = 4.344, p = <.001$), Asian ($Z = 2.56, p = 0.0105$), and Māori students ($Z = 2.084, p = 0.0372$), and Māori students reported significantly more frequently than Pākehā students ($Z = 2.062, p = 0.0392$) that academically supportive peer relationships were related to academic success.

Collective success appeared to be important to Pasifika and Māori students who wanted everyone in their peer group to achieve. One student said academically successful students, "...help other students ... [and] help make sense of what the teacher has taught" [S-537, Pasifika, decile 3]. Another student said it was important not to "judge others on their achievements, but encourage them to push themselves just that little bit more to achieve with a Merit or Excellence" [S-468, Māori, decile 3]. Teachers emphasised the importance of high achievers having like-minded friends. For example, "They deliberately surround themselves with peers that value education/success" [T-018, Pākehā, decile 5]. Teachers also referred to students discussing work with each other and engaging in peer tutoring or a tuakana-teina relationship where a student with expertise in one area helps other younger or less skilled students.

A supportive home background. Only 6.7% of students responded in their questionnaires that a supportive home background was related to academic success compared with 27.4% of teachers. A two-sample Z-test showed that the difference between teachers' and students' responses about a supportive home background was statistically significant ($Z = 9.702, p = <.001$). Although students only made a small number of total responses to this sub-theme, Pākehā and Māori students differed in the type of home background support that they reported was needed for success. Pākehā students' responses were more likely to refer to a certain level of income as an essential component of a supportive environment. One student commented, "There is no successful student I know who also has to deal with an abusive family, poverty, or depression" [S-243, Pākehā, decile 6] and another said successful students "...generally come from a higher socioeconomic background ..." [S-283, Pākehā, decile 8]. There was also the perception that academically successful students' parents had achieved academic success. One participant said students had "...parents who themselves are very intellectual and have well-paying jobs" [S-257, Pākehā, decile 6].

A few Māori students acknowledged that having enough money to obtain educational resources contributed to academic success. For example, "...access to internet/other resources, finances to pay for school stuff" [S-361, Māori, decile 4]. However, none of the Māori students said that parents needed to be in high paying jobs or from a higher socioeconomic background for a student to be successful. Most Māori students' responses about a supportive home background focussed on high expectations from parents, receiving encouragement from their family, and having stability in the home. One student responded, "I do think that someone has to have a good environment at home... for example, an encouraging family" [S-361, Māori, decile 4].

Table 7

Students' and Teachers' Perceptions of Academically Successful Students' Connections with Others

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Connections with others												
Academically-supportive peer relationships	75 12.9%	14 14.6%	30 9.5%	11 36.7%	18 14.3%	2 13.3%	13 4.7%	0 0.0%	12 5.7%	0 0.0%	1 16.7%	0 0.0%
Connections with teachers	40 6.8%	5 5.2%	22 7.2%	5 14.7%	7 5.4%	1 5.9%	33 12.1%	7 16.3%	22 10.4%	3 100%	0 0.0%	1 10%
Supportive home background	39 6.7%	6 6.3%	27 8.8%	2 5.9%	4 3.1%	0 0.0%	76 27.7%	14 32.6%	55 25.9%	2 66.7%	3 50%	2 20%

Equally, most Māori teacher responses referred to a strong whānau or family support network and encouragement of students to do well. There was also an emphasis on valuing education, but it was associated with parental interest and support. Again, Māori teachers did not refer to the level of parental income or socioeconomic status. One teacher said academically successful students “come from a home where education is important and emphasised through family attitudes and encouragement” [T-261, Māori, decile 10].

Like the Pākehā student participants’ responses, Pākehā teachers also related academic success to parental income. For example, “Having wealthy parents” [T-101, Pākehā, decile 6] and “...they tend to be from families who have more interest in their student’s schooling; wealth can be a factor” [T-197, Pākehā, decile 5]. For some teachers, it was not just the income, but also socioeconomic level. One teacher said successful students were, “... from families with an aspiring ethic—often the middle class” [T-030, Pākehā, decile 6]. The perception that success came from being in the type of family that valued education was also stressed. A common response was, “... a family who values learning will also help—the family don’t have to be academic high fliers, but they need to value education. These are the parents and caregivers who come to school events...” [T-093, Pākehā, decile 5]. Another teacher said academically successful students were always “...well supported at home [and] whose parents are interested in their children’s educational success” [T-238, Pākehā, decile 3]. There was an implication that teachers perceived that some students’ families did not value education and consequently, students in those families were not likely to be successful. The following teacher comment confirmed this perception:

The home/family life of a student has the greatest effect on a student’s success. If they are not brought up to value education or school, then the vast majority won’t do well ...It is very hard to change a student’s mind about their education when all their life their family has been telling them

school is a waste of time and not important. We might be able to change one or two students' outlooks, but not the majority [T-016, Pākehā, decile 3].

Positive connections with teachers. The total percentage of student participants' questionnaire responses related to positive connections with teachers was 6.8% compared with 12.1% of teacher participants. Teacher participants made significantly more responses than students ($Z = 2.535, p = 0.0113$) about academically successful students having positive connections with teachers. Teacher participants described positive teacher-student connections as 'good' relationships, forming a 'working' relationship, and relating and interacting in positive ways. One teacher explained that successful students "tend to regard their teachers as allies and are keen to develop good relationships with them [T-234, Māori, decile 6]. Student participants said successful students "...get along with their teachers" [S-342, Pasifika, decile 6] and had "...a good relationship ..." [S-536, Pasifika, decile 3].

Summary. This section of the chapter has presented the findings that were related to the three types of connections that academically successful students had with others. These were: (1) Academically-supportive peer relationships; (2) A supportive home background; and (3) Positive connections with teachers. Pasifika and Māori students reported more frequently than other groups that academically successful students helped and encouraged other students to achieve and supported the collective success of their peer group. Teacher participants also reported that high achieving students benefited from having like-minded friends who valued education and success. Teachers also referred to students discussing work and engaging in tuakana-teina relationships.

More teacher participants than students reported that academically successful students had positive connections with their teachers. According to teacher participants, high achieving students related and with teachers in positive ways and had good working relationships with

them. Although there were much fewer responses, student participants agreed that academically successful students had good relationships with teachers.

Substantially fewer students than teacher participants perceived that academic success was related to a supportive home background. Teacher participants reported that academically successful students had caring, supportive, and interested parents who regularly attended school events. The majority of the Pākehā students and teachers referred to academic success requiring a certain level of wealth and parental education whereas Māori students and teachers predominantly referred to parents' high expectations and emotional support. For Māori teachers, parents valuing education was associated with parental interest and encouragement, rather than a parent's income level. In the next section, the results for each of the sub-themes related to an academically successful student will be discussed.

Discussion

Study One investigated the attributes of an academically successful student through the perceptions of high achieving senior secondary school students and high performing teachers. Thematic analysis of the questionnaire data revealed three main themes for both the student and teacher participants: (1) Achievement and learning-related behaviours; (2) Personal qualities and abilities; and (3) Students' connections with others. The results for each of the themes and sub-themes relating to an academically successful student will be discussed in the following sections.

Achievement and Learning-related Behaviours of an Academically Successful Student

Hard work and effort. Both student and teacher participants agreed that hard work and consistent effort were needed for academic success. The large numbers of responses demonstrated that many study participants ascribed to a growth mindset—the idea that students have some control over their achievement at school—and that subject knowledge, understanding, and grades would improve if they were willing to expend enough time and

effort (Dweck, 2010). Asian and Māori students were found to have a significantly higher response rate to this sub-theme than Pākehā and Pasifika students. Previous research has shown that Asian students perceive themselves to be hard-working compared to other ethnicities (Bablak et al., 2016; P. Wong et al., 1998). Additionally, they have a strong sense of obligation and duty to their families to achieve highly (Shavitt et al., 2010), and from the Confucian belief that hard work and effort will lead to achievement (Stevenson, 1992), Asian students may spend more time studying and place higher value on doing well in education than other students. Asian students are also positively stereotyped by teachers and in society as a ‘model minority’ with high academic ability (S. J. Lee, 2015). As the recipients of high expectations, Asian students are treated better by teachers and given more opportunities to learn. Hence, they tend to be more engaged and do better at school (Good, 1987; Good & Nichols, 2001).

Māori students’ high response rate to working hard at school appeared to be more complex than it was for other students. Like Asian students, Māori have reported that their families have high expectations for their achievement, provide encouragement, and want them to do well at school (R. Bishop et al., 2003; Macfarlane et al., 2014). But, unlike Asian students, Māori are inundated by statistics about their low achievement, are negatively stereotyped by teachers and, in society, are often racially profiled and associated with crime (Turner et al., 2015; Webber, 2012). Māori receive more negative messages about their ethnicity than any other ethnic group in New Zealand (Thomas & Nikora, 1996; Turner et al., 2015). Participants in the Ka Awatea research study (Macfarlane et al., 2014), reported that hard work and effort were critical to the success of high achieving Māori students. The findings in the current study indicated that Māori students were aware of the negative stereotypes and teachers’ low expectations for them. It appeared Māori students felt they

needed to work harder to prove their worth as academic scholars and to disprove the negative beliefs that others may have held for them.

Intelligence and natural ability. Some study participants reported that academic success was due to a student's intelligence and natural ability, which indicated a belief that high achievement was due to being 'smarter' or more intelligent than others. This way of thinking aligns with a 'fixed' intelligence mindset, which is common in New Zealand where between-class ability grouping occurs in most secondary schools. It is unclear why ability grouping has endured despite research showing its negative effects for students (Hattie, 2009; Hornby & Witte, 2014; Oakes, 2008). The current practices in schools certainly indicate more support for a fixed intelligence mindset than that espoused by teachers in this study. Schools need to be challenged about why they continue to use a strategy that leads to unequal opportunities to learn and poor outcomes for so many students (Hornby & Witte, 2014).

Motivation and self-regulation. Motivation and self-regulation as characteristics of academically successful students had among the highest number of responses from teachers and students. Research shows that self-regulation and motivation both predict academic achievement (McCoach & Siegle, 2001, 2003). Māori students' responses about motivation differed from other students' in the study, however. They were the only group who referred to being motivated to succeed in education, so they did not have to be poor. Māori are over-represented in unemployment, poor health, life expectancy, and other negative statistics, and education is seen by many as a way out of poverty (Marriott & Sim, 2015). In his keynote speech to the Hui Taumata Mātauranga, Mason Durie (2001, February) outlined three broad goals of education for Māori, one of which was "To enjoy good health and a high standard of living" (Durie, 2001, February, p. 8).

Furthermore, Durie said,

Although there would probably be disagreement that a prime goal of education is to become wealthy, there would be a fairly high level of agreement that being poor is no great virtue... A successful education...lays down the groundwork for a healthy lifestyle and career with an income adequate enough to provide a high standard of living (p. 8).

Durie's quote highlights that the motivation for many Māori students to succeed does not necessarily lie with achieving a qualification or a prize for themselves, but to obtain the means necessary for them and their family to have a better life.

A study-life balance. Asian students had the highest response rate about academic success being related to a study–life balance and this was an interesting finding given that Asian students also responded about the importance of studying every day. Due to the data being collected via anonymous questionnaire responses, it was not known if the Asian students in the study were international students, recent immigrants, or New Zealand-born. However, if they had experienced the Chinese education system, then students would have attended school for longer hours than in New Zealand, and completed additional classes after school or on weekends. In a study that investigated the work-life balance of East-Asian students in New Zealand (Nguyen, 2013), one student reported that studying in China was much more pressured than in New Zealand. She said she studied full-time every day in China, including weekends, whereas in New Zealand on the weekend everyone relaxed (p. 31). It is possible that in comparing their schooling in China or other Asian countries to New Zealand, Asian students do perceive they are able to maintain a study–life balance.

Personal Qualities and Abilities of an Academically Successful Student

Respect. Māori students and teachers had higher numbers of responses about respect being a quality of an academically successful student than other ethnic groups. For Māori, showing respect towards parents, elders, whānau, adults, visitors, and peers is a key cultural value (R. Bishop, Berryman, & Richardson, 2002; Grimes, MacCulloch, & McKay, 2015) with the expectation that it is also reciprocated. Research studies in New Zealand have shown that when teachers are disrespectful to students, it harms relationships, engagement, and student achievement (R. Bishop, 2010). Therefore, it is beneficial for teachers to focus on developing genuinely respectful relationships with students as it is likely to lead to a more positive learning environment and increased educational outcomes for students.

Literacy and numeracy skills. Students did not identify literacy and numeracy skills in relation to academic success. This was of concern given that literacy and numeracy are integral to every subject. Students are required to achieve a minimum of 10 literacy credits and 10 numeracy credits to pass each level of NCEA (Madjar & McKinley, 2013). It is possible, however, that these skills were taken-for-granted as each of the students in the study had attained NCEA with either Merit or Excellence Certificate endorsement and, therefore, had attained the required level of literacy and numeracy. It is important that teachers emphasise to all students that NCEA cannot be passed unless they achieve the literacy and numeracy credits, regardless of how many other subjects credits the student may achieve.

Academically Successful Students' Connections with Others

A supportive home background. Four times as many teacher participants as students perceived that a supportive home background was related to academic success. This finding was somewhat unexpected as in previous studies high achieving students often attribute their success to family members or other caregivers (Macfarlane et al., 2014; McMillan & Reed, 1994; E. N. Walker, 2006). However, research by Alva (1991) failed to find a strong

relationship between parental support and high academic achievement, finding instead that students reported higher levels of support from teachers and peers. Students in Horsley's study also attributed academic success to teachers (Horsley, 2009).

Although student participants made significantly fewer responses than teachers about the relationship between academic success and a supportive home background, there were differences in the types of responses made by Māori and Pākehā participants. Pākehā teachers and students' responses referred to the importance of high parental income, education level, and socioeconomic status. The focus of most of the Māori teachers and students' responses were about encouragement, high parental expectations and a strong whānau support network.

These differences in viewpoint between Māori and Pākehā may affect how teachers and students of different ethnicities perceive a supportive home background and whether students receive appropriate support. Moreover, the ethnic imbalance of a predominantly white and middle-class teaching population (Pākehā/NZ European 71.5%; Māori 9.3%; Ministry of Education, 2017) means that Māori students are more likely to be taught by Pākehā teachers who have been found to have limited knowledge about tangata Māori, tikanga-a-iwi, or te reo Māori (R. Bishop, 2011; R. Bishop et al., 2003; R. Bishop & Glynn, 2011).

In the current study, some teachers commented that successful students were more likely to be middle class or have wealthy parents who valued education and had higher aspirations, than those from a lower socioeconomic background. Moreover, they assumed that parents were uneducated and are unable to support them properly (McKenzie & Scheurich, 2004). Prejudiced and stereotypical beliefs are difficult to shift, and individuals' attitudes are unlikely to change even when they are aware (or are made aware) of their prejudices (Noon, 2017).

It is also common in the literature for teachers to attribute academic failure to a student's home background. In addition to being unable to support their children properly,

Māori, Pasifika and low-income students' parents are often perceived by teachers to have low expectations for their children's achievement and to be unsupportive of education (R. Bishop et al., 2003; Rubie-Davies et al., 2006; St. George, 1983; Turner et al., 2015). However, research has shown that quality teaching and teachers have the greatest influence on student achievement (Hattie, 2009), and a student's family background has much less of an influence on student achievement (Haycock, 1998).

Previous research has demonstrated the benefits of culturally responsive and relevant pedagogy for Māori student achievement (R. Bishop, 2007). Māori students in this study reported that they appreciated teachers who taught them topics based around what they were interested in, or who took the time to connect with students, so they knew how they learned best. It is recommended that teacher training organisations actively recruit larger numbers of Māori trainees. Additionally, increasing the compulsory Māori component of their initial teacher education programmes will ensure that all beginning teachers begin their teaching careers with at least a basic knowledge of te reo and ngā tikanga Māori (language and culture), and an understanding of culturally responsive practices and culturally relevant content.

Academically-supportive peer relationships. The key connection for students was with their peers. In particular, Māori and Pasifika students were more likely than Pākehā and Asian students to report an academically supportive peer relationship. Students who have experienced support from their peers have an enhanced sense of school belonging which leads to increased engagement (Gonzalez & Padilla, 1997).

For Māori and Pasifika students, whose cultures are collectivistic, academic success is not an individual endeavour, but something that is shared and pursued for the benefit of the group (R. Bishop & Berryman, 2006). Therefore, academically successful Māori and Pasifika students value sharing their knowledge with others to enable everyone to achieve. Glynn et al. (2010) stated that for Māori students, "processes of whakawhanaungatanga naturally

occur...they will soon form strong working relationships with each other, and take responsibility for each other's well-being and learning, especially through a commitment to sharing their knowledge freely among members of the group" (p.120).

Asian students also reported academically supportive relationships with others as many Asian cultures are also collectivistic. However, Māori and Asian ethnicities differ from each other in that Māori are horizontal collectivists (HC) whereas Asians are vertical collectivists (VC). As VC, Asians see themselves as part of a collective group but accept there is a hierarchy and inequality within the group. To keep their position within the hierarchy, members do all they can to maintain the hierarchy and the status of group members, so are less likely to be supportive to out-group members (Tassell et al., 2010). On the other hand, HC, such as Māori or Pasifika students are more likely to perceive members of their group to be equal, are less competitive and more cooperative, and will extend their support to people in out-groups too. There have been examples of Asian students' academic peer relationships in other research studies. For example, in a study by Lee (S. J. Lee, 1994), high achieving Korean students took responsibility for helping lower-achieving Korean students who were struggling. It was noted, however, that Korean peer support was only extended to other Koreans and not to other Asian students. Indians (who are included in the Asian ethnic group) are both collectivists and individualists depending on the context they find themselves in (Sinha, 2014) which provides a further explanation for why Asian students' behaviour in the current study appeared in some cases to align more with Pākehā students than with Māori or Pasifika students.

Conclusion

This study focussed on teachers' and students' perceptions of the characteristics and behaviours of an academically successful student and reinforced that students' ethnic and cultural beliefs influenced how they approached and experienced education. This study also

contributes to the qualitative literature on academic success at secondary school by including the perspectives of a large sample of students ($n = 583$) and teachers ($n = 274$) to provide a rich source of data about the factors which lead to high student achievement at secondary school.

The study also incorporated Māori academic success at secondary school and highlighted experiences of Māori student scholars who had excelled in education. Māori success is an under-researched area in education, with only a limited number of studies that have previously focussed on high achieving Māori students at secondary school (Claxton, 2016; Macfarlane et al., 2014; McRae et al., 2010; Miller, 2015; Mitchell & Mitchell, 1988; Webber, 2011).

Teachers are central to the process of building a positive and inclusive school culture and supporting students to improve their educational outcomes. Furthermore, it is essential to listen to student voice and for educators to be open to making changes to practice. A recommendation from this study is for teachers to promote practices with students that align with whakawhanaungatanga. The findings in this study showed that high achieving Māori and Pasifika students already benefit from working together and supporting each other's learning, and the initiative could be formalised further by including all students in peer support and providing classroom space for students to work in during lunchtime or after school. The initiative could also be extended to a tuakana-teina model to allow senior students to support juniors, and students with particular subject strengths to be able to share their expertise.

Study One focussed on the attributes of academically successful students and what they and their teachers perceived they needed to be successful at school. The next chapter presents Study Two, the second of three studies related to students' academic success. In Chapter Four, the focus is shifted from academically successful students to teachers and examines students' and teachers' perceptions of the characteristics of an ideal and a non-ideal secondary school teacher.

CHAPTER FOUR:
**STUDY TWO—STUDENTS’ AND TEACHERS’ PERCEPTIONS OF AN IDEAL AND
A NON-IDEAL TEACHER**

The aim of Study Two was to explore how students and teachers defined an ideal and non-ideal teacher. The study further investigated whether there were differences in perceptions of what was ‘ideal’ and ‘non-ideal’ for students, teachers, and by ethnicity. Learning about the attributes and behaviours of teachers from the teachers and students will inform stakeholders in education about the key practices and dispositions that need to be promoted in teachers and those that should be avoided. The research questions guiding this study were:

1. How do students and teachers define an ideal and non-ideal secondary school teacher?
2. Does this differ between teachers and students, or by the ethnicity of the student or the teacher?

Method

Participants

There was a total of 144 schools in Study Two. The 274 teacher participants were recruited from 89 schools, and the 583 student participants were recruited from 74 of the 144 schools. The schools were a collection of high decile ($n = 40$), mid-decile ($n = 72$), and low decile ($n = 32$) secondary, composite, and area schools. One school did not have a decile rating.

Teacher participants. The 274 teacher participants in Study Two (169 female and 105 male) were qualified across a wide range of subjects and were defined as high performing because they had all taught students who had attained NCEA Merit or Excellence course endorsement in their class. Their students had also achieved a Certificate endorsement (Merit or Excellence) in NCEA at Levels 1 and/or 2. The ethnic breakdown of the teachers is shown

in Table 8. The 274 teacher participants indicated their teaching experience from a choice of five different periods which ranged from less than one year's experience to more than 25 years' experience. Thirty-nine teachers had up to five years teaching experience, 66 with six to 10 years' experience, 72 with 11 to 17 years' experience, 47 with 18 to 24 years' experience and 50 teachers with 25 years' or more teaching experience. Most teachers in Study Two had either a bachelor's degree or a Graduate Diploma ($n= 155$). The remaining teachers' qualifications were a Postgraduate Diploma ($n=55$), a master's or other higher degree ($n = 58$), including six teachers with doctorates, or a Diploma of teaching ($n = 6$).

Table 8

The Ethnicity of Teacher Participants in Study Two

Māori	Pākehā	Pasifika	Asian	Other ethnicities	TOTAL
43	212	3	6	10	274
15.7%	77.4%	1.1%	2.2%	3.6%	100%

Student participants. The 583 high achieving student participants for Study Two were in Year 12 or 13, aged 16 years or older, and all had attained NCEA Level 1 or Level 2 with Merit or Excellence endorsements. Of the 583 students, 480 were female, and 103 were male. Table 9 shows the ethnicity of students in Study Two by school decile.

Table 9

The Ethnicity of Students in Study Two by School Decile

	Māori	Pākehā	Pasifika	Asian	Other	Total
Decile 1	5	0	0	0	0	5
Decile 2	9	1	2	1	0	13
Decile 3	24	23	12	11	2	72
Decile 4	11	33	0	5	2	51
Decile 5	6	18	4	9	1	38
Decile 6	12	87	6	35	3	143
Decile 7	3	35	0	7	1	46
Decile 8	8	25	0	8	0	41
Decile 9	12	48	5	38	2	105
Decile 10	6	46	1	12	4	69
TOTAL	96 (16.5%)	316 (54.2%)	30 (5.1%)	126 (21.6%)	15 (2.6%)	583 (100%)

Procedures

After obtaining approval from the University of Auckland Human Participants Ethics Committee (UAHPEC; Reference No. 015102), contact information for schools was obtained from the Education Counts website (<https://www.educationcounts.govt.nz>). Principals' consent to access their schools was obtained in writing. After consent was granted, Participant Information Sheets and Consent Forms were forwarded to the schools for distribution to eligible teachers and students. A copy of each of the Participant Information Sheets and

Consent Forms can be found in the Appendices. The UAHPEC also provided the approval to recruit participants through teacher subject associations, Faculty of Education websites and social media pages, participant recruitment websites (e.g., <https://researchstudies.co.nz>), or directly with teachers if their email addresses were accessible in the public domain.

Students either completed the questionnaire online via a link to Qualtrics or on paper questionnaires (see Appendix H for a copy of the student questionnaire). Approximately 1% of students completed the questionnaire on paper, and the remainder completed the questionnaire online. The questionnaire, which collected data for Studies One, Two, and Three took approximately 30 minutes to complete with some students taking less time and other students taking longer.

Teachers were provided with a link via email to complete the Qualtrics survey online and had access to a paper version of the questionnaire if they preferred one method over the other. The teachers' questionnaire took approximately 15 minutes to complete. Every teacher completed the online version of the questionnaire (see Appendix I for a copy of the teacher questionnaire).

Data Analysis

The data gathered from students', and teachers' answers to two open-ended questionnaire prompts were downloaded to an Excel spreadsheet, checked for errors and then uploaded to NVivo. Responses from students' paper questionnaires were transcribed verbatim and added to the online responses on NVivo. All data were analysed thematically using the steps outlined in Braun and Clarke's (2006) approach for analysing qualitative data which involves "identifying, analysing, and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). Thematic analysis is a flexible method of analysing data that suits research questions, such as those in the current study, which are related to people's experiences, perceptions or viewpoints. There are six phases in the analysis process. These are "(1)

Familiarisation with the data; (2) Generating Initial codes; (3) Searching for themes; (4) Reviewing the themes; (5) Defining and naming themes; (6) Producing the report “(Braun & Clarke, 2006, p. 87). The descriptions of the data analysis process outlined below followed the guidelines of Braun and Clarke (2006). The process was first completed for the data about student participants’ best teachers, then followed with teacher participants’ ideal teacher data, student participants’ worst teacher data, and finally, teacher participants’ non-ideal teacher data.

The first phase involved familiarisation with the data and was achieved by reading and re-reading the questionnaire responses, extracting interesting quotes, and noting initial ideas in memos. In the second phase, codes relevant to the research topic and research questions were developed. Two of the first codes made to describe students’ best teachers were ‘supports and helps students’ and ‘relates to students. Data extracts were tagged in each of the participants’ responses and placed into each of the codes.

In the third phase, codes were sorted into themes, and data extracts were allocated to themes. At this point, some codes became themes or sub-themes, and others were discarded. For example, the individual codes of ‘time management’, ‘well-organised’ and ‘prepared for teaching’ were all merged into a new code called ‘organised and prepared’ code as each of those behaviours appeared to be inter-related.

In the fourth phase, themes were reviewed which involved determining whether the themes answered the research questions. Themes were also divided, joined together or rejected in this phase. A second, independent coder was given 10% of the student questionnaire responses and asked to code them into the themes that had been identified by the researcher. Overall, there was a 90% agreement between the researcher and the independent coder. The minor differences related to the coding were discussed until agreement was reached about their

placement by the researcher and the second coder. The final four themes and 17 codes are shown in Table 10.

Table 10

Themes and Codes of an Ideal Secondary School Teacher

Theme	Code
Achievement and learning-related behaviours	Answered questions and explained the work
	Innovative, interesting, and engaging lessons
	Focussed on student learning and success
	Provided extensive help to students
	Provided good notes and resources
	Taught at an appropriate level and pace
	Effective feedback and feed-forward
Professional teaching attributes	Passionate about teaching and their subject
	Advanced subject knowledge & teaching pedagogy
	Organised and prepared
	Committed to further learning and professional development
Personal attributes and abilities	Sense of humour
	Respectful
	Fair and reasonable
	Culturally responsive
Relational practices	Positive connections with students
	Effective classroom management

Two-sample Z-tests. Calculation of Z-tests for Study Two was completed using an online calculator (Stangroom, 2018). Significant results from two-sample Z-tests were included in the results, where applicable. Z-tests were calculated on the number of participant responses to each sub-theme and showed if there were statistically significant differences between the proportions of responses made by student ethnicity, teacher ethnicity, or between student and teacher participants. As large numbers of data were collected, where a sub-theme had a response rate below 5%, it has not been discussed. Additionally, for the teacher ethnic groups, Z-tests were only calculated between Māori and Pākehā teachers as participant numbers of teachers in other ethnic groups were 10 or less, which was too small for comparative analysis. For the student ethnic groups, Z-tests were calculated between Māori, Pākehā, Asian, and Pasifika students' ethnic groups.

Results: An Ideal Teacher

This part of the chapter describes the qualitative data related to an 'ideal' teacher collected from students' and teachers' open-ended questionnaire responses. Student participants were asked to respond in the questionnaire with their 'best' teacher in mind, but for uniformity of responses with the teacher participants, all the data in this section refers to teachers as 'ideal' except when students refer to their teacher as 'best' in direct quotes from the research data. Data were thematically analysed using NVivo, and four themes were identified: (1) Achievement- and learning-related teaching practices; (2) Teachers' personal qualities and attitudes; (3) Professional attributes; and (4) Relational classroom practices.

Achievement and Learning-related Practices of an Ideal Teacher

Participants' responses were coded into seven achievement- and learning-related practices of an ideal teacher. These were: (1) Answered questions and explained work; (2) Taught at an appropriate pace; (3) Provided extensive help; (4) Focussed on student learning and success; (5) Presented innovative, interesting and engaging lessons; (6) Effective feedback

and feed-forward; (7) Provided good notes and resources. The numbers of responses made by students and teachers are shown in Table 11, and the sub-themes are discussed in the following sections.

Answered questions and explained the work. There were 34.6% of students and 8.0% of teacher participants who commented about ideal teachers answering questions and explaining work. Student participants responded significantly more frequently than teachers ($Z = 8.271, p = <.001$), and Asian students responded significantly more frequently than Māori ($Z = 2.77, p = .006$) and Pākehā students ($Z = 2.3, p = 0.02$) about ideal teachers answering questions and explaining work.

Students' ideal teachers used examples and analogies, pointed out obstacles and difficulties to avoid, and provided clear and concise explanations. They were willing to repeat explanations as many times as students needed and tried to answer all their questions. One student said, "She explains ideas to the class in an easy-to-understand way and uses diagrams/visuals to help illustrate confusing concepts.... always ready to answer questions" [S-092, Asian, decile 9]. Another student said, "He always answers questions to the best of his ability. If he doesn't know the answer, he will go away, look it up and come back and tell us" [S-199, Pākehā, decile 6]. Teacher participants commented that ideal teachers provided clear directions and were willing to answer students' queries. One commented that teachers were "...open to questioning and challenge" [T-172, Pākehā, decile 7]. Ideal teachers were also "skilled at explaining the course work in a way students understand" [T-094, Pākehā, decile 10] and used everyday examples to "convey clear explanations of procedures and concepts ..." [T-049, Pākehā, decile 10].

Taught at an appropriate level and pace. There were 33.2% of teachers and 21.4% of student participants who responded about teaching at an appropriate pace, with teacher participants responding significantly more frequently ($Z = 3.701, p = <.001$). Ideal teachers were aware of students' learning needs and devised individualised teaching programmes where necessary, to cater to the range of student achievement levels within a lesson. For example, “[the] ability to pace lesson at a variety of speeds. Also, can teach and guide in a way that best reflects the students' needs...” [T-048, Pākehā, decile 10].

Student participants reported that ideal teachers checked they understood the work and covered the course content at a pace that suited the class. One student commented, “...as well as checking the class understands, [s/he] does not teach too fast but allows the class to learn before moving onto the next topic” [S-272, Pākehā, decile 5]. Another student said, “They slow down when someone can't keep up. They thoroughly check that each student is up to date and is achieving to their potential” [S-006, Pākehā, decile 7].

Innovative, interesting, and engaging lessons. There were 31.4% of students and 37.6% of teacher participants who reported that an ideal or best teacher provided innovative, interesting and engaging lessons. Students reported ideal teachers offered varied activities and resources to each class to keep them interested including quizzes, competitions, ‘hands-on’ practical activities, discussions, online tasks, and videos. One student said, “No two lessons are the same which makes me excited to go to class and learn” [S-115, Māori, decile 9]. Students' ideal teachers found ways to make lessons fun and interactive even when topics or content were difficult. One teacher had “...play-dough activities (for moulding cells) and board games related to the assessment...” [S-222, Pākehā, decile 8].

Table 11

Students' and Teachers' Perceptions of the Achievement and Learning-related Behaviours of an Ideal Teacher

	Students						Teachers					
	All students N = 583	Māori n = 96	Pākehā n = 316	Pasifika n = 30	Asian n = 126	Other n = 15	All teachers N = 274	Māori n = 43	Pākehā n = 212	Pasifika n = 3	Asian n = 6	Other n = 10
Achievement and learning-related behaviours												
Answered questions and explained the work	202 34.6%	26 27.1%	106 33.5%	13 43.3%	57 45.2%	4 26.7%	22 8.0%	3 7.0%	19 9.0%	0 0.0%	0 0.0%	0 0.0%
Innovative, interesting and engaging lessons	183 31.4%	35 38.9%	90 28.8%	11 33.3%	41 32.0%	6 40%	103 37.6%	19 44.2%	76 35.8%	1 33.3%	6 100%	1 10%
Focussed on student learning and success	181 31.0%	28 31.8%	97 31.0%	7 21.2%	41 32.0%	8 53.3%	177 64.6%	29 67.4%	135 63.7%	0 0.0%	0 0.0%	5 50%
Provides good notes and resources	64 11.0%	3 3.1%	39 12.3%	1 3.3%	20 15.9%	1 6.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Taught at correct level and pace	125 21.4%	18 18.8%	60 19.0%	11 36.7%	32 25.4%	4 26.7%	91 33.2%	10 23.3%	77 36.3%	2 66.7%	0 0.0%	2 20%
Effective feedback and feed-forward	56 9.6%	9 9.4%	28 8.9%	5 16.7	13 10.3	1 6.7%	61 22.3%	7 16.3%	49 23.1%	1 33.3%	1 16.7	3 30%
Provided extensive help to students	102 17.5%	12 13.3%	52 16.6%	4 12.1%	26 20.3%	2 10.5%	39 14.2%	7 11.6%	47 15.6%	0 0.0%	1 0.0%	2 0.0%

Teacher participants reported similar comments to the students', including varying teaching strategies, and making classes enjoyable. One participant said, "I want my students to leave the classroom having enjoyed the lesson, having learnt something and wanting to come back again..." [T-271, Pākehā, decile 10]. Several participants discussed being IT savvy, knowing about the latest technology and accessing the internet in lessons as it was important to keep content "...interesting and relevant... Basically just keep trying new stuff" [T-166, Māori, decile 6].

Focussed on student learning and success. There were 31.0% of students and 64.6% of teacher participants who commented about an ideal teacher being focussed on student learning and success, with teachers responding significantly more frequently ($Z = 9.288, p = <.001$). Teacher participants' responses included believing in their students, having high expectations, and challenging them to achieve and improve. One teacher said, "[Teachers] need to expect more... Even if the best piece of work in the world is given, you must have something to offer... so suggest an improvement... Kids rise to high expectations, and they come to thrive on them" [T-001, Pākehā, decile 8]. Participants also said ideal teachers took responsibility for student achievement and believed that all students were capable of learning and success.

Student participants' ideal teachers also had high expectations for achievement. One student said: "This teacher always says that Excellence should and can be achieved by anyone who wants it, which strongly encourages me to continue to have a good work ethic and strive for Excellence in all subjects I am taking" [S-508, Māori, decile 3]. Participants said ideal teachers always encouraged students and helped them to progress. They would "never tell a student that they will not be able to reach a certain grade" [S-028, Pākehā, decile 10].

Provided extensive help to students. There were 17.5% of students and 14.2% of teacher participants who reported that an ideal teacher provided extensive help inside and outside of class. One student said his teacher “was willing and still is willing to spend all his time helping students” [S-243, Pākehā, decile 8]. Another said her teacher did not “...wait for a student to ask for help but will step in where they see someone struggling” [S-107, Pākehā, decile 10]. Student participants also reported ideal teachers were available outside of lesson times and organised extra classes/tutorials during term time and in the school holidays. One student commented that her teacher,

...regularly gave up her time outside of school to teach and help us. I think this is the main reason why she was my best teacher. Because we could see that she was giving 110% to the subject, we were motivated to do so as well [S-047, Asian, decile 7].

Students’ ideal teachers were also accessible via email, text, and social media. One student explained that her teacher, “...set up a Facebook page of her Year 13 students as she knows most of us have it, so that is usually how she communicates to us which is very effective and helpful” [S-335, Māori, decile 5].

Teacher participants said ideal teachers continuously circulated and interacted with students during lessons, provided support and “appropriate scaffolds and templates, but didn’t do all the work for the students” [T-124, Pākehā, decile 5]. Teacher participants also commented that ideal teachers were involved in or attended a range of extra- or co-curricular activities, ran tutorials, were prepared to help students with their work after school, offered text or email support, and were generally “willing to go the extra mile” [T-215, Pākehā, decile 10].

Provided good notes and resources. There were 11.0% of students who responded that an ideal teacher provided good notes and resources. None of the teacher participants

commented about this sub-theme. Statistically significant differences were found by student ethnicity with both Pākehā students ($Z = 2.614$, $p = 0.009$), and Asian students ($Z = 3.088$, $p = .002$) responding significantly more frequently than Māori students. Students commented that notes and other reference materials were useful to refer to when revising. One student said, “I prefer teachers who talk with a slideshow for me to make good notes. My best teacher...ensures we are all getting good notes for revision” [S-040, Pākehā, decile 10]. Other students appreciated that their teachers ensured everyone had access to the resources they used in class (either electronically or in hard copy). One student said her teacher, “... gives us booklets that include all the notes and formulas [sic] we need to know to pass with Excellence ...He also puts all notes, videos and websites related to the topic on Dropbox” [S-447, Māori, decile 6]. In summary, students found study notes useful for revision, and they appreciated teachers who provided classes with either hard copies of course resources or access to online versions.

Effective feedback and feed-forward. There were 21.9% of teacher participants and 9.6% of students who responded about effective feedback and feed-forward, with teachers responding significantly more frequently ($Z = 5.033$, $p = <.001$). Teacher participants described effective feedback and feed-forward as marking work promptly, discussing work/results with students, and giving specific suggestions and explanations about how students could improve. Teachers also commented about providing positive reinforcement and “robust use of formative assessment” [T-074, Asian, decile 7]. One participant said an ideal teacher “ensures students know what they are doing, why they are doing it, what it will look like when they get there, where they are now, what they need to do next, and how to take that next step” [T-124, Pākehā, decile 5].

Student participants also commented that ideal teachers marked and returned work quickly, provided detailed, constructive feedback which helped them to improve, and advised

them about their next steps. One student said her teacher, “Always provided lots of feedback for each internal I completed—I used this feedback to fix up my work, enabling me to get the best result possible in my English external examination” [S-073, Pākehā, decile 10].

Additionally, the feedback was used to ensure students were on track and progressing. One said, “If he doesn’t see an improvement or any progress... he’ll talk to us about how to get back into it, and what needs to be done to get to a place we want to be with our work” [S-149, Pākehā, decile 9].

Summary. This section of the chapter presented the achievement- and learning-related attributes of an ideal teacher: (1) Answered questions and explained the work; (2) Taught at an appropriate pace; (3) Presented innovative; interesting and engaging lessons; (4) Focussed on learning and success; (5) Provided students with extensive help; (6) Supplied good notes and resources; and (7) Provided effective feedback and feed-forward.

Both student and teacher participants reported that ideal teachers readily answered questions and provided clear explanations that they were willing to repeat multiple times, if necessary. Asian students made significantly more responses to this sub-theme than students from the other ethnic groups. Teacher participants reported that ideal teachers were open to answering students’ questions, provided clear directions students could follow and explained the work in ways they could understand.

Teachers responded that ideal teachers taught at an appropriate pace for the variety of student levels within one class and devised programmes of work to cater to individual student need. Student participants commented that an ideal teacher regularly checked student understanding, so the class was paced and levelled appropriately, and adjusted when necessary. Both students and teachers commented that an ideal teacher made lessons fun and interactive, offering a variety of different activities to keep students interested and engaged in their learning.

Participants perceived that ideal teachers had high expectations and that they challenged, encouraged, and supported students to achieve. Teachers took responsibility for student achievement and believed all students could do well. Student participants reported an ideal teacher was willing to help students whenever necessary, inside the class, before and after school, during breaks and in the school holidays. Their teachers were also accessible online. Teacher participants referred to an ideal teacher's willingness to support students with their class work, participate in extra-curricular activities and to provide tutorials, text and email support.

Students found study notes useful for revision. They appreciated teachers who provided classes with either hard copies of course resources or access to online versions.

Students and teachers reported that an ideal teacher marked work quickly, provided students with detailed oral or written feedback with specific suggestions to help them improve, and then advised them about future goals or learning steps. The next section focuses on teachers' and students' perceptions of the professional teaching attributes of an ideal teacher.

Professional Teaching Attributes of an Ideal Teacher

Participants identified four professional teaching attributes of an ideal teacher which are shown in Table 12. These were: (1) Passion for teaching and their subject; (2) Advanced subject knowledge and teaching pedagogy; (3) Organisation and preparation; and (4) Commitment to further learning and professional development. The numbers of responses made by students and teachers are shown in Table 12, and the sub-themes are discussed in the following sections.

Table 12

Students' and Teachers' Perceptions of the Professional Teaching Attributes of an Ideal Teacher

	Students						Teachers					
	All students N = 583	Māori n = 96	Pākehā n = 316	Pasifika n = 30	Asian n = 126	Other n = 15	All teachers N = 274	Māori n = 43	Pākehā n = 212	Pasifika n = 3	Asian n = 6	Other n = 10
Professional teaching attributes												
Passionate about teaching and their subject	131 22.5%	15 15.6%	84 26.6%	5 16.7%	23 18.3%	4 26.7%	94 34.3%	11 25.6%	77 36.3%	0 0.0%	4 66.7%	2 20%
Advanced subject knowledge and teaching pedagogy	82 14.1%	11 12.2%	39 12.5%	5 15.2%	21 16.4%	4 21.1%	104 38.0%	16 37.2%	82 38.9%	1 33.3%	3 50%	2 20%
Organisation and preparation	57 9.8%	8 8.3%	24 7.6%	4 13.3%	19 15.1%	1 6.7%	86 31.4%	14 32.6%	63 29.7%	1 33.3%	2 33.3%	6 60%
Committed to further learning and professional development	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	37 13.5%	7 16.2%	27 12.8%	1 33.3%	2 33.3%	0 0.0%

Passionate about teaching and their subject. There were 21.6% of students and 33.9% of teacher participants who commented about passion for teaching, with teacher participants responding significantly more frequently ($Z = 3.859, p = <.001$). There were also differences by student ethnicity with Pākehā students responding significantly more frequently than Māori students about ideal teachers' passion for teaching and their subject ($Z = 2.34, p = <.05$). Teacher participants referred to ideal teachers as enthusiastic and excited, with a love for teaching. One teacher said, "An ideal teacher has a passion for their subject, which they willingly and joyously share with their students. Their students know the teacher loves their subject..." [T-093, Pākehā, decile 5].

Student participants also commented about teacher enthusiasm, excitement, energy, joy and love for teaching. One student said of her mathematics teacher, "She is so passionate [about her subject], and the passion is contagious. She believes Calculus is beautiful and we should all be 'super excited' about it" [S-027, Pākehā, decile 10]. Students' ideal teachers also had a passion for their job. For example, one student said, "...she is just amazing and gives teaching her all; she loves her job..." [S-542, Pasifika, decile 3].

Advanced subject knowledge and teaching pedagogy. There were 38.0% of teachers and 14.4% of student participants who commented about ideal teachers' advanced subject knowledge and teaching pedagogy. Teacher participants responded significantly more frequently than student participants about these factors ($Z = 7.769, p = <.001$). Student participants expected teachers to be highly knowledgeable and relied on them having the skills to help them obtain high grades. One student said, "The important factor for me is that they know their subject inside and out, and are clear about what is correct and incorrect" [S-019, Pākehā, decile 7]. 'Good' teachers knew their subject well enough to teach without having to rely on a textbook. One student explained that her teacher "...interacts with the class, then hands out a sheet that summarises what she said. She only uses textbooks when

everything is clear to us because reading from a textbook is not a good way of teaching” [S-173, Pākehā, decile 9].

Comments from the teacher participants were similar to students’, including having broad content knowledge (especially at senior levels), and an understanding of how students learn. One participant said an ideal teacher “knows their subject well and how to achieve the top grades” [T-179, Pākehā, decile 5]. However, teacher participants allowed their colleagues some leniency. For example, teachers could be “...confident with content but also not afraid to make mistakes in front of students [T-053, Pākehā, decile 10] as participants thought students benefitted from learning how to correct errors when they occurred and needed to see that teachers were not infallible.

Organisation and preparation. There were 31.4% of teacher and 9.7% of student participants who commented about organisation and preparation. Teacher participants responded significantly more frequently than students that organisation and preparation were characteristic of ideal teachers ($Z = 7.913, p = <.001$). Ideal teachers planned lessons and had good time management skills. Some participants said teaching needed to be “...structured and organised, learning objectives clearly spelled out, [and a] review of key points and ideas from each lesson” [T-248, Pākehā, decile 5]. Student participants said their ideal teachers were on time for each class, well-prepared, and planned structured lessons. One student’s teacher was “...unbelievably organised, with lesson plans for every one of her classes for the whole school year” [S-094, Pākehā, decile 9]. Students also appreciated teachers who were on time and got on with teaching. One student said, “He’s always prepared...as soon as we arrive to class, we immediately learn” [S-208, Asian, decile 8]. There were also differences by student ethnicity, with Asian students significantly more likely than Pākehā students to respond that an ideal teacher was organised and prepared for teaching ($Z = 2.306, p = .02$).

Committed to further learning and professional development. There were 13.5% of teacher participants who responded about professional learning and development. None of the student participants made comments related to this sub-theme. Participants described ideal teachers as active and life-long learners, who upskilled regularly and were “role models for continuing learning” [T-134, Pākehā, decile 6]. Ideal teachers also sought leadership opportunities and were “...engaged in wider education and subject discussion, e.g., subject association, conferences, NZQA marking and/or moderation” [T-035, Pākehā, decile 7].

Summary. This part of the chapter presented the results related to the professional teaching attributes of an ideal teacher: (1) Passion for teaching and their subject; (2) Advanced subject knowledge and teaching pedagogy; (3) Organisation and preparation; and Commitment to further learning and professional development. Teachers who were passionate and enthusiastic about teaching outwardly demonstrated that they loved their subject and their job, and students appeared to be interested and engaged in those teachers’ classes. Ideal teachers also had advanced subject knowledge and teaching pedagogy. They taught content effectively and understood how students learnt.

Ideal teachers were well organised and prepared for teaching. They planned lessons, had good time management and taught well-structured lessons. A commitment to further learning and professional development was only a factor for teacher participants who viewed ideal teachers as being committed to upskilling, so they remained up-to-date in education. Teachers also engaged with the wider education community and appeared to be lifelong learners. The next section focusses on the results related to teachers’ and students’ perceptions of the personal qualities and attitudes of an ideal teacher.

Personal Qualities and Attitudes of an Ideal Teacher

Participants identified four personal qualities and attitudes of an ideal teacher which were: (1) A sense of humour; (2) Respect; (3) Fairness; and (4) Cultural responsiveness. The number of responses made by students and teachers is shown in Table 13, and the sub-themes are discussed in the sections below.

A sense of humour. A sense of humour was identified by 17.5% of students and 15.0% of teacher participants as an important personal characteristic of an ideal teacher. Students said ideal teachers told jokes and funny stories, and could “laugh with us, at us, and at themselves” [S-548, Pākehā, decile 3]. Teachers used humour to make students feel comfortable. One student said, “He makes jokes, sometimes that aren’t that funny, but that gives us the feeling that being ‘dorky’ is okay... He is just himself; it makes us feel like we can just be ourselves ...” [S-381, Asian, decile 7]. Teacher participants said an ideal teacher was able to laugh and have fun with students. One teacher said, “A teacher needs a sense of humour and the ability to not take themselves too seriously” [T-019, Pākehā, decile 5]. Humour helped to make a class enjoyable for students and ensured they were “loving learning (as well as getting good grades)” [T-025, Pākehā, decile 6].

Respect. There were 12.7% of students and 19.3% of teacher participants who responded about ideal teachers treating students with respect. Teacher participants responded significantly more frequently ($Z = 2.555, p = <.05$) than students that respectfulness was a characteristic of an ideal teacher. Teacher participants’ viewed respect as speaking politely and listening to students. One said it was important to show students that you “...value them and their opinions even if they are contrary to the teacher’s...” [T-044, Pākehā, decile 8]. Teachers also expected that they would receive respect from students but appreciated that gaining it was not automatic. One participant noted that an ideal teacher “...doesn’t demand respect, s/he earns it, [and] this may take time [T-133, Pākehā, decile 3].

Students' ideal teachers spoke nicely and listened to them. One student said, "He is definitely a good listener and supporter. He will listen to what you say and agree with you or disagree with you but always tells a reason why he agrees or disagrees" [S-478, Asian, decile 5]. Teachers also maintained student privacy and did not humiliate them in front of others. For example, "[She] never embarrasses or talks down to someone even if they are misbehaving" [S-579, Asian, decile 4]. Students reported that there was mutual respect between them and an ideal teacher: "[She] respects us and in turn earns our respect" [S-210, Māori, decile 8].

Fairness. There were 20.4% of teachers and 9.8% of student participants who said that an ideal teacher was fair and reasonable, with teacher participants responding significantly more frequently ($Z = 4.302, p = <.001$) about this factor. Common responses from teacher participants included being reliable, consistent, fair but firm, and honouring their word, for example, "they do what they say they will" [T-077, Pākehā, decile 7]. Most of the comments referred to teachers being fair and consistent in their treatment of students. One teacher said, "Students know that the teacher is authentic, genuine and transparently fair in what they do, say and articulate in their lessons and programmes" [T-245, Māori, decile 5]. Student participants referred to teachers being impartial, setting reasonable amounts of homework, having the same rules for all their students but also being reasonable about deadlines if there was a valid excuse. For example: "They have realistic expectations of how students have other classes and assignments to complete, as well as jobs and extra-curricular work. However, they are not lenient if you do not have a 'justified'³ excuse" [S-391, Pākehā, decile 7].

³ The student is likely to be referring to 'justified' and 'unjustified' reasons for missing class or being unable to complete work. In most secondary schools, student absence is marked as 'justified' when prior approval is given to be absent or when a parent/guardian provides a note or medical certificate, etc. as an explanation. An 'unjustified' absence is when no note is provided or approval is not given.

Cultural responsiveness. There were 19% of teacher participants and 3.1% of students who responded about cultural responsiveness being characteristic of an ideal teacher, with teacher participants responding significantly more frequently than students ($Z = 7.9214$, $p = <.001$) about this factor. A statistically significant difference was also found between Māori and Pākehā teachers' responses, with Māori teachers responding significantly more frequently about culturally responsive practice than Pākehā teachers ($Z = 2.527$ $p = 0.01$). Comments from teacher participants included being tolerant, non-judgemental, unbiased, and connecting with students' whānau/family. Central to culturally responsive practice was including references to a student's culture in lessons so that new concepts became relevant to their experiences. One participant explained that teachers "...must value what each student brings to their class: knowledge, background, culture etc., and use this to engage students in their learning and make them feel as though they are actively participating in their education..." [T-029, Māori, decile 3]. Māori student participants also commented on how ideal teachers linked learning to students' experiences and interests. One student said her te reo teacher, "understands students, how we work and knows what interests us" [S-232, Māori, decile 8], whereas another said "My best teacher is very understanding... She tries to connect with all her students, so she can find ways for them to learn if they don't understand what she is teaching" [S-001, Māori, decile 1].

There were also differences in how Māori and Pākehā teachers enacted culturally responsive practice. Māori teachers acknowledged that a student's cultural identity was an integral part of who they were. One participant said an ideal teacher helped students "see their potential as leaders in their households, their whānau, hapū and iwi" [T-028, Māori, decile 3]. Māori teachers also connected culture with learning. For example, "The ideal teacher keeps an open, unbiased mindset regarding their students' potential and does not stereotype...Relates concepts to be learnt to students' world context" [T-226, Māori, decile 6]

Table 13

Students' and Teachers' Perceptions of the Personal Characteristics of an Ideal Teacher

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Personal characteristics												
Sense of humour	102 17.5%	12 12.5%	58 18.4%	3 10%	25 19.8%	4 26.7%	41 15.0%	3 7.0%	38 17.9%	0 0.0%	0 0.0%	0 0.0%
Respect	74 12.7%	9 9.4%	38 12.0%	6 20%	15 11.7%	6 40%	53 20.1%	12 23.3%	40 66.7%	2 50%	3 50%	4 40%
Fairness	63 10.8%	5 5.2%	35 11.0%	4 13.3%	18 14.1%	1 6.7%	55 20.1%	10 23.3%	42 19.8%	0 0.0%	0 0.0%	3 30%
Cultural responsiveness	18 3.1%	2 2.1%	7 2.2	1 3.3%	7 5.6%	1 6.7%	52 19.0%	14 32.6%	36 16.0%	2 66.7%	2 33.3%	0 0.0%

and another participant said an ideal teacher "...always shows he is for the learners, for success, and for them as culturally-located people!" [T-021, Māori, decile 7].

Pākehā teachers referred to cultural responsiveness as a 'celebration' or being "inclusive to all cultures" [T-016, Pākehā, decile 3]. Participants said that ideal teachers "...acknowledge and celebrate diversity" [T-173, Pākehā, decile 7] and referred to the "celebration of, acceptance of, and recognition of cultural differences" [T-027, Pākehā, decile 6]. Finally, one participant said an ideal teacher "wants to get to know their 'cultural baggage'" [T-196, Pākehā, decile 6] which suggested that a student's culture could be viewed unfavourably, as the term 'baggage' generally has negative connotations.

Summary. This part of the chapter presented the findings that were related to the four personal qualities of an ideal teacher identified by student and teacher participants. These were: A sense of humour, respect, fairness, and cultural responsiveness.

Participants identified that an ideal teacher had a good sense of humour, told jokes and funny stories, had fun with students, and used humour to help students enjoy learning and feel comfortable in their classes. Student participants commented about the mutually respectful interactions they had with their teacher who listened to them, spoke politely, maintained their privacy, and did not embarrass or shame them in front of their peers. Teacher participants said ideal teachers were respectful to their students and hoped to receive respect in return. Similarly to students, they commented about being polite to students and listening to what they had to say.

Teacher participants thought ideal teachers who demonstrated fairness kept their word and were reliable, honest, genuine, and consistent in their associations with students. Student participants saw ideal teachers as being impartial, having reasonable expectations when it came to homework, having the same rules for all students, but allowing some leeway with deadlines when students had valid excuses.

Teacher participants responded significantly more frequently than students, and Māori teachers responded more frequently than Pākehā teachers about cultural responsiveness. Māori teachers' view of responsive practice focussed on students developing a positive cultural identity and the importance of teaching through culture to enhance learning and achievement. Pākehā teachers focussed more on cultural celebration and acceptance of diversity and cultural difference but did not refer to learning. Māori students' responses related to teachers getting to know them and understanding their culture so that they could teach them effectively. The next section presents the results related to the relational practices of an ideal teacher. These practices were effective classroom management and positive relationships with students.

Relational Classroom Practices of an Ideal Teacher

Participants identified two relational practices of an ideal teacher which are listed in Table 14. These qualities were: (1) Effective classroom management; and (2) Positive relationships with students. The two sub-themes are discussed in the sections below:

Effective classroom management. There were 25.2% of teachers and 8.7% of student participants who commented about effective classroom management being a practice of an ideal teacher, with teacher participants responding significantly more frequently about this practice ($Z = 4.468, p = <.001$) than students. There were also differences by teacher ethnicity, with Māori teachers responding significantly more frequently than Pākehā teachers ($Z = 2.009, p = 0.04$) about cultural responsiveness. Teacher participants described effective classroom management as clear expectations and consistency in the consequences applied for inappropriate behaviour. Participants also referred to teachers remaining composed and in control when disciplining or reprimanding students. One teacher commented, “[S/he] does not overreact; always remains calm, looking for the good in each student” [T-166, Pākehā, decile 7].

Student participants said ideal teachers managed students' behaviour by being consistent, setting boundaries, having clear expectations, and a sense of authority and professionalism. One student said, "He isn't strict, but he keeps to his rules. No late [ness]...no talking during individual work...He is consistent..." [S-381, Asian, decile 7]. Several students said ideal teachers were strict and maintained order and this was appreciated because it meant they could concentrate and work. For example, one student said: "...she doesn't entertain antics from people trying to disrupt the class" [S-003, Pākehā, decile 10] and another said: "... when she needs to, she takes control and is able to get the class to listen and get the work done" [S-335, Māori, decile 5].

Positive connections or relationships with students. There were 98.5% of teacher participants and 70.2% of students who commented that an ideal teacher had positive connections or relationships with students. Teacher participants made significantly more frequent responses than students ($Z = 9.134, p = <.001$) about ideal teachers' positive connections with students. Teacher participants said ideal teachers were approachable, polite, friendly and personable, and made students feel welcome in their classrooms. Some participants had teacher-student relationships where they maintained a professional distance, with interactions described as "friendly but not overly familiar" [T-063, Pākehā, decile 10]. Teachers appeared to have an awareness of being in positions of responsibility and authority, and sometimes having to have difficult conversations with students about behaviour and their achievement, so boundaries needed to be set.

Teacher participants said it was important to build positive teacher-student relationships through caring and by learning about students' home backgrounds and their interests outside of school. One said, "The teacher should be aware of the things in the students' lives which will impact on both success and failure so that the teaching programme can—as far as possible—take this into account" [T-234, Māori, decile 6]. Participants also

said it was important to show that they genuinely liked their students as people and not just as learners. One teacher said, “An ‘ideal’ teacher has a genuine interest in their students ... This builds positive relationships which are really important in engaging students. Students like to know their teacher cares about them...” [T-036, Māori, decile 6].

Student participants described ideal teachers as welcoming, likeable, and easy to talk to. One student said her teacher had “normal conversations with her students” [S-144, Asian, decile 9] and others reported teachers said, “...hi, in the hallways” [S-299, Pākehā, decile 8]. For other students, simple courtesies helped them bond with teachers. One student said an ideal teacher “makes an effort to get to know all of our names and will check up on us, so it feels as if he really cares” [S-017, Pākehā, decile 7]. Several students commented about an ideal teacher knowing their name, which indicated this was a simple way students felt acknowledged and cared for.

Participants appreciated when teachers made a sincere effort to get to know them. One student said her teacher was “...genuinely interested in their students’ personal lives as well as their life at school. This teacher did more than just provide a teaching service as most teachers do but made a positive learning environment by engaging with students” [S-565, Māori, decile 8]. Teacher-student relationships also developed because of a shared cultural and community background. For example, “She can relate to her students because she comes from our community, knows how we grew up, and connects with the people we live around on a cultural level” [S-001, Māori, decile 1].

Students were clear that although they enjoyed teachers who sometimes joked around, they wanted teachers who set boundaries and kept the class on track. For example, one student said her ideal teacher “can have a laugh, but gets us through all assessments” [S-496, Māori, decile 3], and another said her teacher “knows when to have a bit of fun and knows when to stop, control the class, and get work done” [S-553, Māori, decile 3].

Summary. This part of the chapter presented the findings that were related to ideal teachers' two relational practices: Effective classroom management and positive connections/relationships with students. Teacher participants said ideal teachers had clear expectations and consequences for inappropriate behaviour and remained calm and in control when they disciplined students. Student participants' ideal teachers set clear, strict boundaries, maintained order and controlled behaviour so that students could get work done without disruptions.

Almost every teacher (98.5%) made a response about the importance of a positive teacher-student relationship, which was significantly higher than the student response rate (72.0%). Teacher participants described a variety of different types of positive relationships with students. Some teachers focussed on being approachable and welcoming, others were friendly but maintained a professional distance, and some teachers built caring relationships with students that went beyond teaching and were developed through learning about students' interests outside of school and their home backgrounds. Student participants also described an array of relationships with ideal teachers. Some students' teachers were described as welcoming and easy to talk to, whereas other teachers developed deeper connections with students by taking an interest in their lives outside of school or relating to students through their shared community and culture.

Table 14

Students' and Teachers' Perceptions of the Relational Classroom Practices of an Ideal Teacher

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Relational classroom practices												
Positive connections with students	420 72.0%	78 81.3%	224 70.9%	20 66.7%	86 68.3%	12 80%	270 98.5%	42 97.7%	212 100%	3 100%	5 83.3%	8 80%
Effective classroom management	51 8.7%	11 11.5%	27 8.5%	3 10%	9 7.0%	1 6.7%	69 25.2%	17 39.5%	51 24.1%	0 0.0%	0 0.0%	1 10%

Results: A Non-Ideal Teacher

This part of the chapter describes the qualitative data related to a non-ideal teacher collected from students' and teachers' open-ended questionnaire responses. Student participants were asked to respond in the questionnaire with their 'worst' teacher in mind, but for uniformity of responses with the teacher participants, all the data in this section refers to teachers as 'non-ideal', except when students refer to their teacher as 'worst' in direct quotes from the research data. For each section, significant results from two-sample Z-tests, where applicable, are provided. Z-tests were calculated on the total number of responses to each sub-theme to see whether there were differences in the proportions of responses between students, teachers, or by ethnicity.

Of 583 students surveyed, 18 (3%) responded that they could not identify a non-ideal teacher. One student explained,

I like all of my teachers and think they are capable of teaching me well.

My worst teacher, if I had to choose one, would be of the subject that I hate the most (French), but this is only because I dislike the subject, not the teacher... [S-325, Pākehā, decile 10].

Four teachers (1.5%) out of 274 also could not identify characteristics of a non-ideal teacher or said non-ideal teachers did not exist. One said, "In the 21st century, very few of these teachers stay in teaching. It is too hard for them; kids and the school will soon know" [T-030, Pākehā, decile 5]. Another said, "even so-called bad teachers have something to offer; it's just the system breaks them down". He continued, "I don't think any teacher goes out to be 'less than ideal'. Teachers need to be treasured, and if they fall into that category, it is because there are no support structures and they are left to struggle [T-198, Māori, decile 4].

The remaining data for non-ideal teachers were coded to the same four themes identified for an ideal teacher: (1) Achievement and learning-related teaching practices; (2) Teachers' personal qualities and attitudes; (3) Professional teaching attributes; and (4) Relational classroom practices. A complete list of the themes and codes are shown in Table 15.

Table 15

Themes and Codes of a Non-ideal Secondary School Teacher

Theme	Code
Achievement and learning-related behaviours	Did not answer questions or explain work
	Boring and unengaging lessons
	Not focussed on student learning and success
	Unhelpful in and outside of class
	Taught at the wrong pace or level for the students
	Poor content knowledge or teaching competence
	Poor or non-existent feedback
Professional teaching attributes	Lacks passion or enthusiasm for teaching
	Disorganised or does not plan lessons
	Avoids professional learning or development
Personal attributes and abilities	Disrespect
	Discrimination
	Unfair or unreasonable
Relational practices	Poor connections with students
	Nice person, bad teacher
	Ineffective classroom management

Achievement and Learning-related Practices of a Non-Ideal Teacher

Participants identified six achievement and learning-related practices of a non-ideal teacher: (1) Did not explain work, answer questions (2) Boring and unengaging lessons; (3) Unwilling to give extra help inside or outside of class (4) Taught at the wrong pace or level; (5) Not focussed on student learning or success; and (6) Poor or non-existent feedback. The numbers of responses made by students and teachers are shown in Table 16, and each of the sub-themes is discussed below:

Did not answer questions or explain work. There were 38.9% of students and 12.4% of teacher participants who referred to non-ideal teachers not answering questions or explaining work. Student participants responded significantly more frequently than teachers ($Z = 7.87, p = <.001$) about this sub-theme. Student participants said teachers did not, could not, or tried to avoid answering questions. One said: “No questions are allowed... If we ask questions, the teacher threatens us with an ‘Achieved’” [S-138, Asian, decile 9]. Another said, “...any questions regarding answering exam questions are brushed off with answers along the lines of ‘Oh, the exams are supposed to be confusing’” [S-448, Asian, decile 3].

Teacher explanations were also poor. One student said when she asked her teacher to re-explain something “... he will say that he has already explained it or will explain it in the same way that you didn’t understand before” [S-485, Pākehā, decile 6]. Other teachers would instruct students to find answers in textbooks. One student said her teacher, “Always tells us to refer to the book, even though the explanations are sometimes too complex to understand” [S-556, Māori, decile 3] and another said, “... whenever I ask questions, he just says to refer to the textbook. I take it that this year I will be teaching Year 12 Business Studies to myself” [S-217, Pākehā, decile 9]. Other students complained that instead of explaining concepts, a non-ideal teacher just told them the answers or did the work for them. For example,

When asking for help with a specific question they tend to do it for me instead of helping me to do it. When I move onto the next question, I am still lost because they just did it for me, they didn't actually help [S-461, Māori, decile 5].

Teacher participants raised several issues about poor explanations, question refusal and telling students off for asking questions. One teacher said a non-ideal teacher, "...closes down questions that they are uncomfortable with. [They] don't admit they don't know something instead of being open and saying, let's find that out" [T-044, Pākehā, decile 8]. They also provided students with answers instead of explaining how to reach the answer on their own. One participant said a non-ideal teacher, "Presents material in a mechanistic way - here is the formula; just apply it - without explaining why. [Then], steps in and does it for them..." [T-080, Pākehā, decile 7].

Taught at the wrong level or pace. There were 17.3% of students and 20.1% of teachers who commented about teaching at the wrong level or pace, with student participants responding significantly more frequently ($Z = 4.246, p = < .001$). Student participants said teachers taught at a pace that was either too fast, too slow. Some students commented they were taught so slowly, the class lost interest: "It's been three weeks, and we are still working on the same set of questions, which could have easily been done in one day. She drags work out for too long which bores her students..." [S-181, Pasifika, decile 6]. Most students' responses to this sub-theme, however, were complaints that their teacher covered the content too quickly. One student said the teacher, "...works too fast through our course work and students are often left confused at the end of each lesson...She just cannot comprehend that we don't understand what she is teaching" [S-221, Pākehā, decile 5].

Participants reported that their non-ideal teacher's class was often pitched at the wrong level because the teacher did not check prior knowledge or whether students

understood what had been taught. One student commented, “When we don’t ‘get’ something he won’t even realise because he talks to the class as one, so doesn’t know where we are at. When we don’t understand one thing, he keeps moving on. It gets harder and harder...” [S-485, Māori, decile 6]. On the other hand, some work students received in their non-ideal teacher’s class was low level and babyish. For example, “She treats us like kids, making us colour in stuff and do posters” [S-249, Pākehā, decile 4].

Teacher participants also said some teachers taught at too high a level and had difficulty simplifying content for students who needed more support. Other teachers had a “one size fits all approach to teaching” [T-094, Pākehā, decile 10] and expected all students to work at the same pace. One participant said a non-ideal teacher was “dismissive of students who seem unable to grasp ideas quickly ... [and] unwilling to seek different ways to help students learn...” [S-123, Pākehā, decile 5].

Boring and unengaging lessons. There were 17.8% of students and 37.6% of teacher participants who responded that non-ideal teachers’ lessons were boring and unengaging. Teacher participants responded significantly more frequently about this sub-theme ($Z = 6.301, p = <.001$) than students. Teacher participants reported that boring and unengaging lessons included ‘chalk and talk’ where teachers wrote notes or did exercises on the board, which students copied down into their books. Other types of unengaging and unimaginative teaching included lecture-style lessons or having students work from textbooks. One teacher said,

“[The] rote learning and the ‘sit down and shut up’ style, so to speak, is outdated and doesn’t enhance student engagement...Some will learn this way - because that is what they know to do, and they are well trained - but the experience is less than ideal” [T-065, Pākehā, decile 10].

Table 16

Students' and Teachers' Perceptions of the Achievement- and Learning-related Practices of a Non-ideal Teacher

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Achievement and learning-related practices												
Did not answer questions or explain the work	227 38.9%	41 42.7%	114 36.1%	14 46.6%	48 38.1%	10 66.7%	35 12.8%	3 7.0%	28 13.2%	1 33.3%	1 16.7%	2 20%
Boring & unengaging lessons	104 17.8%	17 17.7%	50 15.8%	3 10%	28 22.2%	6 40%	103 37.6%	19 44.2%	78 13.8%	2 66.7%	5 83.3%	0 0.0%
Taught at the wrong pace or level for the students	101 17.3%	17 17.7%	58 18.4%	7 23.3%	17 13.5%	2 13.3%	54 19.7%	9 20.9%	39 18.4%	3 100%	2 33.3	2 20%
Poor content knowledge or teaching competence	117 21.1%	13 13.5%	48 15.2%	5 16.7%	45 35.7%	6 40%	57 20.8%	4 9.3%	48 22.6%	2 66.7%	1 16.7%	2 20%
Not focussed on student learning and success	84 14.4%	23 24.0%	47 14.9%	3 10%	10 7.9%	1 6.7%	81 29.6%	11 25.6%	78 28.5%	2 66.7%	0 0.0%	3 30%

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Unhelpful inside or outside of class	67 11.5%	15 15.6%	39 12.3%	1 3.3%	10 7.9%	2 13.3%	32 11.7%	5 11.6%	24 11.3%	2 66.7%	1 16.7%	0 0.0%
Provides poor feedback or no feedback	37 6.3%	2 2.1%	20 6.3%	3 10%	11 8.7%	1 6.7%	36 13.1%	1 2.3%	32 11.7%	1 33.3%	1 16.7%	1 10%

Teacher participants also commented some teachers were unwilling to make changes in their practice to make classes more engaging and interesting for their students. One teacher said non-ideal teachers had “[A] lack of imagination...Some teachers have been teaching the same topics the same way for years” [T-264, Pākehā, decile 10].

Student participants described classes where teachers spent whole lessons talking or reading from textbooks and where there were few opportunities for student participation or interaction with the teacher or their peers. For example, “Makes topic I like boring by simply engaging in 50-minute monologues as opposed to engaging with the class” [S-333, Pākehā, decile 10]. Another said, “He doesn’t interact much with his students or make learning fun; it is the same each day with no variation in teaching...” [S-553, Māori, decile 3]. Other students reported they copied endless pages of notes from the whiteboard or PowerPoints. Whereas students found notes useful to refer to when they revised for assessments, notes were useless if they were not discussed in conjunction with examples.

One student said, “...most of the period is her writing entire paragraphs on the board, often without explaining them, and we have to copy them down. She copies these notes off a textbook or piece of paper that she doesn’t let us use” [S-448, Asian, decile 3]. It appeared that students would have preferred to receive hand-outs. However, when one student suggested her teacher change his delivery style, he was unreceptive:

... [My teacher] believes writing it all down instead of giving us print outs will benefit us as we are “reading the information as we go”.

However, this is not the case. When we make a comment on how we do not like his way of teaching he says things such as, “I have graduated university with many diplomas, so if you do not like my teaching and you think you can do a better job, then please stand up here and teach the class” [S-261, Asian, decile 5].

Unhelpful inside or outside of class. There were 11.7% of teachers and 11.5% of student participants who commented about teachers being unhelpful inside or outside of class. Teacher participants reported that non-ideal teachers did not participate in extra-curricular or wider school events. For example, “Does the bare minimum, does not participate in any extracurricular [activities] to form relationships” [T-091, Māori, decile 4]. Additional learning support was also not provided. One participant said, “The teachers who are less than ideal seem just to work 8.30-3.30, and then that’s it. They are not willing to give feedback after hours, via Google Docs or whatever” [T-189, Pākehā, decile 1].

Like teacher participants, students reported about the lack of learning-related help their non-ideal teacher provided in and out of class. However, they made no comments about teachers’ non-participation in extra-curricular or school events. Concerning their teacher being unhelpful, some students said they felt ignored. One student said his teacher “...never gives the students attention and never helps the students to get better” [S-500, Pākehā, decile 3]. Other students said their teachers were helpful to some students in the class but not to everyone. For example,

She gives us a task and then sits at the desk for the entire lesson with the people that she thinks need help the most, ignorant to the fact that other students also need help. I can sit with my hand raised for an entire lesson and be completely ignored. [S-237, Pākehā, decile 6].

Students also reported that non-ideal teachers did not provide support to students away from classes either. One student said, “It is also very difficult to contact her outside of school time/class time as she doesn’t reply to emails” [S-096, Pākehā, decile 9].

Not focussed on student learning or success. There were 34.3% of teacher participants and 18.0% of students who responded that non-ideal teachers were not focussed on student learning or success. Teacher participants responded significantly more frequently

to this sub-theme ($Z = 5.269, p = <.001$) than students. There were also differences by student ethnicity with Māori students responding significantly more frequently than Pākehā ($Z = 2.41, p = <.05$) and Pasifika students ($Z = 1.982, p = <.05$) that non-ideal teachers were not focussed on student learning or success. Students reported their teachers had low expectations for their achievement and did not seem motivated for them to succeed. One student said her non-ideal teacher, “treats us like we are dumb” [S-341, Pākehā, decile 5] and another said her teacher “doesn’t care about our grades or if we are learning” [S-334, Māori, decile 10].

Non-ideal teachers also demonstrated low expectations to some students by only teaching to ‘Achieved’ level for achievement standards and not to ‘Merit’ or ‘Excellence’ level. One student’s class was told, “We would have to do homework if we want to get higher than an Achieved because he only teaches Achieved. But then he doesn’t tell us what to research, etc.” [S-316, Māori, decile 3]. Furthermore, teachers limited student access to higher grades and only allowed some students to gain credits, and to re-do assessment tasks. For example, “He doesn’t set us up to achieve a high grade, and if he thinks you’re incapable, then he won’t offer you a re-sub or re-sit opportunity” [S-260, Māori, decile 4]. Another student said, “She does not care if we get a ‘Not achieved’. When wanting to re-sub for Excellence, she says, ‘Why? Merit is good enough’” [S-386, Asian, decile 2].

Other students’ teachers were more explicit in their low expectations, telling students not to try or that they could not achieve highly. One student’s teacher “would discourage students from working hard...saying things such as ‘it’s too late to start studying now’” [S-527, Pākehā, decile 3]. Other teachers told students if they got a low mark, it was because they lacked ability. One student said her teacher told them, “we’re not as capable as the other teacher’s class” [S-462, Pākehā, decile 6]. Students also reported that their non-ideal teachers did not take responsibility for student learning or achievement, and instead blamed students if

they did not do well. One student commented, “Our whole class did poorly in a recent practice test, and she put the blame purely on us saying we did not work hard enough, instead of offering us help or adjusting her teaching to remedy the situation” [S-436, Pākehā, decile 6]. Finally, students’ non-ideal teachers demonstrated a lack of commitment to students, with one commenting her teacher “didn’t show up to class for a week before Internals” [S-482, Māori, decile 10] and another commenting, “Class was seen as ‘cool’ because we didn’t do anything, but when it came to Externals we all failed” [S-516, Māori, decile 2].

Teacher participants discussed non-ideal teachers having low expectations for student achievement with some limiting students’ opportunities by the content that was taught. For example, “Just provides the basics - often taught just to Achieved standard - does not give the students the material to excel” [T-121, Pākehā, decile 5]. Other participants referred to low expectations for students’ future career prospects, with one commenting, “I have actually heard a teacher tell a kid that their future is as a street cleaner - and it wasn’t said like it was a good thing” [T-044, Pākehā, decile 8].

There was also a lack of responsibility for student achievement and attributing blame elsewhere for low grades or failure: “These teachers don’t care if a student doesn’t achieve to their potential; they will blame the student, other teachers, family or friends. They will not self-reflect on what they could have done better” [T-241, Pākehā, decile 4]. Participants said some teachers thought it was too difficult to effect change in low achieving or disengaged students. One commented that a non-ideal teacher “gives up on ever getting better work from poor-performing students [and does] not push those who could gain Excellence with more encouragement” [T-118, Pākehā, decile 7].

Poor or non-existent feedback. There were 13.2% of teacher participants and 6.2% of students who responded about a non-ideal teacher’s poor or non-existent feedback.

Teacher participants responded significantly more frequently than students ($Z = 3.332, p =$

<.001) about non-ideal teachers poor or non-existent feedback. Pākehā teachers also made significantly more responses than Māori teachers ($Z = 2.275$, $p = .02$ about poor or non-existent feedback).

Teacher participants' comments referred to non-ideal teachers not marking students' work, for example, "...cannot be bothered with marking or providing meaningful feedback" [T-123, Pākehā, decile 5], or taking too long to mark work. For example, "Doesn't get marking done within a reasonable time frame" [T-167, Pākehā, decile 7] so any feedback received was irrelevant by the time work was returned. Some teachers reported that the only feedback some students received was criticism. Other common responses about poor feedback included, "not clear or helpful when it comes to next steps..." [T-189, Pākehā, decile 1]; "gives students very little individual feedback" [T-095, Pākehā, decile 10]; and "gives solely summative feedback rather than formative" [T-268, Pākehā, decile 10].

Some student participants' comments about feedback from their non-ideal teacher referred to it being non-existent. One student said her teacher, "... isn't good with checking homework and she doesn't mark it. When I asked her about my essay, she's like this to the whole class: 'Stop harassing me, your essays are in moderation'! When I asked her if she could tell me my grammar mistakes in the English essay, she's like 'I don't have time right now...'" [S-298, Asian, decile 10]. Other students reported they received feedback when it was too late to be useful. For example, "She will give vital feedback the night before an assessment meaning you have no chance to prepare" [S-166, Pākehā, decile 9]. Students reported feedback was often vague without any suggestions. One student commented, "The worst teacher doesn't write down clear notes that say what is wrong with the work" [S-011, Pākehā, decile 7]. For feedback to be useful, it needed to be clear, so students knew how they could improve. However, students were also sensitive to highly critical feedback. One

student said, “My current worst teacher gives criticism in a way that makes you feel like you are hopeless at the subject and have no hope of improving” [S-166, Pākehā, decile 10].

Summary. This section of the chapter presented the results that were related to the achievement and learning-related attributes of a non-ideal teacher. Student and teacher participants both said non-ideal teachers refused or avoided answering questions. They also struggled to explain work to students in a comprehensible manner, giving complicated, difficult-to-follow explanations, or referred students to textbooks when they could not help them. Some non-ideal teachers refused to re-explain work, telling students they should have listened the first time. Other non-ideal teachers just gave students the answers or did the work for them.

Teacher participants described boring and unengaging lessons as ‘chalk and talk’ (teachers talking and students copying notes), lectures, or students working from textbooks. Student participants were also not receptive to whole lessons of the teacher talking, reading from textbooks, or when there were no opportunities for interaction. Notes were useful for revision, but students did not enjoy spending whole periods copying without any discussion and preferred to receive hand-outs or access to notes online. Both teacher and student participants said non-ideal teachers were unhelpful to students in class and did not provide students with any extra help outside of school hours. Teacher participants also noted that non-ideal did not participate in extra-curricular or school events.

Student and teacher participants commented that non-ideal teachers did not check their prior or current understanding so, as a result, either taught the class too fast, too slow, or at the wrong level. Students were either left confused because they could not understand the work, or frustrated at being given tasks that were either unchallenging or not age-appropriate.

Student participants’ non-ideal teachers had low expectations for achievement and appeared unmotivated to support them to succeed. These teachers also limited access to

higher grades by teaching low-level content, restricting re-submissions, and telling students that they lacked the ability or were incapable of success. Responsibility for academic failure was assigned to students. Non-ideal teachers also lacked commitment, failed to turn up to classes before important assessments and provided inadequate support for students to pass external assessments. Teacher participants reported that non-ideal teachers had low expectations for student achievement and their future career prospects. There was also reference by teacher participants to non-ideal teachers restricting students' opportunities to learn by only teaching basic level content. Non-ideal teachers did not take responsibility for student learning or achievement and blamed other teachers, students, students' family, or students' friends for student failure. Non-ideal teachers did not self-reflect about the influence their teaching had on student learning.

Both teacher and student participants commented that non-ideal teachers took a long time to mark students' work, so feedback was given too late to be useful, often making it irrelevant. Sometimes work was not marked at all. Other feedback was unhelpful because it was unclear, vague, or it did not provide students with directions about their next steps or suggestions about how to improve. Highly critical feedback was also not well received as students found it difficult to see past the critique to the constructive advice being given. The next section presents the results that related to students' and teachers' perceptions of the personal qualities or attitudes of a non-ideal teacher.

Personal Qualities or Attitudes of a Non-Ideal Teacher

Participants identified three personal qualities or attitudes of a non-ideal teacher: (1) Disrespect; (2) Discrimination; (3) Unfairness. The numbers of responses made by students and teachers are shown in Table 17, and each of the sub-themes is discussed below:

Disrespect. There were 13.4% of students and 10.9% of teacher participants who reported a non-ideal teacher were disrespectful students. Students described teachers

embarrassing or humiliating them in front of the class, speaking rudely, making jokes at students' expense and general insensitivity. One student commented, "If you ask a question that she thinks is stupid, she rolls her eyes like you are stupid, which is very off-putting and makes some students not want to ask questions [S-175, Pākehā, decile 9]. Another said their non-ideal teacher "...talks down to students generally. For example, when the class doesn't complete their work due to unrealistic deadlines [s/he] will tell them they will get nowhere in life" [S-547, Māori, decile 3]. Other teachers made remarks which they may have meant as a joke but were not interpreted that way by students. One student said, "I was once looking at the school Dux⁴ board, reading the names and was told to 'keep dreaming' by my teacher in quite a demeaning fashion" [S-507, Pākehā, decile 3].

Students valued teachers knowing their names and using the correct pronunciation, and several Māori students conveyed annoyance and frustration at their teachers' poor efforts. One student said her biology teacher, "pronounces names wrong without apology" [S-319, Māori, decile 3] and another said her science teacher, "tries to tell me I'm saying my name wrong" [S-320, Māori, decile 3]. Issues with names occurred for students from other ethnic groups too. One Pākehā student said her non-ideal teacher was "Quite rude to the entire class in general, and mispronounces names on purpose" [S-317, Pākehā, decile 3]. Other teachers demonstrated their disrespect by not learning students' names with one student stating that her teacher "gets names wrong or doesn't know them which shows a lack of interest in us..." [S-485, Pākehā, decile 6]. Other students felt their teacher was not even aware of their existence. One said, "He does not make an effort to learn the names of the students in his class... I don't think he can recognise my face" [S-228, Asian, decile 6].

⁴ 'Dux' is short for Dux Litterarum, which is the title given to the highest ranking senior student in academic achievement.

Teacher participants raised similar issues to students, including mispronouncing names and speaking rudely. They also gave examples of non-ideal teachers swearing at students, and using sarcastic humour or ‘put-downs’. One participant said a non-ideal teacher “Belittles students and tries to gain one-upmanship through throwaway comments” [T-182, Pākehā, decile 7]. Others said non-ideal teachers’ humiliated students in front of others. For example, “[They] “make disparaging comments in public about the class and/or students” [T-248, Pākehā, decile 3].

Discrimination. There were 11.0% of students and 13.1% of teacher participants who commented about discrimination that they had either witnessed or experienced. Student participants referred to racism, sexism, bias, and favouritism, with favouritism most commonly reported. One student said her teacher, “chooses ‘favourites’ in her class who are given special treatment, such as being given her EFTPOS⁵ card to buy her and the student coffee from the local cafe” [S-094, Pākehā, decile 9]. Another student said her teacher, “Has favourites, and this is difficult when it comes to asking for help as she won’t put as much effort into helping you”. It made the student think, “What have I done? Why am I unlikeable?” [S-242, Pākehā, decile 6].

Differential treatment based on ability was also a common response with a number of Māori students reporting that their teacher, “favours the best students in the class, and expects everyone to be able to keep up with them” [S-260, Māori, decile 4] and another commenting that her teacher, “Segregates class into better performing and lesser performing” [S-370, Māori, decile 10]. In both cases, the students did not appear to think that they were favoured by their teachers.

⁵ Bank debit card

Sexism was another type of discrimination referred to by students, although some downplayed it as a generational difference. For example,

...he drops old-fashioned sexist jokes and comments and has a general 'older generation' way of thinking. He is not open to new 'radical' ideas surrounding sexuality, feminism, non-binary gender, etc. As a teacher, he does his job well enough...I simply dislike his beliefs and narrow-mindedness [S-206, Pākehā, decile 6].

Students also commented about racism. One student said, "This teacher is biased, mildly racist, sexist..." [S-507, Asian, decile 3] and another stated her teacher, "Does not accept other people's cultures" [S-320, Māori, decile 3]. One Pasifika student described a situation where he was treated differently to a white student in the class. He said:

[The teacher] is really a knob-head, to be honest! He tells the class that two people have outstanding maths books to return, but he won't tell the class who... I was one of the two. I'm brown, so I guess the colour of my skin has something to do with it. The other fella was white and what do you know, [the teacher] says to the whole class that I was one of the people who didn't return the book but [he] never confronted the other dude! [S-295, Pasifika, decile 6].

Teacher participants referred to discrimination as racism, cultural insensitivity, sexism, classism, and deficit theorising. Participants also commented about teachers' lack of knowledge and understanding of non-Pākehā student culture. One Māori teacher said non-ideal teachers "make no effort to pronounce students' names properly, know nothing about kaupapa Māori" [T-169, Māori, decile 6], whereas a Pākehā teacher said non-ideal teachers "Lacked understanding of culturally sensitive issues in the classroom [T-262, Pākehā, decile 10].

Table 17

Student and Teacher Responses to Personal Quality Sub-themes of a Non-ideal teacher

	Students						Teachers					
	All students <i>N</i> = 583	Māori <i>n</i> = 96	Pākehā <i>n</i> = 316	Pasifika <i>n</i> = 30	Asian <i>n</i> = 126	Other <i>n</i> = 15	All teachers <i>N</i> = 274	Māori <i>n</i> = 43	Pākehā <i>n</i> = 212	Pasifika <i>n</i> = 3	Asian <i>n</i> = 6	Other <i>n</i> = 10
Personal qualities												
Disrespect	96 16.5%	16 17.8%	54 17.3%	3 9.1%	21 16.4%	2 10.5%	37 10.9%	6 9.3%	28 10.9%	0 0.0%	1 16.7%	2 20%
Discrimination	64 11.0%	14 14.6%	27 8.5%	2 6.7%	17 13.5%	4 26.7%	37 13.1%	6 14.0%	29 13.3%	1 33.3%	1 16.7%	0 0.0%
Unfairness	53 9.1%	15 15.6%	26 8.2%	2 6.7%	9 7.1%	1 6.7%	32 10.2%	5 11.6%	26 10.9%	0 0.0%	0 0.0%	1 10%

Other participants said non-ideal teachers made judgemental assumptions about students. For example, they “assume Māori and Pasifika kids are slow learners, never listen, etc.” [T-236, Pasifika, decile 3] and “deficit theorises about ‘types’ of kids” [T-201, Pākehā, decile 3]. One participant reported that a non-ideal teacher had endlessly negative beliefs about their students. For example, “...they can’t learn, they haven’t eaten, have no pen, can’t concentrate...” [T-219, Māori, decile 3], and they perceived that these challenges were insurmountable barriers to students achieving.

There were 10.9% of teachers and 8.6% of student participants who reported about a non-ideal teacher’s unfairness. Teacher participants referred to non-ideal teachers’ dishonesty, breaking promises, or inconsistency in their expectations or treatment of students. One participant said:

“These teachers don’t follow school rules, they don’t have consequences and are extremely inconsistent. Some students will love them as the teacher will allow them not to do any work in class...and they have a good time. However, the other students who want to achieve (which is the majority) get frustrated quickly ...” [T-241, Pākehā, decile 4].

Student participants reported teachers overloaded students with work without considering other pressures. One student said, “She gives us an unnecessarily heavy workload despite us not having an internal this term. This makes it very hard to keep up with other subjects, which are currently more important as we have upcoming internals” [S-105, Māori, decile 9]. Other teachers did not accept legitimate reasons for students not completing work, or would not make allowances for non-school commitments. Students also described teachers as grouchy, grumpy, critical, moody, and negative. When describing her non-ideal teacher, one student said: “Her immediate reaction to every question is ‘No’ even when she has not even heard the whole question” [S-131, Asian, decile 9].

Summary. This section presented the results related to the personal qualities of a non-ideal teacher: (1) Disrespect, (2) Discrimination, and (3) Unfairness. Student participants reported that non-ideal teachers treated them disrespectfully by embarrassing or humiliating them in front of others, making rude, insensitive and derogatory comments. Non-ideal teachers also continually mispronounced students' names or did not bother to learn their names. Teacher participants also reported that teachers swore at students and used sarcastic humour to demean students.

Racism, sexism, bias, and favouritism was referred to by students, with favouritism mentioned most frequently. Some students' non-ideal teachers appeared to prefer some students over others and gave them special treatment, with students perceiving that teachers favoured the higher performing students in the class. Racism was referred to by Māori, Pasifika, and Asian students, but not Pākehā students, and was described as teachers not accepting other cultures, or when students received poorer treatment because of their ethnicity. Teacher participants referred to racism, cultural insensitivity, sexism, classism, and deficit theorising, but not favouritism. Participants identified non-ideal teachers' lack of understanding of kaupapa Māori and deficit theorising about Indigenous and minority students.

Teacher participants referred to non-ideal teachers as being dishonest, breaking promises or being inconsistent in how they treated students or followed school rules. On the other hand, student participants referred to their non-ideal teachers overloading them with work and not accepting legitimate excuses or making allowances when they could not complete work. Students' non-ideal teachers' moods were also erratic. The next section focusses on students' and teachers' perceptions of non-ideal teachers' professional attributes.

Professional Teaching Attributes of a Non-Ideal Teacher

Participants identified four professional teaching attributes of a non-ideal teacher. These included: (1) Poor content knowledge or teaching competence; (2) Disorganisation; (3) Lack of passion or enthusiasm for teaching; and (4) Avoidance of professional development or further education. The numbers of responses made by students and teachers are shown in Table 18, and each of the sub-themes is discussed below:

Poor content knowledge or teaching competence. There were 20.1% of students and 20.8% of teacher participants who commented about a non-ideal teacher having poor content knowledge or teaching competence. Asian students responded significantly more frequently than Māori students ($Z = 3.407, p = .007$) and Pākehā students ($Z = 4.631, p = < .001$) about this sub-theme. Pākehā teachers also responded significantly more frequently than Māori teachers ($Z = 1.979, p = .0478$).

Student participants expected their teachers to be subject experts so were critical of those who appeared to have limited subject knowledge, made frequent mistakes, or relied heavily on textbooks or other resources. One student commented, “He frequently makes mistakes in his working and has, several times, needed to ask either a student or another teacher for assistance in solving a problem [S-037, Māori, decile 8]. Another said, “He has no idea what he’s teaching. To learn, we students need to rely on each other and Google. We cannot go to him for help on any subject...” [S-509, Pākehā, decile 2]. One student also complained that her teacher had a limited understanding of basic facts: “She doesn’t have sufficient knowledge about what she’s teaching...and cannot spell properly...When a student asks her how to spell something she says it’s not important, so don’t worry too much (that’s because she doesn’t know how to spell it)...” [S-131, Asian, decile 9].

Several students complained their non-ideal teachers did not teach them. It appeared they defined teaching as a deliberate act of learning that involved both teacher and student(s),

so teachers needed to either demonstrate knowledge of a topic to students or to interact in a learning activity together. One student explained that her teacher “mainly provides material from external sources (exemplars, past papers, workbooks) which we learn from” [S-092, Asian, decile 9]. Another stated, “This teacher doesn’t teach us much at all. For our last topic covered in class, she basically just read a PowerPoint presentation.” [S-163, Asian, decile 9]. Finally, one student said her teacher “...makes us do group work instead of teaching us herself, and always has to look up pretty much anything she isn’t too sure about” [S-287, Pākehā, decile 8]. From these examples and the students’ definitions, teaching did not occur when students were learning from textbooks or workbooks, being read to, or doing bookwork. They also queried whether group work or independent research made the best use of class time as these tasks students could do at home.

Teacher participants reported that non-ideal teachers did not understand how students learnt and had a lack of subject knowledge which necessitated “...an over-reliance on textbooks or similar sources to teach the course” [T-035, Pākehā, decile 7]. Participants also referred to non-ideal teachers being poorly qualified or non-specialist teachers who were out of their depth because they were “being forced by circumstances to teach out of their areas of specialisation” [T-206, Pākehā, decile 8]. Teaching outside of a subject area occurred when schools were unable to employ suitably qualified teachers for difficult-to-staff subjects.

Disorganisation. There were 34.3% of teacher participants and 14.2% of students who reported that their non-ideal teacher was disorganised, with teachers responding significantly more frequently ($Z = 6.841, p = <.001$). Student participants described teachers being late to class, unprepared to teach and delivering poorly planned lessons, which lacked objectives and direction. Numerous students (25% of the respondents) said their non-ideal teacher regularly arrived late to class. One student said, “She doesn’t start class on time. We all joke that she is getting a cup of tea before starting class (which she does) ... If on time,

she disappears [during class] for about 10 minutes to make a cup of tea [S-287, Pākehā, decile 8]. Another student said her teacher was always late “...then spends half the class deciding what to do... often spends class time printing out worksheets” [S-302, Pākehā, decile 4]. Students also said class time was wasted on filler activities which were unrelated to their current learning or assessments. One student’s teacher used “...activities like making paper hats to fill the time when she doesn’t have a lesson planned...” [S-282, Pākehā, decile 10] whereas another said there were, “too many classes where we do nothing important, like watching movies that have nothing to do with the topic” [S-214, Pākehā, decile 3].

Teachers’ disorganisation meant students were not well-prepared for assessments. One participant said her teacher “...tells us we are having tests only one hour before we actually have them, which is unfair and gives us hardly any time to study” [S-184, Pasifika, decile 6]. Another common complaint was teachers who lost student work. One student said her teacher “...lost my work and found it a week later, then marked it another week after [that]” [S-557, Māori, decile 3]. Furthermore, students’ non-ideal teachers were forgetful and did not keep track of what students were doing. One participant said his non-ideal teacher “gives ‘Merit’ grades to students who haven’t even sat the assessment!” [S-283, Pākehā, decile 8].

Teacher participants had similar responses to students’ and referred to teachers who were unprepared for teaching, failed to plan lessons, lost students’ work, and were late to class. One teacher participant said a non-ideal teacher had a “Messy classroom, unmarked books, [with] no student work displayed on the walls” [T-103, Māori, decile 3]. Some participants said teachers’ lack of organisation meant students were ill-equipped for NCEA. One said a non-ideal teacher “Does not plan teaching or learning and therefore runs lessons without pace or purpose. Consequently, students are not learning or taught the skills to be effective independent learners” [T-012, Pākehā, decile 9].

Lack of passion or enthusiasm for teaching. There were 53.6% of teacher participants and 9.9% of students who commented about teachers' lack of passion or enthusiasm. Teachers responded significantly more frequently than students ($Z = 13.986$, $p = <.001$) about non-ideal teachers' lack of passion or enthusiasm. Teacher participants described non-ideal teachers as lazy, lacking energy, bored, and disengaged. Non-ideal teachers spoke negatively to their colleagues about teaching, disliked teaching their subjects, and being in the classroom with students. One participant said they "complain about never having enough time, complain about class sizes, complain about their pay" [T-031, Māori, decile 6] or they "...complain in the staffroom about unruly kids" [T-177, Pākehā, decile 3].

Teacher participants also discussed teachers who were in the job for the wrong reasons, like "... the cash and the promotions, which mean the biggest pay packets for the least amount of work" [T-179, Pākehā, decile 5] or teachers who remained in the teaching profession because they were close to retirement age or unable to find another job. Several participants (10%) referred to the attraction of teaching because of the benefits received, stating that non-ideal teachers were "only in it for the money and holidays" [T-015, Pākehā, decile 8].

Student participants reported that their non-ideal teachers seemed bored, made it clear they disliked their job, and acted as if they would rather be somewhere else. One student said, "He only teaches because it's his job. I feel he has no passion or love ..." [S-388, Māori, decile 7]. As well as disliking teaching, students said their non-ideal teachers lacked enthusiasm for their subject. One said, "He does not really seem to enjoy his subject, even blatantly acknowledging that it [Maths] is useless after school" [S-228, Asian, decile 6]. Finally, some teachers seemed so unhappy their students wondered why they were teaching: "She would directly say to the class that she hates teaching us. She would say that we don't try so she wouldn't try either..." [S-088, Pākehā, decile 10].

Table 18

Students' and Teachers' Perceptions of the Professional Teaching Attribute Sub-themes of a Non-ideal Teacher

	Students						Teachers					
	All students N = 583	Māori n = 96	Pākehā n = 313	Pasifika n = 33	Asian n = 128	Other n = 15	All teachers N = 274	Māori n = 43	Pākehā n = 212	Pasifika n = 3	Asian n = 6	Other n = 10
Professional teaching attributes												
Poor content knowledge or teaching competence	117 21.1%	13 13.5%	48 15.2%	5 16.7%	45 35.7%	6 40%	57 20.8%	4 9.3%	48 22.6%	2 66.7%	1 16.7%	3 20%
Disorganised	83 14.2%	18 18.8%	44 13.9%	7 23.3%	13 10.3%	1 6.7%	94 34.3%	9 20.9%	75 35.4%	2 66.7%	2 33.3%	6 60%
Lacks passion or enthusiasm for teaching	59 10.1%	12 12.5%	30 9.8%	3 10%	10 7.9%	4 26.7%	147 53.6	23 53.5	116 54.7%	1 33.3%	1 16.7%	6 60%
Avoidance of professional learning or development	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	30 10.9%	4 9.3%	23 10.8%	1 33.3%	2 33.3%	0 0.0%

Avoids professional learning or development. There were 10.9% of teachers who commented about teachers avoiding professional development and further education, and referred to teachers' negativity about learning opportunities or educational initiatives introduced in their schools. Non-ideal teachers also did not want to work collaboratively or learn from colleagues. One participant said non-ideal teachers “deliberately surround themselves with colleagues who think and speak negatively about professional development and advancement in practice. They are limited because they do not engage with ideas that other teachers and educational professionals share with them” [T-018, Pākehā, decile 5]. Participants also reported that non-ideal teachers did not see the value in learning to improve their prospects, upskill in their subject, or learn new teaching methods. “They are reluctant learners; they avoid trying new strategies, they avoid responsibility...” [T-201, Pākehā, decile 3]. Student participants did not refer to teacher professional development or further education at all in their questionnaires.

Summary. This part of the chapter presented the findings that were related to the professional attributes of a non-ideal teacher. Students were highly critical of teachers with poor content knowledge, those who made spelling errors or frequent mistakes in their working out, or who did not appear to be subject experts. Teachers who did not employ interactive teaching methods were also criticised. Group work, reading from PowerPoint, or setting work from textbooks were not considered to be effective teaching methods. Teacher participants viewed poor subject knowledge or teaching competence as not understanding how students learnt or an over-reliance on textbooks, but they were less critical of their colleagues than students as they realised teachers might struggle due to being placed into difficult-to-staff subjects.

Student participants described teacher disorganisation as recurrent lateness, being unprepared to teach due to lack of planning, and wasting learning time on unrelated activities

or pointless busy work. Their non-ideal teachers also lost student work and kept poor records and allocated incorrect grades. Teacher participants' responses concurred with students concerning non-ideal teachers' lateness, lack of planning, and losing student work. They also noted that non-ideal teachers had messy classrooms and piles of unmarked work.

Teacher participants described non-ideal teachers as lazy, bored, disengaged, and negative about teaching. They also referred to teachers who had stayed in the profession because they were close to retiring or lacked other options. Some even thought that unenthusiastic teachers stayed for the money and holidays they received. Student participants' non-ideal teachers showed they did not like their jobs through appearing bored, disinterested, and demonstrating a lack of enthusiasm for their subjects. Some teachers told their students their subject was useless and that they hated teaching them.

Teacher participants commented that non-ideal teachers were not interested in learning anything new. They were negative about professional learning opportunities, educational initiatives, or working collaboratively with colleagues. They did not see the value of or take up opportunities to upskill in their subject or to learn different or innovative ways of teaching. The next section focuses on students' and teachers' perceptions of the relationship classroom practices of a non-ideal teacher.

Relational Classroom Practices of a Non-Ideal Teacher

Participants described three relational classroom practices of a non-ideal teacher. These were: (1) Poor connections with students; (2) Non-learning connections with students, and (3) Ineffective classroom management. A breakdown of the numbers and percentages of each ethnic group's responses to the 'poor connections with students' and 'ineffective classroom management' sub-themes are provided in Table 19 and are discussed in the sections below:

Poor connections with students. There were 68.2% of teachers and 23.7% of student participants who commented about poor connections with students, with teacher participants responding significantly more frequently ($Z = 12.153, p = <.001$). Pākehā teachers also responded significantly more frequently than Māori teachers ($Z = 2.777, p = <.01$). Student participants described their non-ideal teachers as unapproachable, intimidating, unfriendly, and uncaring people who did not seem to like students or enjoy their company. One student said her non-ideal teacher had "...taken teaching as a job without thinking that they will have to deal with children or teenagers" [S-082, Asian, decile 10].

Other participants said their non-ideal teachers could not relate to or understand teenagers because of an age or attitude gap. One student said her teacher, "...has trouble relating to all of his students.... He is one of the older teachers in the school and compares us to students that he taught many years before we were born. He is technologically impaired and is constantly asking younger teachers to set work for us on Google" [S-547, Māori, decile 3]. There were also teachers who were not interested in getting to know their students beyond teaching academic content, which made it difficult for students to build relationships with them. One student said her non-ideal teacher, "...doesn't try to relate to us or interact with us (before/after lessons) unless it's a question about biology" [S-322, Asian, decile 3].

However, for a small number of students, the lack of a personal connection with teachers was not an issue. One said, "They are a nice person but don't really try to relate to students or anything; they teach us, and that's A-Okay for me" [S-188, Asian, decile 6].

Teacher participants commented that non-ideal teachers' connections with students were unfriendly or unapproachable, uncaring, dismissive or "cold and distant" [T-019, Pākehā, decile 5]. Participants said s/he "doesn't greet the students on arrival" [T-235, Pākehā, decile 6] and "At the extreme end, [they are] people who see kids as the enemy ..." [T-030, Pākehā decile 5]. Conversely, some non-ideal teachers overstepped professional

boundaries, trying to be their students' friends instead of their teachers. For example, "[they are] too casual and tries to be a 'cool pal' ..." [T-019, Pākehā, decile 5]. Neither extreme was seen by teacher participants as an effective connection with students.

Other teachers did not appear to be interested in getting to know their students' personal interests or their lives beyond school. One participant said, "A 'less than ideal' teacher usually won't bother to understand their students and who they are as people - they don't appreciate their background, knowledge or cultural capital that they bring to the class" [T-029, Māori, decile 3]. Finally, participants referred to teachers who were 'un-relatable', who struggled to find common ground with students, and did not share any personal information about themselves, or allow students to get to know them. For example, "does not like or understand teenagers" [T-174, Pākehā, decile 7]. Some teachers did not even attempt to relate to students because, as one participant relayed, they "believe they are a 'waste of space'" [T-265, Māori, decile 10]. For one participant, indifference towards students was unacceptable. He said: "In my opinion, a less than ideal teacher forgets that those are someone's children. These are people who have thoughts and ideas and feelings" [T-202, Pākehā, decile 3].

Non-learning connections with students. A group of 31 student participants were conflicted about their non-ideal teacher. For the emotional relationship, they described their non-ideal teacher as 'nice', 'friendly', 'kind', or 'lovely', but contrasting with these feelings was the belief that their non-ideal teachers did a poor job of teaching. So, in addition to positive personal attributes, participants also described their non-ideal teachers as disorganised, ineffective at managing behaviour, unable to teach, lacking in subject knowledge, and lazy. For example, one student commented, "He cannot get his knowledge across in his teaching... He is an extremely friendly person but a horrible teacher..." [S-547, Māori, decile 3].

Table 19

Number of Student and Teacher Responses to Relational Practices Sub-themes of a Non-ideal Teacher

	Students						Teachers					
	All students N=583	Māori n = 96	Pākehā n =316	Pasifika n = 30	Asian n =126	Other n = 15	All teachers N=274	Māori n = 43	Pākehā n = 212	Pasifika, n = 3	Asian n = 6	Other n = 10
Relational Practices												
Poor connections with students	138 23.7%	27 28.1%	66 20.9%	7 23.3%	31 24.6%	7 46.7%	187 68.2%	22 51.2%	154 72.6%	3 100%	2 33.3%	6 60%
Ineffective classroom management	90 15.4%	9 10%	48 15.3%	6 18.2%	21 16.4%	6 31.6%	104 38.0%	18 41.9%	81 38.2%	0 0.0%	3 50%	2 20%

Some students reported that they loved their non-ideal teachers, signifying that emotional connections could occur separately to an academic connection. For example, “Altogether a nice and friendly teacher who is terrible at teaching. I love her anyway, but I am probably going to fail this subject” [S-446, Asian, decile 3] and “He is really nice except he cannot teach... He is extremely kooky, and we all love him, except the things he says do not make sense...” [S-344, Asian, decile 10].

Ineffective classroom management. There were 20.4% of students and 38.3% of teacher participants who stated that their non-ideal or a non-ideal teacher had ineffective classroom management. Teachers responded significantly more frequently than students about ineffective classroom management than students ($Z = 5.565, p = < .001$). Pākehā students also responded significantly more frequently than Māori students about non-ideal teachers’ ineffective classroom management ($Z = 2.979, p = < .01$). Teacher participants reported that non-ideal teachers were either too strict or too relaxed. ‘Too strict’ teachers were bad-tempered, used threats or fear to control behaviour, were quick to overreact and shouted at students. One participant said a non-ideal teacher was “...always yelling, threatening, operates from a punitive paradigm” [T-012, Pākehā, decile 9]. Conversely, teachers who were too relaxed had poorly managed classes with no rules or limits. One participant said a non-ideal teacher “... allows students to do as they wish, so inappropriate behaviour dominates the learning environment” [T-012, Pākehā, decile 9].

Like teacher participants, students thought their non-ideal teachers were either too strict or too lenient. Strict teachers had extreme reactions to low-level misbehaviour. One student said, “If a student is a little noisy or distracting, instead of saying a few words to them to encourage them to stay quiet, he always just tells the student to leave the classroom” [S-547, Māori, decile 3]. Another issue of concern to student participants was non-ideal teachers who yelled or shouted which caused students stress and discomfort. Some non-ideal

teachers shouted at students about misbehaviour, but in other classes, teachers constantly yelled, with one student stating, “[it] seems like he is yelling every time he talks, and it gives negative vibes” [S-316, Māori, decile 3]. At the other end of the scale were teachers who lacked the authority to manage classroom behaviour effectively, or allowed students to disrupt class learning. One student said, “He doesn’t really do anything about disruptive students which wastes a lot of time in class and stops us from completing work, which is bad” [S-194, Asian, decile 6].

Summary. This section of the chapter presented the results related to the relational classroom practices of a non-ideal teacher identified by participants. These were: (1) Poor connections with students; (2) Non-learning connections with students; and (3) Ineffective classroom management.

Student participants reported that their non-ideal teachers were unfriendly and uncaring. Their teachers did not seem to like students; they struggled to relate to or understand teenagers and were not interested in getting to know them. A few student participants, however, were not concerned that their teacher did not make any effort to relate to them. Teacher participants also reported that non-ideal teachers were unfriendly and uncaring, and were dismissive or unapproachable. They were not interested in getting to know their students and kept their students at a distance. Conversely, some non-ideal teachers disregarded professional boundaries and were too friendly with students.

A small group of students had positive social-emotional connections with their non-ideal teachers despite rating them as poor practitioners. They described teachers as kind or lovely people but unable to teach. None of the teacher participants referred to teachers in this way.

Teacher participants referred to ineffective classroom management as either too strict or too relaxed with ‘too strict’ teachers described as bad-tempered, quick to overreact,

frequently shouting at students, and using threats and fear. On the other hand, 'too relaxed' meant there were no rules or limits, with students misbehaving and disrupting the learning environment without consequence. Student participants also referred to their non-ideal teachers as too strict or too lenient. Strict teachers managed the class by yelling or shouting at students and used excessive punishments such as sending students out of class for talking. Lenient teachers lacked authority and allowed students to disrupt class learning.

Discussion

This study investigated how students and teachers perceived an ideal teacher and a non-ideal teacher, and which teacher behaviours and characteristics were conducive to student learning and success. Data were also analysed to see if there were differences in perceptions for students and teachers, and by ethnicity. Following thematic analysis, four main themes were identified: (1) Achievement- and learning-related teaching practices; (2) Personal qualities and attitudes; (3) Professional teaching attributes; and (4) Relational classroom practices. In this part of the chapter, the results for each of the sub-themes about an ideal teacher and a non-ideal teacher will be discussed together.

Achievement and Learning-related Practices of Ideal and Non-Ideal Teachers

Answered questions and explained work/Did not answer questions and explain work. Having teachers who answered their questions and explained work was valuable to students, who relied on teachers to advance their knowledge and understanding. A willingness to answer questions and to explain work to students more than once, if required, are teacher behaviours that are positively associated with student achievement and satisfaction (Hines, Cruickshank, & Kennedy, 1985). Student help-seeking behaviour is also positively related to academic achievement and should be encouraged, but it relies on access to teachers who are willing to listen and help students. Low achieving students are less likely

to ask teachers questions than high achieving students (Good, Slavings, Harel, & Emerson, 1987; A. M. Ryan, Pintrich, & Midgley, 2001), so if teachers are unreceptive to students' questions they could further limit student progress, as students may not want to engage with unapproachable teachers or those who have refused to help them in the past.

In the present study, Asian students responded significantly more frequently about their ideal teachers answering questions and explaining work. International studies on Asian students' learning habits (W. O. Lee, 2014; Mo Ching Mok et al., 2008) have found that students value the academic support they can obtain from teachers to improve their understanding and so they can avoid repeating mistakes in the future. However, they were also deterred from asking teachers' questions during lessons out of consideration for the learning needs of the rest of the class as they did not want to disrupt their classmates' learning or interrupt their teacher teaching. Instead, students conferred with other students about their work during class time or would wait until after class to ask their teachers' questions (W. O. Lee, 2014).

Māori students made significantly fewer responses than Asian students about teachers answering questions and explaining work. A possible explanation for this finding in existing research (Lilley, 2010), is that Māori students sought answers to questions from people who they trusted which were, more often, their peers and whānau members than their teachers. Webber et al.'s (2016) study on academic counselling found that instead of asking teachers questions, Māori students preferred teachers to approach them and privately offer support if they thought they needed it. It is important that teachers initiate regular discussions with students about their learning, and offer help to students who are not achieving well, and those who may lack the confidence to seek assistance when they need it.

Innovative, interesting, and engaging lessons/Boring and unengaging lessons.

For lessons to be innovative, interesting and engaging, students wanted variety, but they also

wanted interactions with their teacher and their peers. In classes with ideal teachers, students were offered a range of different activities and resources each class including quizzes, competitions, 'hands-on' activities, discussions, online tasks, and videos. Some activities that teacher participants viewed as boring and unengaging, such as note taking, were viewed as useful by students in the context that they needed notes to refer to for revision purposes. Students were also cognizant, however, that copying notes was an activity that tended to discourage interaction and participation, and it was important that teachers explained the notes or allowed students to discuss what they were writing about. In Raufelder et al.'s (2016) study of German adolescents' perceptions of their teachers, students criticised teachers whose teaching methods excluded participation in the lesson. Furthermore, students reported that writing notes without having them explained could lead to important information being missed (Raufelder et al., 2016).

In the current study, students' non-ideal teachers controlled students access to textbooks and other resources, and reacted defensively to student feedback that challenged their teaching methods. In contrast, classes with students' ideal teachers were highly interactive, and teachers gave students access to all class resources. Existing research indicates that in classrooms with high levels of teacher-controlled and teacher-directed behaviours, students are less motivated, display negative emotional behaviour, and achieve less well than in classes where teachers support more autonomy (Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Reeve, 2006). It is important that teachers utilise pedagogical practices that promote student engagement and autonomy. Additionally, encouraging students to provide teachers with regular feedback is a way to ensure that teaching practices are meeting students' learning needs. Previous research has shown that high achievers' rated teachers highly who were open and receptive to student feedback and criticism (Buser et al., 1974).

Provided extensive help to students/unhelpful to students. There was a marked difference in how teachers and students viewed teacher support, and about how much support could reasonably be expected. Student participants referred to their ideal teachers *always* being accessible and providing numerous hours of support on top of classroom contact, which stretched into evenings, weekends, and school holidays. Some students' parents may have skills and knowledge that enabled them to provide personal help to their children, and others may have the resources to pay for external tutoring, but for many students, their teachers are the people they look to for one-to-one help and tutoring.

Teacher participants also thought ideal teachers should provide tutorials, answer students' emails, and take on extra-curricular activities, but, overall, their expectations of additional support were less than students'. It is important to note that burnout due to the demands of an excessive workload is cited as a reason why many teachers leave the profession (Brill & McCartney, 2008). Teachers' mental and physical well-being needs to be taken care of, so they enjoy their job and are retained in the teaching profession long-term. It is equally important that teachers model healthy work behaviours to their students, so they too maintain a healthy study-life balance, allocating time to spend with their family and friends, and having time away from their studies so that they can rest and recharge.

Focussed/not focussed on student learning and success. Both teacher and student participants referred to a non-ideal teacher limiting student access to higher grades by only teaching students 'Achieved' level content in NCEA. It is concerning that students may not be given opportunities to achieve at high levels and that teachers in schools are aware of these practices occurring. There is a scarcity of research on this topic with only one research study able to be located that referred to students not being taught 'Excellence' level material. Rawlins (2008) explained that

the teaching and learning of the units of mathematical content were structured around the assessment criteria for the assessment standards, starting with material consistent with the ‘achieve’ [sic] level criteria and progressing through to ‘merit’ and ‘excellence’ level material. In many instances, however, excellence material was not actively taught: the responsibility to master excellence material often being left up to the individual student (p. 108).

Fortunately, there were many examples of high expectation teaching in the current study, and in other research (e.g. Webber et al., 2016), there was evidence that teachers demonstrated high expectations by explicitly teaching students what was required to achieve Merit and Excellence course endorsements in NCEA.

Nearly a quarter of Māori student participants responded that their non-ideal teachers were not focussed on learning and success, which was significantly higher than for the other ethnic groups, so it appeared that Māori students in the current study might have perceived lower teacher expectations. This finding is supported in the literature with previous research at secondary school level finding that teachers have lower expectations for Māori than for other ethnic groups (R. Bishop et al., 2003; Turner et al., 2015). A study by Walkey, McClure, Meyer, and Weir (2013) reported that high student aspirations and expectations in NCEA were essential. The study found that students who aimed to leave school with NCEA Level 1 or Level 2 qualifications were indistinguishable from students who were likely to leave school without completing any qualifications. The authors suggested that promoting low or moderate aspirations or having low expectations for students may have the deleterious effect of reinforcing lower academic achievement. Furthermore, the study emphasised the need for teachers and schools to not only promote high expectations but also to focus on

promoting high aspirations in all students and not just intervening with those students who appeared to be at risk of not attaining any qualifications.

Despite all students in the current study achieving highly overall in NCEA, it was evident from their comments that many had done so despite low expectations and a lack of belief from some of their teachers. However, high numbers of students also commented about their ideal teacher being focussed on learning and achievement and that they encountered positive and high expectations, which may have been enough to prevent low expectations having a deleterious effect on their achievement.

Feedback and feedforward. For feedback to be effective, students reported that it needed to be timely, detailed, recommend their next steps, and inform them what they needed to do to improve. Although relatively few students reported about receiving poor or non-existent feedback, it was evident that students were concerned that they were not receiving feedback from teachers about how they could improve their work, which dispels the idea that students do not read or want feedback, and are only interested in their grade (Tanner & Jones, 2003). Feedback has an average effect of $d = .79$ on achievement (Hattie & Timperley, 2007), with higher effect sizes for informational feedback that tells students how to improve their work and lower effect sizes for feedback that only consists of praise. Given the high potential effect that instructive feedback can have on student achievement, it is vital that teachers are providing students with regular and timely, informative instructional feedback.

Professional Teaching Attributes

Passionate about teaching and their subject/ Lacked passion and enthusiasm.

There were large numbers of participants who identified the importance of teacher passion and enthusiasm. Several participants also referred to teachers enjoying their job because of the salary or annual leave they received. This was a surprising finding given the heavy workload, long hours and average remuneration teachers receive compared with other

professions in New Zealand (Hall & Langton, 2006). Perhaps, compared to the average median wage in New Zealand, some participants viewed teaching as a well-paid position. However, the low numbers of students currently entering teacher education courses and the high numbers of teachers leaving the profession indicate that the monetary rewards and holidays may be insufficient to either attract or retain enough teachers to meet the current demand. One of the findings from secondary school students in Sexton's (2012) study was that 'bad teachers' were "only here to get a pay-check" (p. 63). Teachers who were not passionate or enthusiastic about teaching, and appeared to be primarily interested in remuneration, did not demonstrate to students that teaching was important to them.

Research has shown that teacher enthusiasm benefits teachers' mental well-being and that teachers who experience passion for teaching and their subject also report being happier and more fulfilled in their jobs (Kunter, 2013). Moreover, enthusiasm for teaching is related to student engagement and behaviour (Kunter, 2013) as well as student achievement (Keller, Neumann, & Fischer, 2013). It is likely that a positive cycle is created whereby teachers' passion and enthusiasm leads to students becoming more engaged in classes, and because of high student engagement, teachers are motivated to be enthusiastic and to provide interesting and engaging experiences for their students (Stenlund, 1995).

Advanced subject knowledge and teaching pedagogy/Poor content knowledge and teaching competence. Student participants wanted subject and teaching experts, and they were critical of teachers who lacked knowledge or who did not teach them effectively. Studies have shown that there is a relationship between teachers' subject knowledge and student achievement (H. C. Hill, Rowan, & Ball, 2005; Monk, 1994; Sadler, Sonnert, Coyle, Cook-Smith, & Miller, 2013) so qualified, knowledgeable teachers are essential to support students' academic success. Several students referred to teachers 'not teaching' when their lessons comprised completing worksheets or doing problems out of textbooks. In his review

of how teachers influence what is taught in classrooms, Brophy (1982) reported that teachers who relied heavily on textbooks and other materials were not actually teaching. The participants in his research studies also admitted that the resource materials they were using were “doing the teaching [and they were] mostly coordinating and monitoring...” (Brophy, 1982, p. 5).

Teacher participants were less critical of their colleagues than students and explained that teachers may have poor content knowledge or an over-reliance on curriculum materials due to not teaching in their areas of specialisation or if schools were unable to employ suitably qualified teachers in a particular subject area. The current teaching shortage in New Zealand is likely to be contributing to this problem as some schools are unable to employ teachers in some subject areas (Fraser, 2018). However, it is of serious concern when decisions are made to staff classes with non-specialist teachers, which could potentially put students’ achievement at risk. A teacher with no mathematics experience taking a senior calculus class, for example, may be able to teach students how to get a correct answer but could lack the depth of understanding required to quickly correct errors in student work or the mathematical knowledge to explain to students how they misinterpreted a problem (Loewenberg Ball, Thames, & Phelps, 2008).

Organisation and preparation/disorganised and does not plan lessons. More than one-third of teacher participants responded that ideal teachers were well-organised and non-ideal teachers were disorganised. When teachers are punctual to class and teach pre-planned and structured lessons, they demonstrated to students that they take teaching and learning seriously, and are holding themselves to the same high standards they expect of their students (Murphy, Weil, Hallinger, & Mitman, 1982). Disorganised teachers, on the other hand, do not model the same high standards and could be perceived as showing a lack of commitment to their classes (Foote, Vermette, Wisniewski, Agnello, & Pagano, 2000). Despite making

fewer responses, students were concerned their non-ideal teachers' disorganisation had a detrimental effect on their achievement, as class time was often wasted doing unrelated activities, teachers lost their work, and incorrect grades were awarded to students. There is scant research at secondary school level which investigates students' perspectives of teacher disorganisation. Most research has been undertaken at the tertiary level (Kearney, Plax, Hays, & Ivey, 1991) and refers to disorganisation as one of three types of "teacher misbehaviour". Arriving late to class, not preparing lessons, and wasting class time is referred to as indolence. These behaviours were acknowledged to be less damaging when compared to offensive behaviours such as public humiliation but still had the potential to demotivate students (Banfield, Richmond, & McCroskey, 2006; Vallade & Myers, 2014). Kearney et al. (1991) warned that teacher indolence could lead to decreased student attendance, lower achievement, and behaviour management problems. However, as their studies referred to students in higher education, not at the secondary school level, the transferability of these effects to school classrooms has not yet been confirmed. The effect of teacher indolence on student achievement, engagement, and behaviour management at the secondary school level is a suggestion for future research.

Commitment to further learning and professional development/Avoidance of professional development or further education and learning. Teacher participants emphasised that learning and professional development was an attribute of an ideal teacher and was part of role modelling to students the importance of life-long learning. Conversely, participants viewed avoiding upskilling and further education as a lack of commitment to teaching and education. The literature supports the idea that for teachers to remain effective in their profession, they need to frequently engage with further education throughout their careers (Helterbran, 2008). Further education may include professional readings, attendance at conferences and workshops, undertaking research or upgrading qualifications. From the

findings in this study, it appeared that there were large numbers of teachers in schools who would not reach competency in some of the New Zealand Standards for the Teaching Profession (Education Council of Aotearoa New Zealand, 2017), so would need to upskill in order to be appraised successfully or to renew their practising certificates. In particular, there was a lack of understanding of culturally responsive teaching and many teachers lacked basic te reo me ngā tikanga Māori, reported through numerous comments from students about their teacher's inability to correctly pronounce their names. School leaders need to not only encourage staff to obtain the skills they are lacking, but they also need to take a stronger stance to ensure that all of the staff they employ are able to meet the requirements set out by the Ministry of Education and the Education Council so that all students are better supported to achieve successfully.

Teachers Personal Qualities and Attitudes

Cultural responsiveness. There were relatively few responses from either teachers or students relating to culturally responsive practice. The lack of responses was surprising given the Ministry of Education's focus over the last decade on 'Māori achieving educational success as Māori' through the implementation of initiatives such as, Ka Hikitia – Managing for Success (Ministry of Education, 2008), Ka Hikitia – Accelerating Success (Ministry of Education, 2013a), Tātaiako (Education Council of Aotearoa New Zealand, 2011), and Kia Eke Panuku: Building on Success (Ministry of Education, 2015b). Māori and Pākehā teachers' comments about cultural responsiveness also differed, with Māori teachers making links to learning and raising student achievement whereas Pākehā teachers commented on the importance of celebrating cultural differences and being inclusive. The differences between Māori and Pākehā teachers' understanding of culturally responsive teaching is multifaceted. In part, it may be related to the dominance of Pākehā knowledge, values, and language in the New Zealand education system and that most teachers are Pākehā (Pākehā/NZ European

71.5%; Māori 9.3%; Ministry of Education, 2017). Self-managing schools in New Zealand are not obligated to implement any Ministry of Education initiative; hence, numerous schools do not participate in any initiatives designed to raise the achievement of Māori students through culturally responsive practices. There are many teachers who have limited knowledge of te reo me ngā tikanga Māori (R. Bishop, 2011; R. Bishop et al., 2003; R. Bishop & Glynn, 2011), and an inadequate understanding of how to enact and incorporate culturally responsive practices and content in their classes (Sleeter, 2012). There is also evidence that some Pākehā are threatened by initiatives that focus on improving educational outcomes for Māori students (McCreanor, 2005; Thomas & Nikora, 1996), viewing initiatives that address the needs of Māori students as ‘racist’ or exclusionary to other ethnic groups (Hynds & Sheehan, 2010).

While disparities in educational outcomes remain between Māori and non-Māori, teachers need to critically reflect on whether their teaching practices are helping or hindering their students’ achievement. Culturally responsive teaching has been shown to improve the educational outcomes of Indigenous (J. T. Johnson, Cant, Howitt, & Peters, 2007) and minority students when they learn through their culture, and when teachers access students’ funds of knowledge and provide opportunities to learn concepts within contexts students can relate to (Gay, 2010; Ladson-Billings, 1995b). However, culturally responsive teaching must do more than celebrating students’ cultures; it must be used as a pedagogical tool (Ladson-Billings, 1995b) to teach students challenging academic content. A study by Glynn et al. (2010) found that Māori student engagement in science increased when teachers incorporated Indigenous science worldviews along with Western/European science in their lessons.

Some researchers (Lynch & Rata, 2018) have argued that culturally responsive or culturally sustaining pedagogy was limited to only teaching student’s cultural everyday knowledge that they already knew about, whereas academic subject knowledge was

excluded. 'Everyday' knowledge was referred to by Bernstein (1999) as horizontal knowledge and 'academic subject' knowledge, was referred to as 'vertical knowledge'. Using familiar contexts through which to teach students new concepts does not exclude vertical knowledge. For example, accessing literature and poetry by Māori writers involves incorporating vertical knowledge about metaphors, similes and other literary devices but does so within a setting and context with which students can identify. Reading literature by Māori authors and having the opportunity to engage with te reo Māori in the classroom also helps to promote a positive ethnic identity in students and increases their sense of belonging at school as Māori (Stewart, 2014).

Discrimination. Although the difference between ethnic groups was not statistically significant, Māori and Asian students made the highest number of responses about discrimination from their teachers, particularly concerning racism and differential treatment. Pākehā students predominantly referred to sexism and teacher favouritism, but not racism.

Favouritism was the most commonly reported type of discrimination that students mentioned in the study. Excluded students reported feeling mistreated and hurt when they perceived other students received special treatment. In an early study on students' perceptions of ideal teachers, Matlack (1959) reported that most student participants thought teacher favouritism was intentional and likely to lead to resentment from both the favourite child and those who were neglected. The authors, however, thought most teachers were unaware they were favouring some students over others. This finding aligned with the current study as none of the teacher participants made any reference to teacher favouritism or teachers' pets in their questionnaires, so teachers may not be aware that this was an issue of concern for students.

Other studies have also found higher levels of class conflict and lower levels of class morale in classes where there was teacher 'favourites' or teachers' pets (Tal & Babad, 1989,

1990), especially where there was only a single teacher's pet as it was more obvious to excluded students that another child was receiving special treatment. With the current study focusing on academically successful students, it is possible that because most students wanted to achieve high marks, they may have felt more resentful towards other students who they perceived were receiving preferential treatment, or more teacher time and attention.

For the students who reported experiencing racism in their questionnaires, it is of concern that students are encountering this type of discrimination from teachers. Although research has demonstrated that some teachers explicitly discriminate against students based on their ethnicity (Mitchell & Mitchell, 1988; Turner et al., 2015), there was also evidence that some teachers' biases were implicit (Peterson, Rubie-Davies, Osborne, & Sibley, 2016). Therefore, teachers of the students in the current study may have unknowingly held negative beliefs for their students or were unsuccessfully hiding their negative beliefs towards some of their students. Teacher racism is an area for further research and investigation in the New Zealand education system as reports continue to be published that find Māori and other minority group students have experienced racial discrimination at school (Office of the Children's Commissioner and New Zealand Trustees Association, 2018).

Respect/disrespect. Students made numerous comments about disrespect related to teachers' mispronouncing their names. Teachers mispronouncing students' names is a common finding both in research conducted in New Zealand and internationally (Berryman & Eley, 2017; Doerr, 2009; Eagleson, 1946; Kohli & Solórzano, 2012; Lehiste, 1975; Sembiente, Baxley, & Cavallaro, 2018). Māori children's names may reflect important events, whenua (land) or tūpuna (ancestors). When tūpuna names are mispronounced, it is seen as not only as an act of disrespect towards the child but also as an attack on the mana of the ancestor (Mead, 1996). The Education Council (2017), states that teachers, "refusing to pronounce the names of Māori learners correctly or to learn how to, including the important

names that they whakapapa to such as their whānau, hapū, iwi, tūpuna, marae, waka or maunga” (Education Council of Aotearoa New Zealand, 2017, p. 14) are not showing commitment to their learners, nor affirming them as tangata whenua.

In her study undertaken in a New Zealand secondary school with a Māori bilingual unit, Doerr (2009) found teachers’ lack of effort or apology when incorrectly pronouncing Māori students’ names was in stark contrast to when they made mistakes in maths or English, for which they immediately corrected or apologised. Doerr said it revealed that “mistakes in Te Reo did not matter, while mistakes in English did” (p. 163). Doer stated that “ignorance of Te Reo, intentionally or not, constituted disrespect for Te Reo, its speakers and Māori people” (p.162) and that the teachers’ failure to pronounce Māori names correctly “indexes not only the speaker’s communicative competence as a citizen of a Māori-Pākehā bicultural nation but also the speaker’s attitude toward being a citizen of a bicultural nation” pp.162-163. The correct pronunciation of students’ names is a sign of respect, and a teacher who tries to learn and pronounce a Māori student’s (or any of their students’) names correctly has taken a crucial step in building a positive relationship (Tito, 2008). Mispronunciation of Māori students’ names by teachers highlights that Māori language and cultural knowledge is still given a low priority in New Zealand schools and that teachers are employed who either lack the basic knowledge required to pronounce basic Māori vowel sounds (Awanui, 2014) or do not consider that Māori language is important enough to learn or use correctly (de Bres, 2010).

Fairness /unfairness. As well as making a significantly higher number of responses, teacher participants’ perceptions of fairness also differed from those of students. For teacher participants, ‘fairness’ was used interchangeably with ‘consistent’, so participants perceived fairness to mean that every student received the same treatment and unfairness was when teachers were ‘inconsistent’ in their how they treated students. For students, however,

fairness included a degree of leniency with an expectation their teachers would sometimes make allowances depending on circumstances. Therefore, teachers were ‘unfair’ if they did not accept students’ legitimate excuses. In Walker’s, *Twelve Characteristics of an Effective Teacher* (R. J. Walker, 2013), he stated that fairness “doesn’t mean treating all children the same. It is important to remember that children’s situations are different, so you must be just in the way you treat their individual situations” (R. J. Walker, 2013, p. 48)

Relational Classroom Practices

Positive connections or relationships/poor connections with students. Almost every teacher participant commented that an ideal teacher had a positive connection or relationship with their students, and more than half commented that non-ideal teachers had poor connections with students, which showed that teachers viewed relationships as central to their role. Student participants’ lower number of responses may have indicated that a positive relationship was less important to students as they made higher numbers of responses to sub-themes that were achievement-related. Some research studies have found that high achieving/gifted students placed more value on teacher behaviours that supported their learning rather than on socio-emotional relationships (Capern & Hammond, 2014). It could be that senior students relied on teachers for academic knowledge and support for their learning needs rather than for emotional support because the focus in the final years of high school is on achieving a high stakes qualification. However, there were also students who valued emotional connections with their teachers in addition to academic support and wanted teachers who made a genuine effort to get to know them. Other studies (McHugh, Horner, Colditz, & Wallace, 2013; Siegle, Rubenstein, & Mitchell, 2014) have also found that gifted and high achieving students benefitted from teacher-student relationships that are both socio-emotional and achievement-focussed.

Students made significantly fewer responses about having a poor connection with their non-ideal teacher than did teacher participants. It is possible that there were students in the study who did not have negative relationships with their non-ideal teachers, despite rating their teaching poorly. Research has shown that high achieving students are more likely to have positive relationships with teachers than lower achieving students (Hamre & Pianta, 2001). Additionally, several students in the study identified having positive social-emotional connections with their non-ideal teachers even though they perceived the teacher had poor subject knowledge or lacked teaching ability. Only one secondary school was located with a similar finding. Students in Hawk et al. (2002) reported they had teachers who they did not respect (as teachers) because they did not help them learn.

Conclusion

High-quality teachers and effective teaching contribute not only to students' academic achievement and success but also to their social and emotional well-being. The benefit of having both teacher and student data reported in this study offered not just the perspectives of both groups but added weight to the arguments that each group made. For example, teacher participants confirmed students' reports that their non-ideal teachers mispronounced student names and voiced low expectations about Māori and Pasifika students as teachers had observed these incidences too.

This study contributes to the research on ideal and non-ideal teachers by focusing on the less frequently researched area of secondary education and by including the perceptions of both current students and practising teachers. Relatively few research studies have explored the attributes and characteristics of non-ideal or ineffective teachers. Most studies concentrate on ideal or effective teacher characteristics and tend to focus on the perceptions of teachers or teacher trainees, rather than on those of secondary school-age students (Johnson-Leslie, 2007; Walls, Nardi, von Minden, & Hoffman, 2002). It is important to

include student voice in discussions about ideal and non-ideal teachers as they are key stakeholders and can provide a unique viewpoint to teachers, principals, teacher training organisations, and policy-makers about what matters most for students at school. Education is of little value if teachers maintain practices and behaviours that do not work for a large percentage of the student population.

The next chapter presents Study Three, the final of three studies in this thesis. Study Three was a mixed methods study which examined high achieving secondary school students' perceptions of their relationships with teachers, their reported engagement with school, and the relations between teacher-student relationships and achievement, and between student engagement and achievement. Study Three also builds on the findings from Studies One and Two by exploring in more detail the factors related to students' academic success.

CHAPTER FIVE:
STUDY THREE—TEACHER-STUDENT RELATIONSHIPS, ENGAGEMENT AND
STUDENT SUCCESS

Introduction

Study Three employed a mixed methods design and examined high achieving secondary school students' perceptions of their relationships with teachers, their reported engagement with school, and the relations between teacher-student relationships and achievement, and between student engagement and achievement. Quantitative data were collected via a questionnaire, and focus groups provided the qualitative data for the study. Of interest in the current study were the interrelations between achievement, engagement, and the teacher-student relationship, the types of relationships students wanted with their teachers, and whether high achieving students perceived they needed positive teacher-student relationships to be successful at school or if success was attributable to other factors. Differences between the ethnic groups were also examined.

The research questions for this study were:

1. Is there a relationship between students' relationships with their best and worst teachers and their reported level of engagement?
2. Is there a relationship between ethnicity, prior achievement, and students' relationships with their best or worst teacher?
3. Is there a relationship between prior achievement, student engagement, and student ethnicity?
4. To what extent do students perceive that relationships with teachers and engagement with school have influenced their academic achievement?

Method

Participants

Questionnaire participants. The participants for the questionnaire were 636 students in Year 12 or Year 13 who had attained Merit or Excellence certificate endorsement in the National Certificate of Educational Achievement (NCEA) at Level 1 or Level 2, or had achieved two or more of their courses endorsed with Excellence in one year (at either Level 1 or Level 2). The students were aged between 16 and 19 years old (mean = 16.5, *SD* = .55). The ethnic breakdown of the students is provided in Table 20.

Table 20

Students by Ethnicity Who Completed Questionnaires in Study Three

Ethnicity	Frequency	Percent
Māori	101	15.9%
Pākehā/NZ European	342	53.8%
Pasifika	35	5.5%
Asian	139	21.9%
‘Other’ ethnicity	19	3.0%
TOTAL	636	100.0%

Students also reported the highest education level of either of their parents, which ranged from not completing secondary school to a master’s or higher degree. Table 21 shows the totals of each type of parent qualification along with a breakdown by student ethnicity.

Table 21

Highest Educational Level of either Parent as Reported by Students

	Māori	Pākehā	Pasifika	Asian	Other	TOTAL
Did not complete secondary school	22	29	2	7	2	62
Completed secondary school	23	51	7	20	2	103
Certificate or Diploma	13	69	9	18	1	110
Bachelor's Degree	16	83	4	36	3	142
Master's or Higher Degree	9	61	7	40	6	123
Don't know	13	36	6	15	5	75
Did not answer	5	13	0	3	0	21
TOTAL	101	342	35	139	19	634

Ethnic group organisation for quantitative data analysis. CFA and SEM are quantitative analysis methods which rely on large sample sizes (Tabachnick & Fidell, 2014). Although the Asian student group had 139 students, the Pasifika group and students from other ethnicities only had 35 students and 19 students respectively, which were not large enough to analyse separately. It was therefore decided to focus on Māori and Pākehā students, and then have a third group comprised of Asian, Pasifika and other ethnicities, who

had in common that they were all ethnic minority groups in New Zealand. Additionally, earlier research has shown likenesses between Asian and Pasifika students beliefs, such as similar levels of performance goal orientation and self-efficacy (e.g., see Meissel & Rubie-Davies, 2016).

Focus group participants. Focus group interviews were conducted with 25 students from three secondary schools in Auckland. Two schools were low decile (decile 2 and decile 3), and one was high decile (decile 9). One of the focus groups comprised only Māori students ($n = 7$) and the remaining four focus groups were mixed ethnicities including Māori ($n = 2$), Pākehā, ($n = 10$), Pasifika ($n = 3$), and Asian students ($n = 3$).

Procedures and Measures

Focus groups. The focus group interviews concentrated on student perceptions of success, teacher-student relationships, and engagement, and this method was selected to obtain responses from a large number of student participants within a relatively short period. A question schedule similar to an interview was developed for the groups (see Appendix J). The question-based focus group format has been used previously in research studies with participants of high school age (e.g., see Grigg & Manderson, 2015). Although similar types of questions are asked at focus groups and group interviews, a focus group aims to elicit responses, interactions, and discussion among participants who may be prompted to respond, not only to questions raised by the interviewer but also to the responses offered by other participants. The responses of others may encourage participants to provide deeper or different reflections on their experiences (Kitzinger, 1995).

A hui whakatau (welcoming ceremony) took place prior to the commencement of the focus group at one school. A hui whakatau is less formal than a pōwhiri (a formal welcoming ceremony usually held on a marae) but includes similar protocols (Tipene-Matua, Phillips, Cram, Parsons, & Taupo, 2009). The hui started with student, teacher, and researcher

introductions by sharing a brief mihi (greeting), pepeha (a way of introducing yourself in Māori which includes geographical and tribal identifiers to inform others who you are, where you are from, and where you belong), and whakapapa (genealogy). Following the introductions and greetings, the researcher explained the research, and what the students' involvement would be if they chose to participate. The researcher then invited students to ask questions. Once all questions had been answered, the hui was concluded, and food was shared. Those students who wanted to participate in the focus group remained in the classroom during their lunch break.

For the remaining focus groups in the other two schools, time was allocated at the start of each session for researcher and participant introductions, explanation of the research, and student questions. All focus groups were held at the students' schools, and food and drink were provided for participants at each session. In Māori culture, providing food is a way to demonstrate manaakitanga towards guests, which is a gesture of goodwill and hospitality (Tipene-Matua et al., 2009). Krueger and Casey (2015) also support the use of food at focus groups for youth who report it makes discussions "more comfortable, relaxed and enjoyable" (p. 119).

All focus groups were held during students' breaks to minimise interruptions to learning time. The time taken for each focus group ranged from 40 to 60 minutes. Field notes supplemented the digital audio recording so that a note could be made of who was speaking at a given point in the discussion. Krueger and Casey (2015) support separating the comments of individual focus group members and identifying participants with codes or pseudonyms so that researchers can attribute quotes to a speaker or analyse data based on participant demographics (pp.113 -114). In the current study, students' perceptions of their relationships with their teachers and how engagement with school related to achievement was compared by ethnicity, so it was necessary to code individual comments to students, so their

ethnicity could be recorded. Krueger and Casey (2015) concluded that whatever method of capturing data was selected, notes for focus groups should at least include, “the name of the study, date...time...location...type of participants...number of participants...name of moderator...name of assistant moderator, a diagram of the seating arrangements, including the first name of each participant or a code for each participant...” (pp. 114-115). Student and teacher names in the current study were replaced with codes to protect participants’ identities.

Ethical Considerations

Consent to be audio-recorded was obtained from all participants at the beginning of the study. Participants had the option to withdraw from the interviews up until the start of the focus group without giving a reason. Questions were emailed to participants in advance, which enabled them to formulate responses before the focus group interviews if they chose to. However, participants were invited to respond freely about their beliefs about the topics.

Data collection. Students had the option of completing the questionnaire on paper or online via Qualtrics at a suitable time nominated by the students or the school. If they opted for an online questionnaire, students were provided with a link to complete the survey via Qualtrics on their own or school devices, and a supply of paper and pencil questionnaires were also on hand if required. Questionnaire completion was supported by the researcher (a fully registered teacher). The student questionnaire took approximately 30 minutes to complete with some students taking less time and other students taking longer.

Questionnaire. The Study Three questionnaire was comprised of the Network of Relationships Inventory - Social Provisions Version (NRI-SPV; Furman & Buhrmester, 1985) and the Student Engagement Instrument (SEI; Appleton et al., 2006). Demographic data collected from students included their school name (so that the decile rating of the school could be tracked), date of birth, year level, gender, student and parent(s)/guardian(s)

ethnicity, the highest education level of either parent or guardian, the highest level of education the student expected to complete, and students' extra-curricular involvement.

The Network of Relationships Inventory Social Provisions Version (NRI-SPV; Furman & Buhrmester, 1985) was used to measure students' perceptions of the teacher-student relationship. The measure was originally developed to measure characteristics of an individual's relationships with others and, according to the authors, is suitable for children 11 years or older. Participants were asked to indicate their relationship with their current best, and worst teacher on separate 6-point Likert scales, where 1 = *Completely Disagree*, 2 = *Mostly Disagree*, 3 = *Slightly Disagree*, 4 = *Slightly Agree*, 5 = *Mostly Agree* and 6 = *Completely Agree*. The NRI-SPV is comprised of 10 subscales; seven are social needs subscales (affection, reliable alliance, reassurance of worth, intimate disclosure, instrumental aid, companionship, and nurturance), two are negative characteristics of relationships subscales (conflict and antagonism), and one is relative power. Each subscale contains three items. For this study, the relative power, companionship, reliable alliance, nurturance, and antagonism scales were removed as the items were not considered relevant to the teacher-student relationship, or they referred to situations outside the context of the classroom. In previous studies, Cronbach's alphas were adequate and ranged from .75 to .89 (Carbery & Buhrmester, 1998; Furman & Buhrmester, 2009). A sample item and the internal consistency (alpha reliability) from the current study for each subscale are listed in Table 22.

Table 22

NRI-SPV Subscale Sample Items and Internal Consistency

Subscale	Sample Item	Internal Consistency (Cronbach's Alpha)
Conflict	This teacher and I often disagree and quarrel with each other	$\alpha = .90$
Instrumental Aid	This teacher teaches me how to do lots of things that I don't know	$\alpha = .76$
Intimate disclosure	I often tell this teacher about things that I don't want others to know	$\alpha = .93$
Affection	This teacher really cares about me	$\alpha = .87$
Reassurance of worth	This teacher treats me as if I'm really admired and respected	$\alpha = .86$

The SEI (Appleton et al., 2006) measured students perceived cognitive and emotional engagement. Students were asked to indicate their level of engagement on a 6-point scale, where 1 = Completely Disagree, 2 = Mostly Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Mostly Agree and 6 = Completely Agree. Obtaining students' own perceptions of their cognitive and emotional engagement was preferable as data related to these facets of engagement are less easy to obtain than examples of behavioural and academic engagement which can either be observed or sourced through students' records of attendance or behaviour, task completion (Appleton et al., 2006), and student reports of participation in extracurricular activities.

Of the six subscales in the SEI, three are related to cognitive engagement (future aspirations and goals, extrinsic motivation, and control and relevance of school work) and three are related to emotional engagement (teacher-student relationships, peer support for

learning, and family support for learning). The internal consistency (alpha reliability) in previous studies for this scale ranged from $\alpha = .72$ to $\alpha = .92$ (Appleton et al., 2006; Reschly, Huebner, Appleton, & Antaramian, 2008). A sample item and the internal consistency (alpha reliability) from the current study for each subscale is listed in

Table 23.

Table 23

SEI Subscale Sample Items and Internal Consistency

Subscale	Sample Item	Internal Consistency (Cronbach's Alpha)
Future aspirations and goals (5 items)	I plan to continue my education following high school	$\alpha = .79$
Extrinsic motivation (2 items)	I'll learn, but only if the teacher gives me a reward (reversed)	$\alpha = .76$
Control and relevance of school work (9 items)	Most of what is important to know you learn in school	$\alpha = .80$
Teacher-student relationships (9 items)	At my school, teachers care about the students	$\alpha = .89$
Peer support for learning (6 items)	Students at my school are there for me when I need them	$\alpha = .89$
Family support for learning (4 items)	When I have problems at school my family/guardian(s) are willing to help me	$\alpha = .82$

Students' Academic Achievement

Students' self-reported, prior year NCEA results were used as a measure of academic achievement. Official achievement data could not be obtained for each student due to the anonymity of the questionnaire. However, prior research has demonstrated correlations of between .73 and .94 for self-reported achievement results when compared with official grades

(Anaya, 1999; Cassady, 2001). Students reported whether they achieved each of their subjects with Excellence (E), Merit (M), Achieved (A), or Not Achieved (N) grades. Grades were then converted to numerical scores where an E = 4.00, an M = 3.00, an A = 2.00 and an N = 0. The numerical scores for students' top five subjects were totalled and an average calculated to create an overall achievement score (Walkey et al., 2013). This process is like the method followed to calculate rank scores for university admission except that universities calculate the total from a student's 80 best credits at NCEA Level 3 over five subjects, rather than from their final grade in each subject (University of Auckland, n.d.). The maximum university rank score for a student earning all Excellence credits would be 320 (80 credits at 4 points per credit). In the current study, a student earning Excellence grades in all subjects in the previous year would have an achievement score of 4.00, a student earning all Merit grades would have an achievement score of 3.00, and a student earning all Achieved grades would have an achievement score of 2.00.

The Conceptual Model

A hypothesised conceptual model (see Figure 1) was developed in response to the research questions for this study and empirically tested. The following hypotheses were proposed. First, prior year achievement will influence students' relationship with their best or worst teacher and will differ by student ethnicity. Second, it was hypothesised that students' relationship with their best or worst teacher would influence engagement, and this would differ by student ethnicity. Finally, it was hypothesised that there would be relations between students' prior year achievement, engagement, and student ethnicity.

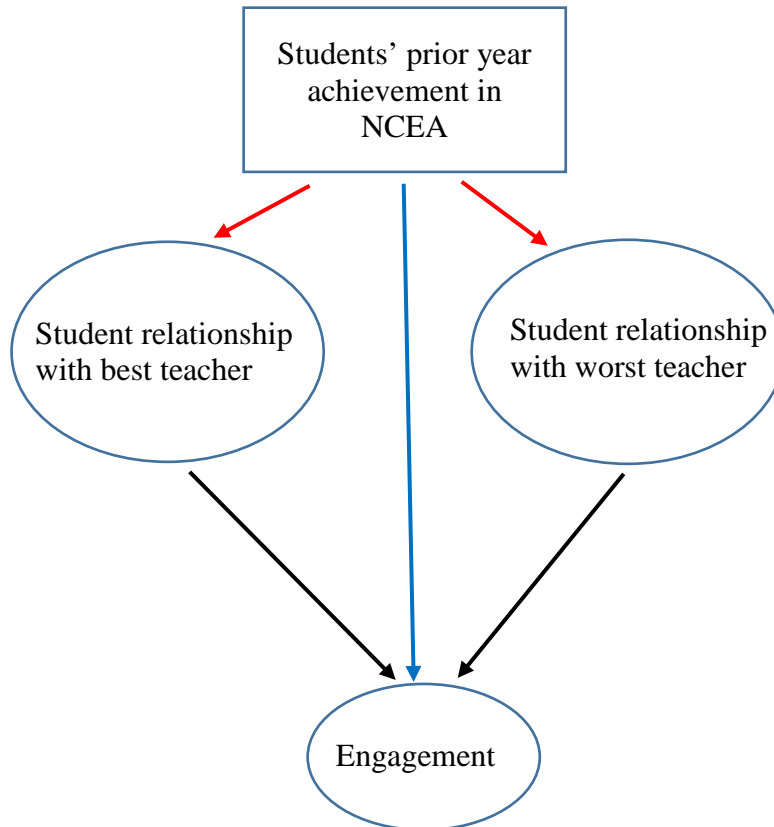


Figure 1. Hypothesised model of the relations between students' relationships with their best and worst teacher, engagement, and prior year achievement with three ethnic groupings (Māori, Pākehā, and students from other ethnicities).

Quantitative Data Analysis

Quantitative data analysis. Quantitative data management and analysis were performed using the Statistical Package for Social Sciences (SPSS) version 24.0 and Analysis of Moment Structures (AMOS) version 25. The demographic data, NCEA achievement data, NRI-SPV, and the SEI were entered into SPSS. Once entry was complete, the data were checked for errors, missing responses, and outliers.

Outliers. Data were screened for outliers using SPSS 24.0. Structural equation modelling is sensitive to outliers, which affect the mean, standard deviation, and correlation coefficients (Schumacker & Lomax, 2004). Existing research studies have shown that outliers can seriously skew the data and produce results that are not an accurate reflection of

the data (e.g., see Osborne & Overbay, 2004). In the total sample of 636 students, 47 (7.3%) were identified as extreme outliers. Each data record was checked for errors, and in each case, it appeared that participants might not have completed the questionnaire correctly as either the same answer was marked throughout the script, or they had alternated between two responses in a pattern. Therefore, it was decided to drop these extreme outliers from the CFA and SEM analysis, which left a sample of 594 students. The three groups of students were comprised of Māori ($n = 91$), Pākehā ($n = 321$) and students from other ethnicities ($n = 182$).

Missing data. The online questionnaire was set up to reduce the likelihood of missing responses required and an answer for all the Likert scale items on each page before moving on, which eliminated missing answers from the raw data file. However, there were small numbers of missing responses in the paper and pencil versions of the questionnaire and from parts of the online questionnaire where there were free or multiple responses possible. A total of 9.1% of students had missing responses. At less than 10%, this was within the acceptable limits for using expectation maximisation. A Little's MCAR test (Little, 1988) was undertaken in SPSS which resulted in a Chi-square = 19.222 ($df = 19, p = .443$), indicating that data were missing completely at random. Missing data were imputed using Missing Values Analysis within SPSS 24.0.

Confirmatory factor analysis. Confirmatory factor analysis was conducted separately for both the NRI-SPV and the SEI to validate each measure and the proposed measurement models before structural equation modelling. This ensured that each of the variables accurately reflected each of the factors it was measuring and reduced the likelihood of problems arising with the structural model (Jackson, Gillaspay Jr, & Purc-Stephenson, 2009). Default models using the items from each measurement scale were specified first, and then changes were made to each of the models by removing items with low factor scores and

high standardised residual covariance (SRCs) to obtain a good fit, resulting in nested models when compared to the default model.

Model fit. Several fit indices were used in this study to ascertain whether each of the models developed had good or acceptable fit. These were the chi-square (χ^2), degrees of freedom (df), normed chi-square (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root mean square error of approximation (RMSEA), gamma hat ($\hat{\gamma}$), and the standardised root mean square residual (SRMR). The chi-square statistic evaluates overall model fit and “assesses the magnitude of discrepancy between the sample and fitted covariance matrices” (Hu & Bentler, 1999). A reported weakness of the chi-square statistic is its sensitivity to sample size which means it is almost always significant and therefore rejects a model when a large sample size is used, so reporting it alongside other fit indices, such as the normed chi-square (χ^2/df) is recommended. The acceptable ratio of chi-square to degrees of freedom varies between researchers (Hooper, Coughlan, & Mullen, 2008; Schreiber, Nora, Stage, Barlow, & King, 2006) with values ranging between 2 and 5. However, in general, a value between 2 and 3 is considered a good model fit.

For the RMSEA and the SRMR, moderate model fit is between .08 and .10, and <.06 or less indicates excellent fit (Hooper et al., 2008; Hu & Bentler, 1999). For the CFI and TLI indices, a moderate fit is $\geq .90$, and excellent fit is $\geq .95$ (Hu & Bentler, 1999). The gamma hat is not sensitive to either sample size or the type of model used (Fan & Sivo, 2007). Acceptable fit of the gamma hat is $\geq .90$ and $\geq .95$ constitutes excellent fit (Marsh, Hau, & Wen, 2004).

Qualitative Data Analysis

Digital recordings from each of the focus group interviews were transcribed verbatim, uploaded to NVivo and then analysed using thematic analysis, which Braun and Clarke (2006) describe as “a method for identifying, analysing and reporting patterns (themes)

within data” (p. 79). Thematic analysis is a flexible method of analysing data related to people’s experiences, perceptions or viewpoints. There are six phases in the analysis process. These are “(1) Familiarisation with the data; (2) Generating Initial codes; (3) Searching for themes; (4) Reviewing the themes; (5) Defining and naming themes; (6) Producing the report” (Braun & Clarke, 2006, p. 87). The descriptions of the data analysis process outlined below followed the guidelines of Braun and Clarke (2006).

The first phase involved familiarisation with the data and was achieved by reading and re-reading the focus group transcripts, highlighting interesting quotes, and noting initial ideas in memos. In the second phase, codes relevant to the research topic and research questions were developed. Two of the first codes made to describe students’ attributions for success were ‘motivation’ and ‘hard work and effort’. Data extracts were tagged in each of group’s transcripts and placed into each of the codes.

In the third phase, codes were sorted into themes, and data extracts were allocated to themes. At this point, some codes became themes or sub-themes, and others were discarded. As discussed earlier, ‘motivation’ and ‘hard work and effort’ were allocated to an ‘Attributions for success’ theme. The individual codes of ‘independent work’ and ‘self-studying/self-teaching’ were merged into a new code called ‘independent self-study’ as these items appeared to be related.

In the fourth phase, themes were reviewed, which involved determining whether the themes answered the research questions. Themes were also divided, joined together or rejected in this phase. In the ‘Student Engagement’ theme, engagement types were each given a separate code (e.g., behavioural engagement, emotional engagement, etc.).

The fifth phase was where each theme was analysed, and a story developed from each one, and the final phase involved writing up the results. Here, data extracts were woven into a narrative that told the story of the data and produced an argument about the research

questions (Braun & Clarke, 2006). The sixth phase, the production of the focus group findings, is reported in the qualitative results section of this chapter. The final four themes, five sub-themes, and 25 codes are displayed in Table 24.

Table 24

Themes and Codes related to Students' Perceptions of Teacher-student relationships, Engagement, and Student Success

Themes	Codes
Students attributions for success in NCEA	
Personal	Hard work and effort Motivation Natural ability Independent self-study Support from teachers
Effective teaching	Offered help Explained work Taught directly to Achievement standards Regularly revised Checked students understood the work
Ineffective teaching	Did not teach Did not explain the work Did not help/guide students with internal assessments Taught using worksheets/textbooks No interactions/discussions in class
Students perceptions of engagement related to achievement	Behavioural engagement Cognitive engagement Emotional engagement
Teacher-student relationships	
Important for academic success	Increased engagement

Themes	Codes
	Increased enjoyment of the subject
	Better results
Not important for academic success	Still achieved despite a bad relationship
Types of teacher-student relationships	Academic-learning relationships
	Emotionally supportive relationships
	Academic-learning and emotionally supportive relationships

Quantitative Results

Student Achievement in NCEA by Ethnicity

As can be seen from the means listed in Table 25, the students from ‘Other’ ethnicities had the highest mean achievement of three ethnic groups whereas Māori student achievement was the lowest. However, as described earlier, an achievement score of 3.00 indicates an average of five merit grades across five subjects. Therefore, although the average achievement score of 2.79 for Māori students in this study was lower than that of the two other groups, Māori students, on average, achieved merit grades or higher in at least four of their subjects, which indicates above average achievement.

Further examination of the student achievement means using a one-way between groups ANOVA, revealed a statistically significant difference between the ethnic groups, $F(2, 591) = 9.928, p < .001$. The effect size, calculated using eta squared, was .03 which, according to Cohen (1988), is a small effect size. A post hoc Tukey test showed statistically significant differences between Māori and Pākehā students ($p = .002$) and Māori and Other students ($p < .001$) with Māori student achievement lower than both Pākehā and students from other ethnicities. There was no statistically significant difference between the achievement of Pākehā and students from ‘Other’ ethnicities.

Table 25

Means and Standard Deviations for Students' Prior Year Achievement in NCEA

Ethnicity	NCEA Achievement	
	Mean (<i>N</i> = 594)	SD
Pākehā	3.01	.52
Māori	2.79	.59
Other	3.11	.60

Validation of the Measures and Measurement Models

Validation of the SEL. A six-factor model based on Appleton et al.'s findings (2006) was created with all 32 questionnaire items loaded onto their corresponding factors (teacher-student relationships, family support for learning, peer support for learning, future aspirations and goals, control and relevance of school work, and extrinsic motivation). Regression weights were initially set to one on the first item of each factor, and after the initial calculation of estimates, the items with the highest unstandardised factor loadings had their regression weight set to 1 (Byrne, 2010). The estimates were then calculated again to get the default model statistics. The initial model had acceptable fit for RMSEA and SRMR, but poor overall fit (Model 1, $\chi^2 = 1926.3^{***}$, $df = 450$, $\chi^2 / df = 4.3$, CFI = .85, TLI = .83, RMSEA = .07, Gamma Hat = 0.87, SRMR = .06).

To improve the model fit, the SRC matrix was examined for significant SRCs. Significant SRCs have an absolute value higher than 2.58, which indicates items that do not fit well in the model and significantly decrease model fit. Items 39C, 32C, 22C, and 14C in the teacher-student relationship factor and items 13D, 19D and 20D from the control and relevance of schoolwork factor all had significant SRCs, so each of these items was dropped.

These changes led to improvements in the model including a moderate fit of the RMSEA and SRMR, and an acceptable gamma hat. The CFI and TLI did not, however, reach acceptable levels (see Model 2, Table 26), so the standardised residual covariance (SRC) matrix was examined again to obtain 'good' fit for all the indices.

Several items were found with values above 2.58 including items 11F, and 25F from the future aspirations and goals factor, item 1C from the teacher-student relationship factor, and 33E from the peer support factor, so these four items were dropped. Items 8D and 15D from the Control and relevance of schoolwork factor also had significant SRCs, and as deletion of this item would have left only one item, it was decided to delete the whole factor (Tabachnick & Fidell, 2014). These changes led to an acceptable fit of most of the indices (see Model 3, Table 26). However, as the fit of the final measurement model was likely to decrease when two measurement instruments were combined into one model, it was decided to try to obtain a good fit of each of the indices.

The extrinsic motivation factor was also dropped as both items had significant SRCs. This factor only had two variables, and as it is generally recommended that factors have three or more variables (Tabachnick & Fidell, 2014). This change led to a final four-factor model with the good-to-excellent fit of all indices. The final validated model of the SEI retained for further analysis is shown in Figure 2. See Table 27 for a list of all the items measuring student engagement.

Table 26

The Goodness of Fit Indices for the Student Engagement Instrument (SEI)

Model	χ^2	<i>df</i>	χ^2 / df	CFI	TLI	RMSEA	Gamma Hat	SRMR	Notes
Acceptable levels			≤ 2 to 5	$\geq .90$ - .95	$\geq .90$ - .95	.05 – .08	.90 - .95	< .08 - .10	
Model 1: Default 6-factor model	1926.3***	450	4.3	.85	.83	.07	.87	.06	
Model 2 – 6 factor model	795.0***	261	3.0	.92	.91	.06	.91	.06	EX19D and EX20D dropped from control and relevance of school work. Items 14C, 22C, 27C and 39C dropped from the teacher-student relationship factor.
Model 3 – 6 factor model	273.9***	126	2.2	.97	.93	.04	.97	.04	Dropped 11F and 25F from the future goals and aspirations factor, 1C from teacher-student relations, and 33E from peer relations factor. Dropped the Control and Relevance of Schoolwork factor.
Model 4 – 4 factor model	229.0***	98	2.3	.97	.96	.05	.97	.04	Extrinsic motivation factor dropped due to significant SRCs in both items

χ^2 = Chi-square, *df* = degrees of freedom, CFI—Comparative Fit Index, TLI—Tucker-Lewis Index, RMSEA—Root-Mean-Square Error of Approximation, SRMR (Standardised Root Mean Square Residual). *** $p < .001$



Figure 2. A schematic diagram of the four-factor validated model of the SEI showing the standardised regressions for each item.

Table 27

Student Engagement Instrument Subscales and Items following the CFA

Factor	Item	Description
Teacher-student relationship	7C	Adults at my school listen to the students
	17C	The school rules are fair
	18C	Overall, my teachers are open and honest with me
	27C	I enjoy talking to the teachers here
Family support	12G	My family/guardian(s) are there for me when I need them
	35G	My family/guardian(s) want me to keep trying when things are tough at school
	38G	When something good happens at school, my family/guardian(s) want to know about it
	42G	When I have problems at school, my family/guardian(s) are willing to help me
Peer support	3E	Students at my school are there for me when I need them.
	9E	Other students at school care about me.
	16E	Other students here like me the way I am.
	21E	I enjoy talking to the students here.
	30E	Students here respect what I have to say
Future aspirations and goals	4F	I plan to continue my education following secondary school.
	10F	Going to further education after secondary school is important.
	31F	School is important for achieving my future goals

Validation of the NRI-SPV. A 10-factor model based on Furman and Buhrmester's (1985) original five-factor model was created which incorporated 30 questionnaire items loaded onto their corresponding factors for a student's relationship with their best (BT) and their worst teacher (WT). The conflict factor reflected negative aspects of the teacher-student relationship (BT Conflict and WT Conflict) and four factors were reflective of the supportive aspects of BT reassurance of worth, WT Reassurance of worth, BT affection, WT affection, BT instrumental aid, WT instrumental aid, BT intimate disclosure, and WT intimate disclosure).

The same process was followed to validate the NRI-SPV as had been used to validate the SEI. Regression weights were initially set to 1 on the first item of each factor, and after the initial calculation of estimates, the items with the highest unstandardised factor loadings had their regression weight set to 1 (Byrne, 2010). The estimates were then calculated again to get the default model statistics. The initial model fit was poor (Model 1, $\chi^2 = 2711.9^{***}$, $df = 404$, $\chi^2 / df = 6.7$, CFI = .82, TLI .81, RMSEA = .098, gamma hat = 0.79, SRMR = .15).

The standardised residual covariance (SRC) matrix was examined for significant SRCs (those with a value greater than 2.58). There were several items with values above 2.58, including all the items in the BT and WT Reassurance of Worth factors. As a result, these two factors were dropped from the model. These changes led to improvements in the model, but the fit of the model was still not satisfactory (see Model 2, Table 28).

The SRC index was examined again to see if there were any other items with significant values. Significant SRCs were found in items in the BT and WT Affection factors, so these two factors were also dropped. The removal of these two factors led to a moderate fit of the model (see Model 3, Table 28) but it was decided to try and get the best possible fit because when the NRI-SPV was added to the full measurement model, there was a chance that fit may be reduced.

Significant SRCs were found in items in BT Conflict and WT Instrumental aid, so both factors were dropped. These changes led to good overall fit: (Model 4, $\chi^2 = 192.0^{***}$, $df = 53$, $\chi^2 / df = 3.6$, CFI = .97, TLI .96, RMSEA = .07, gamma hat = 0.96, SRMR = .13). The validated model of the NRI-SPV is shown in Figure 3. See Table 29 for a list of all the items measuring a students' relationship with their best and worst teacher.

Table 28

The Goodness of Fit Indices for the Network of Relationships Inventory Social Provisions Version (NRI-SPV)

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	Gamma Hat	SRMR	Notes
Acceptable levels			≤ 2 to 5	$\geq .90$ - .95	$\geq .90$ - .95	.05 – .08	.90 - .95	< .08 - .10	
Model 1 - Default 10 factor model	2711.9**	404	6.7	.82	.81	.098	.79	.15	
Model 2 – 8 factor model	1103.7***	251	4.4	.90	.90	.076	.89	.14	Dropped WT Reassurance of Worth and BT Reassurance of Worth factors
Model 3 – 6 factor model	792.3***	133	3.8	.94	.94	.069	.93	.13	Dropped WT Affection and BT Affection
Model 4 – 4 factor model	192.0***	53	3.6	.97	.96	.067	.96	.13	Dropped BT conflict and WT affection factors WT Instrumental aid factors

Table 29

NRI-SPV Subscales and Items Following the CFA Results

Factor	Item	Description
Best Teacher Instrumental Aid	BINA1	This teacher teaches me how to do lots of things that I don't know
	BINA2	This teacher often helps me to figure out or fix things
	BINA3	This teacher gives me a lot of help when I need to get something done
Best Teacher Intimate Disclosure	BIND1	I often tell this teacher about things that I don't want others to know
	BIND2	I often tell this teacher everything that I am going through
	BIND3	I often share secrets and private feelings with this teacher
Worst Teacher Conflict	WCON1	This teacher and I often disagree and quarrel with each other
	WCON2	This teacher and I often get mad or get into fights with each other
	WCON3	This teacher and I often argue with each other
Worst Teacher Intimate Disclosure	WIND1	I often tell this teacher about things that I don't want others to know
	WIND2	I often tell this teacher everything that I am going through
	WIND3	I often share secrets and private feelings with this teacher

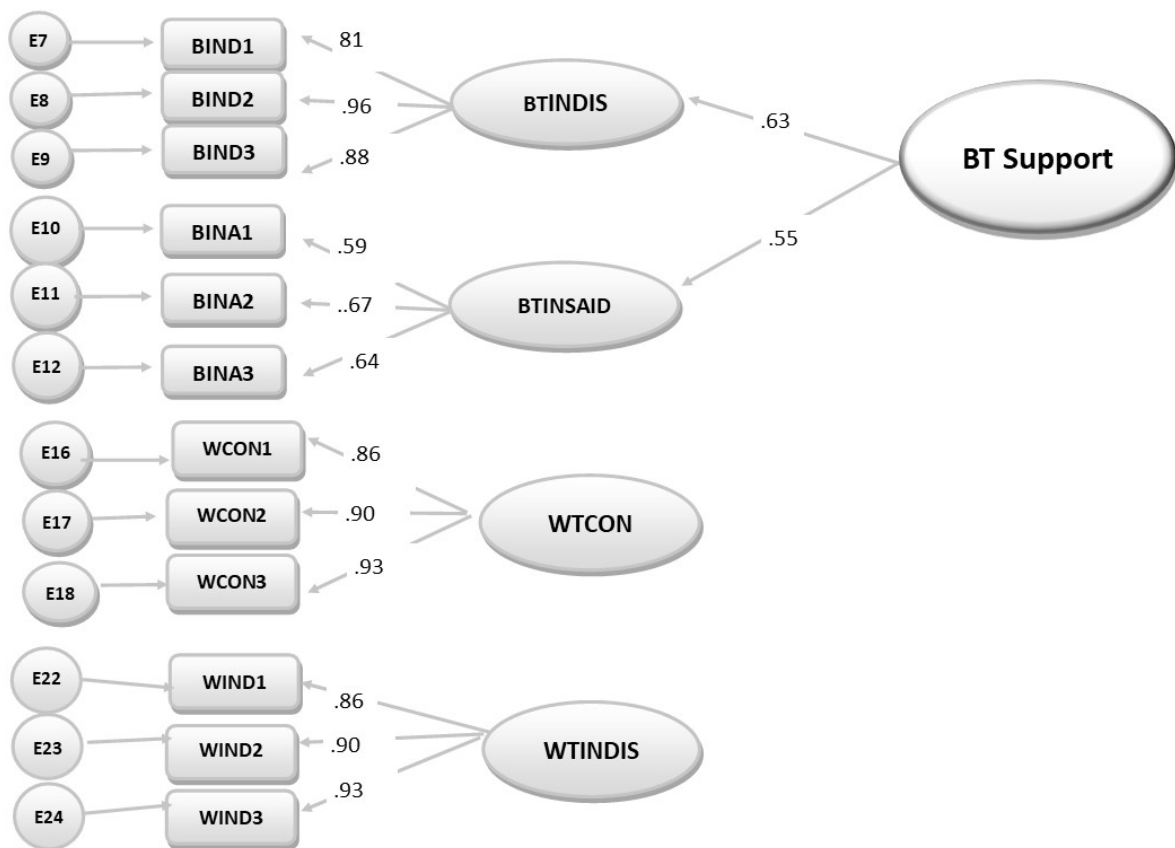


Figure 3. A schematic diagram of the validated model of the NRI-SPV showing the standardised regressions for each item.

Structural Equation Model of the Relations between Student Relationships with their Best and Worst Teachers, Engagement, and Achievement

A schematic diagram of the hypothesised model is shown in Figure 4. Ovals represent latent variables and rectangles represent measured variables. Absence of a line connecting variables implies a lack of a hypothesised direct effect. The final measurement model comprised of one supportive factor (worst teacher intimate disclosure) and one conflict factor (worst teacher conflict) to explain a student's relationship with their worst teacher. Two factors explained the supportive aspect of a student's relationship with their best teacher (best teacher intimate disclosure and best teacher instrumental aid) and four factors explained

a student's engagement with school (teacher-student relationship, family support for learning, peer support for learning, and future goals and aspirations), and students' prior year achievement score in NCEA.

The hypothesised model, which included 20 items from the validated Student Engagement instrument and 12 items from the validated Network of Relationships Inventory – Social Provisions Version, was subjected to confirmatory factor analysis using the full sample of 594 students. The model showed good overall fit (Hypothesised model 1, $\chi^2 = 788.0^{***}$, $df = 370$, $\chi^2 / df = 2.1$, CFI = .95, TLI .95, RMSEA = .04, gamma hat = .96, SRMR = .07).

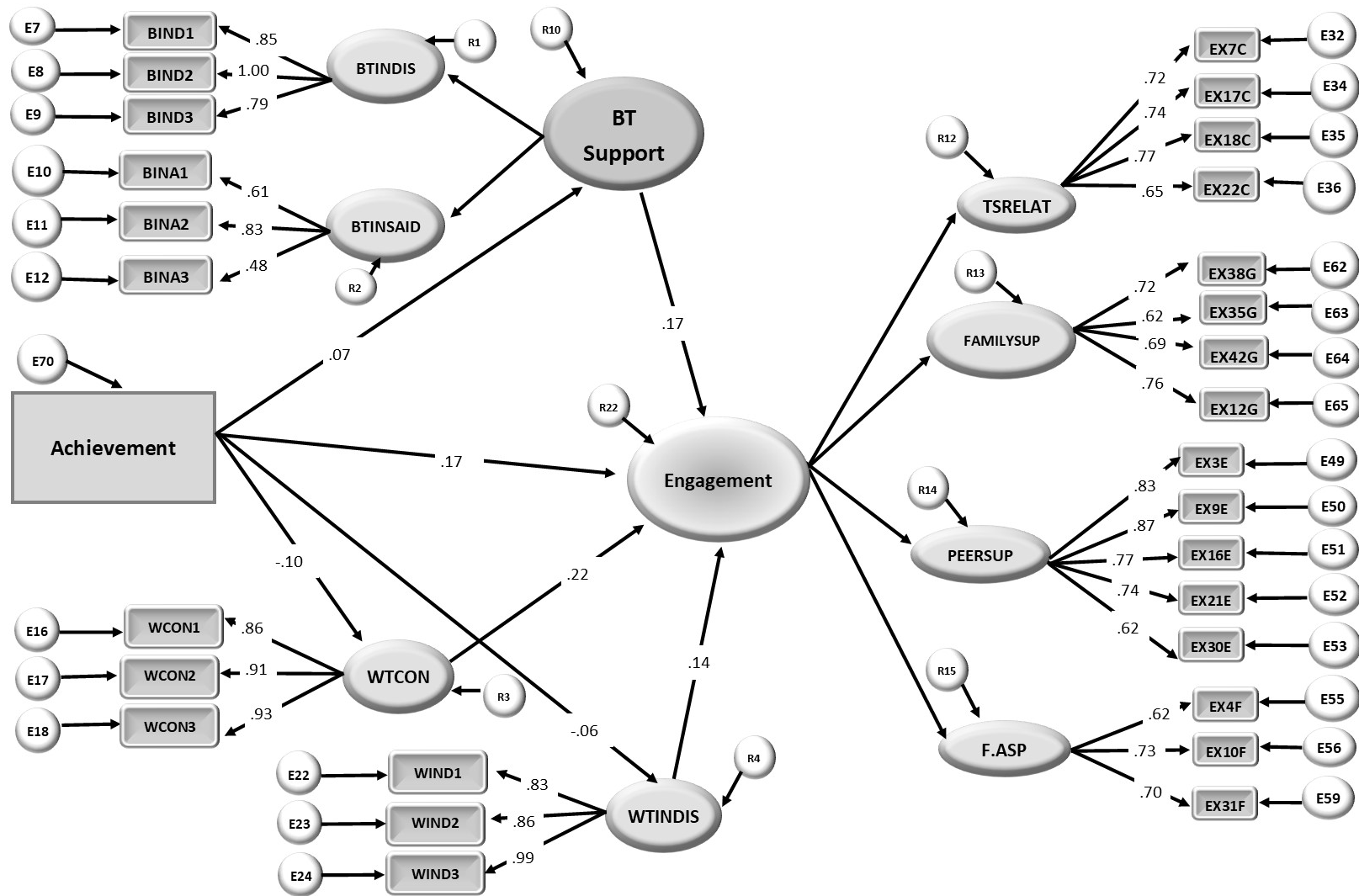


Figure 4. A schematic diagram of the baseline hypothesised measurement model showing standardised regressions

Factorial Invariance

To answer the research questions related to differences by student ethnicity, multiple group invariance testing was conducted to establish factorial equivalence for the three ethnic groups (Māori students, Pākehā students, and students from Other ethnicities). ‘Other’ students comprised Asian, Pasifika, and students whose ethnic origin did not fit with any of the previously described groupings. Measurement invariance was tested on the hypothesised model using the steps outlined in Milfont and Fischer (2010).

In the first step, before the groups were compared, the hypothetical model structure was checked to ensure it had good fit for each of the three ethnic groups being studied. All three groups had acceptable model fit: Māori: ($\chi^2 = 507.9^{***}$, $df = 369$, $\chi^2 / df = 1.4$, CFI = .91, TLI = .90, RMSEA = .07, SRMR = .11, Gamma Hat = .91); Pākehā ($\chi^2 = 627.0^{***}$, $df = 367$, $\chi^2 / df = 1.7$, CFI = .95, TLI = .94, RMSEA = .05, SRMR = .08, gamma hat = .94); and Other ethnicities ($\chi^2 = 590.4^{***}$, $df = 368$, $\chi^2 / df = 1.6$, CFI = .91, TLI = .90, RMSEA = .06, SRMR = .09, Gamma Hat .93).

The second step was the validation of the hypothesised model through factorial invariance, which consists of four levels: Configural invariance, weak factorial invariance, strong factorial invariance and strict factorial invariance (Timmons, 2010). The first level, configural invariance is where chi-square, RMSEA, CFI and other fit indices determine whether combined models have good model fit. With configural invariance, the model is estimated freely; that is the variables are not constrained. If a good model fit is achieved, then it is likely that the groups are equivalent with regards to the factor structure.

Configural invariance. Model 1 tested the proposed structure for invariance across the three ethnic groups. As the fit of the structure had been established independently for each ethnic group, it was expected that configural invariance would be supported. The

goodness of fit indices for the three-group unconstrained model were Model 1, $\chi^2 = 1802.4^{***}$, $df = 1110$, $\chi^2 / df = 1.6$, CFI = .922, TLI .914, RMSEA = .032, gamma hat = .98, SRMR = .11. The comparative fit index (CFI) value of .92 was acceptable, and the root mean squared error of approximation (RMSEA) value of .032 indicated very good fit across the three ethnic groups demonstrating that the factorial structure was equivalent across the three ethnic groups and therefore configural invariance was confirmed.

Weak factorial invariance. The third step was testing for weak factorial invariance (also called metric invariance) which is where all factor loadings in the model are constrained, so they are the same across each of the ethnic groups. The fit indices for Model 2, shown in Table 30 indicated that constraining equal factor loadings across the ethnic groups did not decrease the fit of Model 2 compared with Model 1. As chi-square is sensitive to both sample size and complex models, the RMSEA values and RMSEA confidence intervals of the weak and strong factorial invariance models were compared, along with the change in CFI (Δ CFI). Changes $<.01$ indicate model invariance. The RMSEA values fell within the confidence intervals of both the configural and weak factorial invariance models. For example, RMSEA (configural) = .032 (.030-.035); RMSEA (weak) = .032 (.030-.035). The Δ CFI was also less than 0.01 (.922 - .919). Therefore, metric invariance was supported across the three ethnic groups.

Strong factorial invariance. The fourth step tested for strong factorial invariance and involved constraining not only the factor loadings but also structural paths and residuals (there were no factor covariances in this model). The fit indices for the strong factorial model (Model 3) are shown in Table 30. The RMSEA values also fell within the confidence intervals of both the weak and the strong factorial invariance models. For example, RMSEA (strong) = .034 (.031 - .036); RMSEA (weak) = .032 (.030 - .035) and Δ CFI (.919 and .910) was less than 0.01 which indicates strong factorial invariance.

Strict factorial invariance. The fifth step in the multi-group confirmatory analysis is strict factorial analysis. This level of invariance involves the indicator residuals also being equivalent and is not usually recommended as it is generally too strict to achieve in practice. Achieving strong factorial invariance is considered sufficient. However, to demonstrate whether the hypothesised model met strict factorial invariance, the fit indices for the strict factorial invariance model were: Model 4 ($\chi^2 = 2257.1^{***}$, $df = 1240$, $\chi^2 / df = 1.8$, CFI = .885, TLI = .887, RMSEA = .037, gamma hat = .97, SRMR = 0.12). Strict factorial invariance was not met as the change in CFI between the strict invariance, and strong invariance model was greater than 0.01 (.908-.887). The RMSEA values also did not fall within the confidence intervals for both the strict and strong factorial invariance models. For example: RMSEA (strict) = .037 (.035 - .039); RMSEA (strong) = .034 (.031-.036).

Table 30

The Goodness of Fit Statistics for Tests of Measurement Invariance between the Student Ethnic Groups

Model	χ^2	df	χ^2/df	RMSEA	Δ RMSEA	CFI	Δ CFI	TLI	Gamma Hat	SRMR
			≤ 2 to 5	.05 – .08		$\geq .90$ - .95	<.01	$\geq .90$ - .95	$\geq .90$ - .95	< .08 - .10
Ethnic group invariance										
Model 1:	1802.4***	1110	1.6	.032	-	.922	-	.914	.98	.11
Configural invariance										
Model 2:	1864.6***	1148	1.6	.032	-	.919	.003	.914	.98	.11
Weak (metric) invariance										
Model 3:	1987.3***	1188	1.7	.034	.002	.910	.009	.908	.98	.12
Strong factorial invariance										
Model 4:	2257.1***	1240	1.8	.037	.003	.885	.025	.887	.97	.12
Strict factorial invariance										

*** p = <.001

Descriptive Statistics

Once validation of the two measurement instruments was completed, and factorial invariance of the hypothesised model had been established, the means, standard deviations, skewness, kurtosis, and internal consistency (Cronbach's alpha) were calculated for each of the factors in the model (see Table 31). Skewness ranged from .46 to 1.91 and kurtosis ranged from .39 to 4.97. According to Kline (2005), skewness levels less than three, or kurtosis less than ten, suggest departures from normality that are unlikely to be problematic, while West, Finch and Curran (1995) and Kim (2013) suggest slightly more conservative criteria, and deemed skewness less than two and kurtosis less than seven to be acceptable. The range of skewness and kurtosis in the current study meets Kline's (2005) as well as West et al.'s (1995) and Kim's (2013) criteria.

The internal consistency (Cronbach's alpha) for all factors except one exceeded .70. The Cronbach's alpha for the 'Best Teacher Instrumental Aid' factor was $\alpha = .65$. DeVellis' (2003) acceptability ranges for reliability on research scales are as follows: "below .60, unacceptable; between .60 and .65, undesirable; between .65 and .70, minimally acceptable; between .70 and .80, respectable; and between .80 and .90, very good; much above .90, one should consider shortening the scale" (pp. 95-96).

Robinson, Shaver, and Wrightsman (1991) largely concurred with DeVellis, referring to a Cronbach's alpha of .80 as exemplary; .70 to .79 as extensive; .60 to .69 as moderate and below .60 as a minimum. To decide whether scale reliability was acceptable, Ponterotto and Ruckdeschel (2007), advised that it was important to consider the situation in which the scale would be used. A lower Cronbach's alpha was acceptable for scales that were used in group-design research studies with large samples (such as the current study), but for individual, high-stakes decision-making, such as student placement into academic programmes or clinical diagnoses, Ponterotto and Ruckdeschel (2007) advised that Cronbach's alpha needed

to be above .70. Therefore, the internal consistency for the Best Teacher Instrumental Aid factor of $\alpha = .65$ in the current study was acceptable.

Table 31

Descriptive Statistics and Cronbach's (Alpha) Reliability Coefficients by Factor

	M (SD)	α	Skewness	Kurtosis
Best teacher instrumental aid	5.3 (.68)	.65	-1.61	3.74
Best teacher intimate disclosure	2.4 (1.5)	.91	.88	-.39
Worst teacher intimate disclosure	1.2 (.68)	.93	.46	-.37
Worst teacher conflict	2.4 (1.4)	.92	-.73	-.58
Teacher-student relationship	4.7 (.84)	.80	-.91	1.13
Family support for learning	5.2 (.88)	.82	-1.65	3.28
Peer support for learning	4.9 (.85)	.88	-1.12	1.22
Future aspirations and goals	5.5 (.68)	.72	-1.91	4.97

α = Internal consistency (Cronbach's Alpha)

Pearson's bivariate correlations were also calculated among all the factors (see Table 32). As can be seen from Table 32, most of the correlations between factors ranged between .10 and .44, and none exceeded .70, which indicated that multicollinearity was not likely to be an issue (Pallant, 2013).

Table 32

Pearson's Bivariate Correlations among the 8 Factors in the Hypothesised Model

Factor	1	2	3	4	5	6	7	8
Best teacher instrumental aid	-							
Best teacher intimate disclosure	.255**	-						
Worst teacher intimate disclosure	.028	.316**	-					
Worst teacher conflict	.096*	.253**	.152**	-				
Teacher-student relationship	.121**	.106**	.102*	-.176**	-			
Family support for learning	.087*	.019	.021	-.120**	.277**	-		
Peer support for learning	.093*	-.026	.043	-.036	.435**	.283**	-	
Future aspirations and goals	.036	-.027	.023	-.085*	.324**	.240**	.238**	-

** $p < .01$, * $p < .05$.

Structural Equation Model – Exploring Relations between Achievement, Engagement, Teacher-Student Relationships, and Student Ethnicity

Following factorial invariance, structural equation modelling was undertaken using AMOS 25 to test the associations between teacher-student relationships, engagement, and achievement for each of the ethnic groups. Acceptable model fit had previously been established (Table 30). A schematic diagram of the model showing the statistically significant paths for each of the ethnic groups is displayed in Figure 5. Maximum likelihood bootstrapping within AMOS 25 was used to estimate standard errors for all relevant indirect, direct and total effects (2000 samples were drawn). Bootstrapping is a robust technique that takes a nonparametric approach and does not assume multivariate normality. Therefore, it provides a way to gain more accurate estimates from the data.

The direct, indirect, and total effects for the model are reported in Table 33. To determine effect sizes, Cohen's (1992) guidelines were used to define the strength of relations between two variables. A standardised regression weight of $<.10$ was very small, $.10 - .30$ was small to moderate, $.30$ to $.50$ was moderate to large, and $>.50$ and above was large to very large.

The relation between students' relationship with their best and worst teachers and engagement. Māori students' supportive relationship with their best teacher ($\beta = .41, p = .01$) and their supportive relationship with worst teacher ($\beta = .30, p = .01$) both positively predicted engagement. According to Cohen's (1992) guidelines, these were moderate to large effects. None of the other ethnic groups' supportive relationships with teachers positively predicted engagement.

Pākehā students' conflict relationship with their worst teacher negatively predicted engagement ($\beta = -.18, p = <.01$) and the effect size was small to moderate (Cohen, 1992).

Students' from other ethnicities' conflict relationship with their worst teacher also negatively predicted engagement ($\beta = -.22$ $p = <.05$), also a small to moderate effect (Cohen, 1992).

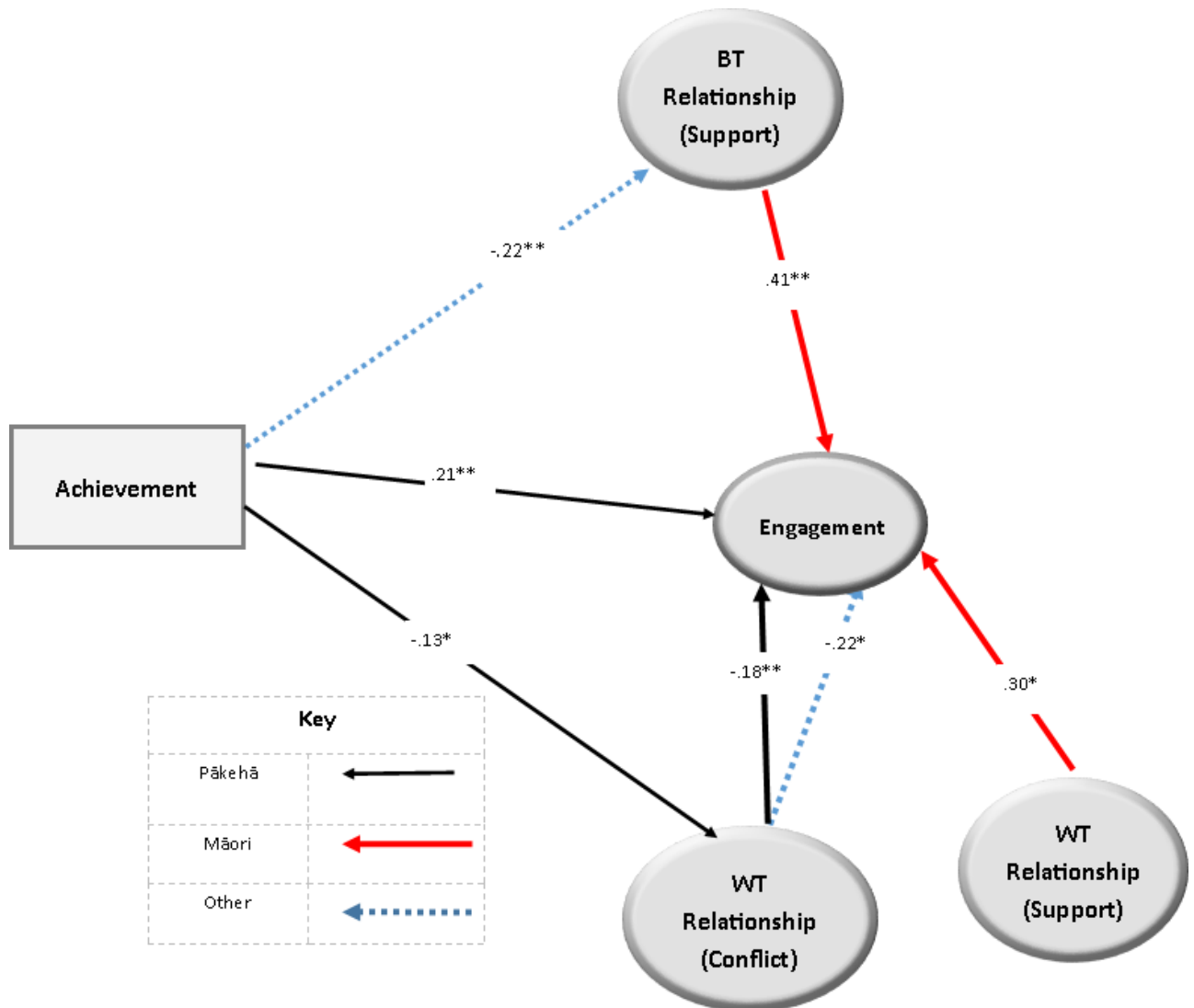


Figure 5. Schematic diagram of the hypothesised model showing the statistically significant paths for each of the ethnic groups.

Table 33

Standardised Indirect, Direct, and Total Effects by Student Ethnicity for the Structural Equation Model

		Māori students			Pākehā students			Other students		
		Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
BT relationship (support) → Engagement	Estimate	.41**	.00	.41**	.10	.00	.10	.20	.00	.20
	SE	.17	.00	.17	.08	.00	.08	.12	.00	.12
WT relationship (support) → Engagement	Estimate	.30*	.00	.30*	.13	.00	.13	.11	.00	.11
	SE	.12	.00	.12	.05	.00	.05	.11	.00	.11
WT relationship (conflict) → Engagement	Estimate	-.22	.00	-.22	-.18**	.00	-.18**	-.22*	.00	-.22*
	SE	.13	.00	.13	.09	.00	.09	.09	.00	.09
Prior Achievement → BT relationship (support)	Estimate	-.08	.00	-.08	-.03	.00	-.03	-.22**	.00	-.22**
	SE	.11	.00	.11	.07	.00	.07	.09	.00	.09
Prior Achievement → WT relationship (support)	Estimate	.01	.00	-.01	-.08	.00	-.08	-.08	.00	-.08
	SE	.19	.00	.19	.06	.00	.06	.07	.00	.07
Prior Achievement → WT relationship (conflict)	Estimate	-.11	.00	-.12	-.13*	.00	-.13*	.01	.00	.01
	SE	.10	.00	.10	.06	.01	.06	.08	.00	.08

		Māori students			Pākehā students			Other students		
		Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Prior Achievement → Engagement	Estimate	.09	.06	.15	.21**	.01	.22**	.14	-.06*	.08
	SE	.14	.09	.15	.07	.00	.07	.08	.03	.08

* $p < .05$; ** $p < .01$

The relationship between prior achievement, engagement, and student ethnicity.

Prior achievement for Pākehā students positively predicted engagement ($\beta = .21, p = <.01$). According to Cohen (1992), this was a small to moderate effect size. There were no statistically significant relations between achievement and engagement for Māori or students from other ethnicities. However, for students from other ethnicities, the conflict relationship with their worst teacher partially mediated the relationship between prior achievement and engagement ($\beta = -.06, p = <.05$). The indirect effect was very small and negative (Cohen, 1992). There was a very small direct effect on 'Other' students' prior achievement and engagement ($\beta = .14$) which shows there was partial mediation but not full mediation. The total effect of 'Other' students' prior achievement on engagement was .08, indicating that prior achievement was associated with a .08 increase in achievement. The total effect, however, was not significant ($p = >.05$).

The relation between prior achievement and students' relationships with their best and worst teacher. Pākehā students' prior achievement negatively predicted their conflict relationship with their worst teacher ($\beta = -.13, p = <.05$), which meant that as achievement increased, conflict with their teacher decreased. This was a small effect according to Cohen (1992). For students from Other ethnicities, prior achievement negatively predicted their supportive relationship with their best teacher ($\beta = -.22, p = <.01$), which meant as achievement increased, support from their teacher decreased. According to Cohen (1992), this was a small to moderate effect.

To summarise, the quantitative results showed that only Māori students' support relationship with their best and worst teachers positively predicted engagement. However, Pākehā and students from Other ethnicities' conflict relationship with their worst teacher

were negative predictors of engagement. Achievement positively predicted student engagement for Pākehā students, but not for Māori or students from Other ethnicities.

Students from Other ethnicities' prior achievement negatively predicted their supportive relationship with their best teacher and prior achievement for Pākehā students negatively predicted their conflict relationship with their worst teacher. There was also a small statistically significant indirect relation between achievement and engagement for students of Other ethnicities, partially mediated by the conflict relationship with their worst teacher. There were no significant associations between Māori students' prior achievement and their conflict or support relationships with either their best or worst teachers. The next section presents the qualitative results from the focus group interviews which focused on how students perceived the teacher-student relationship and their engagement with school were related to their academic success.

Qualitative Results from the Focus Group Interviews

The research question for the qualitative part of Study Three was: To what extent do students perceive that relationships with teachers and engagement with school have influenced their academic achievement? This part of Study Three built on the findings from Studies One and Two by exploring in more detail the factors that were related to students' academic success. Furthermore, this qualitative research also extended the quantitative research within Study Three to explore in more detail how students perceived that the teacher-student relationship and engagement with school were related to their academic success. Therefore, the focus group interviews aimed to explore whether teacher-student relationships and engagement with school were related to students' perceptions of academic success or their grades, the type of relationships students had with their teachers, and if there

were differences in perceptions depending on student ethnicity. Braun and Clarke's (2006) steps for thematic analysis were followed, as previously outlined in the method section of this chapter. The key themes that emerged from the coded data were: (1) Students perceptions of engagement related to achievement; (2) Types of teacher-student relationships; (3) Associations between teacher-student relationships and academic success; and (4) Students' attributions for their success in NCEA, which included personal factors and those related to effective teaching practices. Within the final theme, students also discussed ineffective teaching practices which they perceived hindered student success in NCEA. The complete list of themes, sub-themes and codes is displayed in the method section of this chapter in Table 24.

Student Perceptions of Engagement and its' Relationship with Achievement

Students primarily defined engagement behaviourally (e.g., attending school or participating in activities). One student said it was, "... joining the groups... getting the work done and handing stuff in on time, and just in general participating in the school community" [FG3-1 Pākehā, decile 9]. Almost all the participants at the Māori students' focus group viewed attendance as vital. One student said, "If you don't attend [school], then you can't do anything. You can't engage if you don't even go. At least if you go, then you have a chance at doing something" [FG1-1, Māori, decile 2].

Other students, however, were not convinced that attendance was necessary for high achievement. One said,

"I know all the Internals I've got to get done...If I missed a week of school but I was working at home, I could still get the work done... I love this school, and I love the teachers, but my sole engagement is just passing and getting good grades. ... So, whether I am here or where I am

learning... I guess all I think about this year is the Internal and nothing else really matters that much ...” [FG5-2, Pākehā, decile 3].

Another student reported she attended irregularly. She said, My attendance is--- It’s ah--- It’s not up there...Probably, four days a week I come to school. It’s just the structure. The going from one class to the next...It’s not enough time to fully engage yourself and get work done...When I’m not at school, I’m doing the work anyway, and I have time to focus...So you can still be engaged with school and not be physically at school [FG5-6, Pākehā, decile 3].

Enjoying school and having a sense of belonging (emotional engagement) was also important to students. However, high achievement was still possible when students did not enjoy school. One student said, “I know people who have gone through school and absolutely hated it...they have done really well and have gone off to good universities... but they had zero enjoyment from school. [They] just worked through and waited until they could leave ...” [FG3-1, Pākehā, decile 9].

Finally, some students emphasised the importance of connecting education with their goals, which refers to cognitive engagement:

Some people have the approach where they are like, “I just go to school because I have to, because I am forced to”. But if you think of it as a part of your actual life and something that is significant, with purpose. That helps you achieve highly. I think that’s it [FG3-3, Pākehā, decile 9].

To summarise, students’ primary definition of engagement was behavioural and incorporated attending school and participating in school, sport or cultural activities. For Māori students, in particular, attendance was perceived as essential for achievement, but not

all students agreed that physically being in class was necessary as long as they completed the required assessment tasks (and school attendance is not a condition of passing NCEA).

Nevertheless, most students in this study appeared to be cognitively and academically engaged as they stated their commitment to completing their studies, placed value on learning and achieving highly, and intended to attend further education after secondary school.

Types of Teacher-Student Relationships

Students reported three different types of relationships with their best teacher: emotionally supportive, academically supportive, or equally emotionally and academically supportive. Of all the students in the focus groups, only one student said they perceived that their relationship with their best teacher was exclusively emotionally supportive. The remaining students said they either had an academic-learning relationship or a relationship that was both an academic-learning and emotionally supportive relationships with their best teacher.

Students had an academic-learning relationship preferred to focus on school work and learning-related matters with their teachers, and did not perceive they needed an emotional connection. One student described this type of teacher as "...really strict and never really speaks to you but are really good teachers ... They are kind of unapproachable, but they will give you all of the information and explain pretty well" [FG2-1, Pākehā, decile 9]. One student perceived emotional relationships with teachers to be risky as a friend had formed a close connection with a teacher, which she alleged had adversely affected her NCEA results. She said,

"I can get that [emotional support] from my friends, or if I am feeling really down, the counsellor... I like getting really good feedback on my work, and I don't need anything else... I had a friend who had a really

emotional relationship with a teacher... The way [the teacher] would mark her work would be to give her Excellences in everything, and she got to the exam and got Achieved... It was giving the student false hopes saying, "This is definitely an Excellence. You're doing super well" ...They were so emotionally invested in each other that [the teacher] didn't want to offend the student. In the end, that didn't work to anyone's advantage because she didn't get the grades she wanted or was expecting [FG3-1, Pākehā, decile 9].

Some Asian students said that cultural expectation of achieving highly led to a greater focus on academics rather than an emotional relationship. One student said, "I guess for those students, teacher-student relationships might not matter on an emotional level because it's just, 'Give me what I need to get the grade'" [FG2-3, Asian, decile 9]. Another student said an academic-learning relationship helped her learn more than getting along with a teacher on a personal level. She explained,

I did Japanese last year, and I clicked with the teacher, but I didn't click with their teaching style, so I found I didn't actually learn... Where I click with the style but not with the teacher, I do really well... Last year with English, we didn't get along...but the [teaching] style clicked so I was able to learn" [FG3-2, Asian, decile 9].

Finally, some students who preferred academic-learning relationships with their best teacher had emotional connections with other adults in the school. For example, one student said, "...now that I'm in Year 13 and a Prefect, our Dean and Miss M..... (the Deputy Principal) are all quite emotionally invested in us...They always make sure that we're okay... that we're not too stressed... That's kind of cool to have" [FG5-1, Māori, decile 3].

Students who said the relationship with their best teacher was both academically and emotionally supportive enjoyed knowing their teachers cared about them as people as well as being invested in their academic success. One student said,

...you need to enjoy the class and feel wanted and loved... [that] they want you to be there, and they want you to do well. There are a few teachers I would never go to at lunchtime if I needed help, but my best teachers... I would always go to...and they would always welcome me and be like, “Oh yeah, I will help you” [FG4-1, Pākehā, decile 9].

One Māori student said that her teachers had to connect with her culturally and know who she was. She said,

“...knowing you emotionally makes it easier for them to teach you academically...Maoris [sic] have always been known for whanaungatanga and stuff. As soon as you meet each other, you tell each other where you’re from. You tell each other what you do, and you relate...” [FG1-3, Māori, decile 2].

Students also appreciated teachers whose support went beyond in-class help and reported examples of their best teacher giving students extra support and guidance outside of school hours, sometimes late at night. One student said,

Yeah, he stays up with us. We will do an Internal [Achievement standard] and most of our class kind of leave it ‘til the last minute, and he’ll stay up until 2 am... He has a waiting list of who he has to see first on Google Drive [an online class forum] ...He’ll come and check your work and give you feedback, and then he’ll move onto the next

person...Doing that out of school in your own personal time, I think that's so cool [FG5-7, Pākehā, decile 3].

To summarise, almost all students wanted either an academic-learning or a relationship that was both an academic-learning and an emotional relationship. Students who preferred relationships that were both types wanted a connection with their teacher that went beyond classwork. They wanted their teacher to like, know, and care about them. In contrast, students who preferred their relationship with their best teacher to be only related to academic-learning were less concerned about a personal connection. Emotional support for those students was met by friends, family, or other adults in the school who were often in non-teaching roles, such as the deputy principal or school counsellor. The next section presents the results related to teacher-student relationships and achievement.

Teacher-Student Relationships and Achievement

More than half of the students in the focus groups reported that a positive relationship with their teachers led to increased engagement, enjoyment of subjects, and higher marks. Students reported their best results were achieved in classes where they had positive relationships with teachers. One said, "...I have done a lot better in English this year because I have a good relationship with my teacher. She is very understanding and supportive and helps you out" [FG4-1, Pākehā, decile 9]. Another said, "You get better results because you like the teacher and you are more engaged in the learning" [FG4-4, Pākehā, decile 9].

A positive teacher-student relationship also led to increased support as teachers appeared more invested in students' achievement. One student said,

...if you don't have a relationship [with your teacher], and they don't like you particularly, then they are not really going to give up their time to help you...I was just in Wellington for five days. I did miss quite a bit of

class, but the Biology teacher was like, “Here are the [PowerPoint] slides, come in at lunchtime, and we can go through it”. So, if you do have a positive relationship... they are more likely to help you... [FG3-1, Pākehā, decile 9].

A positive relationship with teachers was beneficial when students did not like a subject. One student said, “I am passing Biochemistry (that I don’t like) ... [But] it’s only because of my teacher...I like the way she teaches... I know her, and she knows me” [FG1-5, Māori, decile 2].

On the other hand, students appeared to blame lower grades on negative relationships. For example, “Last year I did quite well in most subjects...I had a good, positive relationship with all of my teachers, except one subject I didn’t do that greatly [sic] in. I do think that my grades were related to him” [FG2-2, Pākehā, decile 9].

Some students did not perceive that a positive teacher-student relationship was critical to their success at school. For example, “In classes that I have good teachers, I get Excellences... In classes where I have bad teachers, I get Merits... The sort of person I am, it [achieving] would happen anyway... I’m like, ‘I need to learn this!’” [FG1-3, Māori, decile 2]. Other students said the relationship had not contributed to their achievement because their teacher was ‘nice but ineffective’. For example, “My design teacher is great as a person but as a professional, as a teacher; the relationship doesn’t carry across” [FG5-6, Pākehā, decile 3]. Another student said, “My current teacher is so nice... I have a really good relationship with her over my other teachers except---she isn’t that good at the subject in comparison to other teachers I have had” [FG2-4, Pākehā, decile 9].

To summarise, more than half of the students in the study perceived that a positive teacher-student relationship increased their engagement, their enjoyment, and their

achievement at school. They also perceived higher levels of support from teachers with whom they had positive relationships. Another group of students, however, did not think a positive teacher-student relationship was related to their academic success as they perceived their success at school came from their own efforts. Furthermore, one group of students had a positive teacher-student relationship but thought their teacher was an ineffective practitioner. The next section presents the results related to student achievement and success in NCEA, including students' attributions for their success and the type of teaching that students perceived was most effective.

Attributions for Success in NCEA

Students credited their success in NCEA to personal attributes and behaviours, and effective teaching. Some students perceived effective teaching was more important than the teacher-student relationship as it helped them to achieve even if relationships with teachers were negative. One student said, "...if they teach you in a good way and...they answer your questions; then it doesn't have to be a positive relationship" [FG4-4, Pākehā, decile 9].

Other students said self-motivation and hard work, rather than a teacher-student relationship had led to their success. One student said,

I don't think you have to have a very positive relationship with your teacher [to achieve well] putting in extra work gets you ahead of everyone else [and] gets you those better grades. It's to do with yourself, I reckon, your self-motivation [FG4-2, Māori, decile 9].

Students' personal attributions for their success. Students' attributions for their success at school were predominantly self-regulatory, internalised behaviours with several referring to intrinsic motivation. Students also identified self-belief, hard work and effort, and self-study as contributors. Self-study included revising notes, utilising online tutorials or

help websites, visiting the New Zealand Qualifications Authority website, completing courses by correspondence, and working through exemplars. One student said, “I certainly did a lot of independent study rather than rely on my teachers” [FG4-2, Māori, decile 3]. Another said,

They [teachers] have given us heaps of materials to work with, like exemplars you can read through and all that stuff. Obviously, it helps a bunch if they can explain it to you, but a lot of times, even the best teachers don’t have that kind of time [FG5-2, Pākehā, decile 3].

Other students said their success in NCEA was due to natural ability or having a particular skill like writing or answering examination questions that enabled them to get high grades. One student said, “I feel like it’s natural ability...a lot of people do try really hard and don’t get the grades they want... I don’t try as hard as some of my friends and I get better grades than them...” [FG4-1, Pākehā, decile 9]. Another student said, “I passed my English, but I had a terrible relationship with my teacher... I think it was natural for me to be good at that subject” [FG1-7, Māori, decile 2].

Effective teaching for NCEA. Students also described a range of ways that their teachers were effective and ineffective. They appreciated teachers who checked students understood the work and made an effort to find out how they were progressing. For example, one student said her best teacher regularly asked her,

“Do you need any help?” and “What are you struggling with?” ... I quite like when the teachers ask you, ‘Do you need any help?’ and are reaching out to me rather than [me] reaching out to them because I don’t find some teachers approachable enough to go and do that to [FG4-2, Māori, decile 9].

Along with a desire for teachers who explained the work and checked students understood the content, some students only wanted to be taught content which would be assessed. One student said that teachers should, “make sure they are teaching directly to the Internal and directly to the External because even though some stuff could be quite interesting, there really is no point in them teaching us something that is not going to be in the Internal or External” [FG4-1, Pākehā, decile 9].

Other students wanted teachers to revise content regularly so that it was not forgotten. One said,

...each few weeks maybe go back to the old topic because I just forget all the stuff I’ve learnt from Term 1, Term 2 and then Externals hit...I have to study really hard, and it’s quite a lot of stress. So, I think they should just go back and revise throughout the whole year [FG4-2, Māori, decile 9].

Ineffective teaching for NCEA. Although the students in the current study were successful learners who had achieved high results in previous years, all reported they relied on self-study strategies to maintain good grades when they had ineffective teachers. In some classes, students said teachers did not teach the class, explain the work, or guide students through assessment tasks.

Some students were left to flounder on their own for weeks. One reported, “She pretty much just gives us an Internal and is like, ‘It’s due in two months. Do whatever you want until then’. In Media, we just go on laptops and watch documentaries” [FG5-2, Pākehā, decile 3]. Nevertheless, the student appeared undeterred and said, “I have always been a ‘do it myself’ sort of person, I guess”. Another student complained that the, “‘leave you to it’ kind of style... it’s something I could do at home” [FG3-2, Asian, decile 9].

Doing work in booklets, worksheets or textbooks were not considered useful for learning. One student said, "...you are just kind of reading the book and re-writing it" [FG2-1, Pākehā, decile 9]. Students were also critical of teachers who wasted classroom learning time on activities that could have been completed independently. One student said, "This year in Bio, the teacher just reads what's in the book out to us...She will write notes and read the book, and that's just not helpful to me...I can read the book just as well as she can" [FG3-2, Asian, decile 9]. Instead, students wanted class time to be used for interactions, allowing students to discuss ideas and to ask questions.

To summarise, academic success in NCEA was attributed to students' personal attributes and behaviours, and effective teaching. Students' attributes included being self-motivated, self-regulated, and committing time and effort to study. Some students also said they had a natural ability or skills which enabled them to achieve high grades. Effective teaching strategies that students described included 'teaching to the test', revising the taught content regularly, and lessons where students were able to discuss their learning and interact with their peers and the teacher. Ineffective teaching strategies were 'not teaching', reading from textbooks, and failing to provide enough guidance to students about assessment tasks. In the next section, the results for each of the research questions for Study Three will be discussed.

Discussion and Conclusion

The first part of this study utilised confirmatory factor analysis and structural equation modelling to evaluate associations between students' relationships with their best and worst teachers, student engagement, and achievement. Multiple group invariance testing also established factorial equivalence across the ethnic groups. In the second part of the study, focus groups were employed to explore students' perceptions of teacher-student relationships,

engagement with school, and views of academic success. Differences by ethnicity for each of these elements were also explored in the focus groups. The results for each of the research questions for this study will be discussed in this section of the chapter.

Teacher-student relationships and Engagement

To answer the first research question, is there a relationship between students' relationships with their best and worst teachers and their reported level of engagement, the quantitative results showed that Māori students' supportive relationships with their best teacher and worst teacher positively predicted engagement, but there was no significant positive association for Pākehā students and students from other ethnicities. Instead, Pākehā students and students from other ethnicities' conflict relationship with their worst teacher negatively predicted engagement. Prior research has found positive associations between positive relationships and engagement, and negative associations between negative relationships and engagement (Roorda, Jak, Zee, Oort, & Koomen, 2017; Roorda et al., 2011). The positive association also occurs because teachers respond positively and are more relational towards students who are engaged. So, students may be engaged or become more engaged because of the positive responses or reinforcement they receive from their teachers (Birch & Ladd, 1997).

The less expected finding of the positive association between Māori students' relationship with their worst teacher and engagement did correlate with the findings from the focus groups. Students reported having positive emotional connections with their worst teachers even when they perceived the teacher had poor subject knowledge or lacked teaching ability. The only research study able to be located where secondary school students rated their teachers as both emotionally supportive and an ineffective practitioner was one study by Hawk et al. (2002) who reported that students had teachers who they did not respect

because they did not help them learn. Other school-based research studies have reported that when students rate their teachers as caring, they also tend to view them as better teachers (Stronge et al., 2011). Other research studies which had some relevance to the finding in the current study about the positive association between Māori students' relationship with their worst teacher and engagement were in higher education research. A study by Aleamoni (1999) found that students did not give an overall high rating to lecturers in course evaluations unless they were proficient in all areas, so some would rate lecturers highly on warmth/caring scales but lower on instructional ability. With all the students in the current study at the senior secondary level, it is likely they were able to differentiate between teachers' positive personal characteristics and pedagogical practices.

The Association between Achievement, Engagement, and Student Ethnicity

To answer the research question, 'Is there a relationship between prior achievement, student engagement, and student ethnicity?': The quantitative results showed that achievement positively predicted engagement for Pākehā students, but not for Māori or students from other ethnicities. The positive association between achievement and engagement is supported in the research literature (Fredricks et al., 2004), with high achieving students more likely to be engaged. Students who are engaged at school also have an increased sense of belonging and are less likely to drop out than students who are disengaged (Archambault et al., 2009), and their engagement behaviours tend to lead to higher achievement. Given that all the students in the study had achieved highly, it was surprising that there were no significant associations between achievement and engagement for Māori students or those from other ethnicities.

The Relation between Achievement and Teacher-Student Relationships

For the research question: “Is there a relationship between prior achievement, student engagement, and student ethnicity?” Prior achievement for Pākehā students negatively predicted their conflict relationship with their worst teacher; as achievement increased, conflict with their teacher decreased. This finding is supported in the literature with previous research reporting that students with higher grades were perceived as more cooperative and less defiant, and were less likely to be in conflict with teachers than lower achieving students (Gregory & Thompson, 2010; Sheets, 1996).

Students from other ethnicities’ prior achievement negatively predicted their supportive relationship with their best teacher, which showed that as achievement increased, support from their teacher decreased. This was a surprising finding as high achievement is usually positively associated with teacher-student relationships and this relationship is bi-directional (Roorda et al., 2011). However, a New Zealand study by Winheller et al. (2013) which examined the role of teacher-student relations about academic performance in mathematics also found negative associations between academic performance and teacher-student relationships. The results from the current study suggest that further investigation is needed into the possible negative associations between the teacher-student relationship and achievement.

The Associations between Teacher-Student Relationships, Engagement, and Achievement

The answer to the fourth research question, ‘To what extent do students perceive that relationships with teachers and engagement with school are associated with academic achievement?’ was less straight forward. There were mixed responses about the associations between achievement and positive teacher-student relationships in the focus groups. Some

said the teacher-student relationship was meaningful, but other students asserted that other factors were more important, such as quality teaching and their own efforts. Almost all students wanted either a relationship that focussed exclusively on academic support or a relationship that provided both social-emotional and educational support. Other than one student who primarily wanted an emotional connection with their teacher, all students wanted learning-focussed relationships.

Over the last decade, relationship building has been an emphasis of the New Zealand Ministry of Education literature and within initiatives such as Ka Hikitia (Ministry of Education, 2013a). Links between positive teacher-student relationships and achievement for Māori students have also been established in New Zealand studies (R. Bishop et al., 2003; R. Bishop et al., 2014) and in international research with minority students (Decker et al., 2007; Delpit, 2012) so it may have been expected to find Māori students' asserting more strongly that they perceived an association between their teacher-student relationship and achievement. However, despite the effectiveness of Te Kotahitanga and the introduction of other similar Ministry of Education initiatives focussed on raising Māori student achievement, the uptake, implementation and widespread effects have been inconsistent (Meyer et al., 2010). Recent research has also reported that negative, disrespectful and discriminatory treatment towards Māori students in schools continues (Office of the Children's Commissioner and New Zealand Trustees Association, 2018; Turner et al., 2015), so it is indeed possible that students in the study did not have supportive relationships with their teachers, and that their achievement was attributable to other factors.

There were also mixed responses from students in the focus groups about the association between engagement and achievement. Māori students perceived that attendance at school and participating in classes were critical for achievement, whereas there was less

consensus among Pākehā students in the focus groups, with some reporting that engagement with school was not necessary, because they had achieved well despite low levels of engagement. Predominantly, the Pākehā students were referring to behavioural engagement (which is only one aspect of engagement), but to find low engagement within a sample of high achieving students was unexpected (Archambault et al., 2009). For example, some Pākehā students reported that they chose to work at home an average of three days a week because they either perceived the school timetable was too inflexible to allow time for extended thinking, or they alleged they accomplished just as much work at home due to the lack of structure and guidance provided by their teachers.

Closer monitoring of student attendance and determining the reasons for absenteeism need further investigation so that students are supported to attend school regularly, as the research literature does not report positive associations between low attendance and high achievement (Gottfried, 2010; Marburger, 2006). Although the students in this thesis had prior high achievement in NCEA, attending school for only an average of three days per week may have put their achievement at risk. Low attendance and disengagement in high achieving students may indicate other underlying issues. Previous research has found that students disengage predominantly for social reasons, that is, when they do not get along with teachers or other students (Catterall, 1998) or when it appears that teachers demonstrate a lack of support and interest in their achievement (V. E. Lee & Burkam, 2003). Therefore, educators need to ensure they are regularly connecting with students and their whānau, and ensure that their classes are engaging and supportive (Ennis & McCauley, 2002), so students are motivated to attend school and participate.

Effective Teaching for Success in NCEA

One key theme from the qualitative results related to effective teaching for NCEA was the importance of teachers only covering content that would be assessed in internal or external achievement standards. Most students were not interested in learning anything else. This concept is described in the literature as ‘teaching to the test’ (Moeed & Hall, 2011). It appeared the students were less likely to be motivated by a love of learning, or interest in increasing their knowledge, but instead were focused on test performance and earning credits. Students earning credits as opposed to learning content has been a criticism of NCEA (Meyer et al., 2006) but it is not unexpected to find students placing a high value on credit-earning tasks when they are tracked throughout the year and students are regularly reminded about the number they must achieve. This credit-tracking system also places teachers in the difficult position of having to convince students to learn something for which there is either no extrinsic value or which students think they do not need because they already have the desired number of credits (Walkey et al., 2013).

The findings in the current study are timely as a review of NCEA (Ministry of Education, 2018b) is currently underway. One area of concern noted in the Ministerial paper for the review (Office of the Minister of Education, 2017), was a reference to ‘teaching to the test’ and the focus on individual achievement standards that excluded non-assessed but important areas of learning. Whatever the outcome of the review, students need a qualification that gives them the option to attend university or to pursue the career of their choice. Schools also need to promote academic pathways rather than unit standards so that greater numbers of students, especially Indigenous and minority students, have the opportunity to achieve university entrance.

The next and final chapter synthesises the findings of the three studies and identifies the limitations along with suggestions for further research. Contributions that the thesis makes to the field of academic success in the secondary school context are also examined. The chapter concludes with the theoretical and practical implications for education that arise from the research, and recommendations for stakeholders in education.

CHAPTER SIX: DISCUSSION, EDUCATIONAL AND THEORETICAL IMPLICATIONS, AND CONCLUSIONS

Introduction

This thesis investigated the perceptions of high achieving Māori and non-Māori secondary school students and teachers to gain an insight into the factors that contributed to students' academic success. The research in this doctoral thesis contributes to the body of knowledge focused on academic success for high achieving students within the context of mainstream secondary school education in New Zealand. The thesis also makes contributions to the Māori student success literature and the wider field of Indigenous and minority student education.

Across the three studies undertaken for this thesis, participants from all ethnic groups agreed that achievement and learning-related intrapersonal behaviours, and personal qualities and abilities played a key role in students' academic success. The involvement of interpersonal and external factors to academic success, however, (e.g., teacher-student relationships, peer relationships, and whānau/home background) differed by ethnicity and between teachers and students. Teacher participants were more likely than students to report that home-background factors contributed to academic success, and Māori and Pasifika students were more likely than other ethnic groups to report that academic support within their peer groups contributed to success.

The research questions for the thesis were as follows:

Study One: How do students and teachers define an academically successful student? Does this differ between teachers and students, or by ethnicity?

Study Two: How do students and teachers define an ideal and non-ideal secondary school teacher? Does this differ between teachers and students, or by ethnicity?

Study Three: Is there an association between students' relationships with their best and worst teachers, and their reported level of engagement? Is there an association between ethnicity, prior achievement, and students' relationships with their ideal or non-ideal teacher? Is there a relationship between prior achievement, student engagement, and student ethnicity? To what extent do students perceive that relationships with teachers and engagement with school influence their academic achievement?

In this final chapter, the main findings from each of the three studies are summarised and discussed, followed by the limitations of the thesis and suggestions for further research. The chapter concludes with the theoretical and practical implications for education that arose from the thesis, recommendations for stakeholders in education, and the contributions that this doctoral research makes to the field of academic success in the secondary school context.

Overview of the Findings

The three separate but connected studies in this thesis investigated key factors related to students' success in NCEA, New Zealand's national-level qualification, including the attributes and behaviours of academically successful students, ideal and non-ideal teachers, teacher-student relationships, and student engagement with school. The key findings from each of the studies are described below.

Key findings from Study One. Study One was a mixed methods design which utilised open-ended questionnaires to explore how students and teachers defined an academically successful student, and two-sample Z-tests to investigate whether there were differences in the reports of teachers, students, or by ethnicity. The characteristics and attributes identified by both students and teachers as contributors to student academic success are portrayed in Figure 6.

Achievement & learning-related behaviours

- Hard work and effort
- Engagement with school
- Questioning teachers and asking for help
- Study-life balance (*Students only*)
- Setting and achieving goals
- Perseverance and persistence

Personal qualities and abilities

- Motivation and self-regulation
- Organisation and time management
- Positive attitude
- Intrinsic value
- Self-belief and self-confidence
- Respect (*Māori students and teachers*)
- Intelligence and natural ability
- Resilience

Students connections with others

- Academically-supportive peer relationships (*Students only*)
- Positive relationships with teachers
- Supportive home background

Figure 6. Characteristics and attributes of academically successful students as reported by the teacher and student participants.

Findings from Study One revealed that students' intrapersonal learning and achievement-related behaviours (e.g., hard work and effort), and their personal qualities and attributes (e.g., motivation and self-regulation) were perceived to be the greatest contributors to student success for all ethnic groups. Students' connections with others, including peers, teachers, and home background were reported less frequently. Māori and Pasifika students' motivation to achieve and work hard came from wanting to make a better life for themselves and their families, whereas Asian students appeared to have a sense of duty and obligation to their families to achieve highly and be successful. In contrast, Pākehā students were competitive and mainly focussed on achieving personal goals, which appeared to be more individualistic.

In their connections with others, student participants (especially Māori and Pasifika students), valued academically supportive peer relationships. Teacher participants, on the other hand, reported that students' home background and the support students received from parents was the most important external factor that contributed to students' academic success.

Key findings from Study Two. Study Two had a mixed methods design which utilised open-ended questionnaires and two-sample Z-tests to explore students' and teachers' perceptions of an ideal and non-ideal teacher. For each teacher type, the attributes, behaviours, and characteristics were identified which built up a profile of participants' ideal and non-ideal teacher and highlighted enablers or barriers to student success. Students' and teachers' profiles of an ideal and non-ideal teacher are displayed in Figure 7.

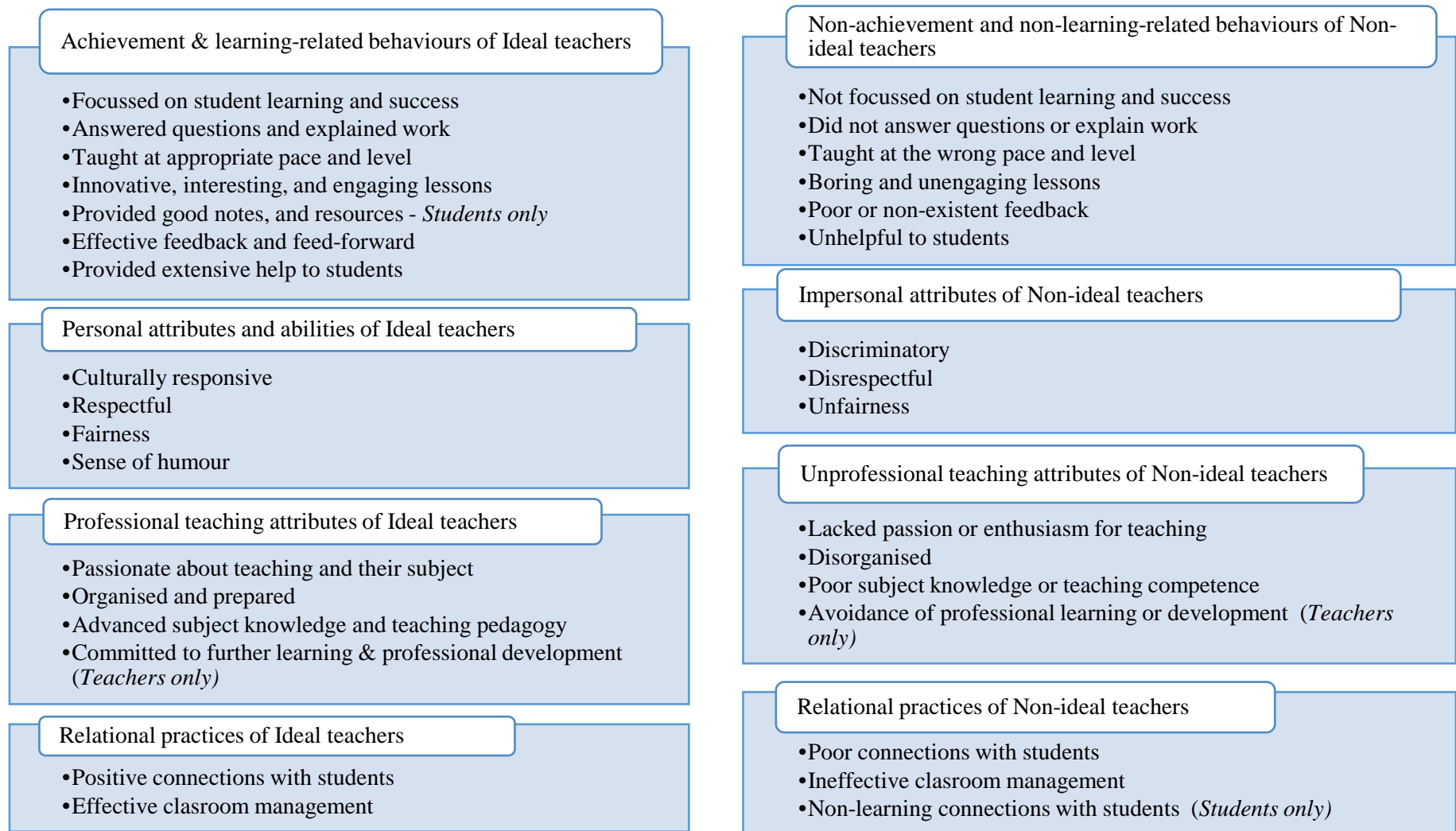


Figure 7. Characteristics and attributes of academically successful students as reported by the teacher and student participants

The ideal teacher profile. The ideal teacher profile which emerged from teachers' and students' responses was comprised of teachers' achievement and learning-related behaviours, personal qualities and abilities, professional teaching attributes, and relational practices. One of the main achievement- and learning-related behaviours of ideal teachers was a focus on student learning and success. Participants reported that ideal teachers had high expectations and believed all students could achieve well. Ideal teachers provided extensive help within and outside of class time, along with study notes and resources to complement content taught in class. Ideal teachers also presented interesting lessons that were interactive and engaging. Participants reported that ideal teachers spent time directly teaching students and allowed time to discuss what was learnt.

Furthermore, ideal teachers willingly answered students' questions and clearly explained the work. They also checked student understanding to ensure they taught at the correct pace. Ideal teachers' feedback to students was timely, detailed, and included specific suggestions about the next steps to ensure improvements could be made to their work.

An ideal teachers' professional teaching attributes included passion and enthusiasm for teaching, and participants reported that ideal teachers demonstrated that they loved their subject. Ideal teachers were perceived by students to have advanced subject knowledge, taught content effectively, and understood how students learnt. Participants reported that ideal teachers were well-organised, arrived at class on time, planned lessons in advance, and managed class time efficiently. Teacher participants also perceived that ideal teachers were committed to upskilling through further education, and engaged in collaboration with the wider education community to ensure they remained up-to-date with their subject, and with changes to the curriculum.

One finding related to ideal teachers' personal qualities was that they were perceived to be culturally responsive practitioners, but there were differences between the ethnic groups

in terms of how culturally responsive practice was understood and enacted. Māori teachers referred to teaching through culture to enhance learning and achievement, and they believed that they supported students to develop positive cultural identities. Conversely, Pākehā teacher participants did not refer to learning associated with culture but instead focussed on ideal teachers celebrating students' cultures and accepting diversity. Māori students' responses referred to ideal teachers knowing them and understanding their culture to teach them effectively.

Ideal teachers were also described as respectful in their interactions and their attitudes towards students. They were good listeners, spoke politely, and did not deliberately shame or embarrass students. Teacher and student participants both described ideal teachers as fair. For teacher participants, fairness meant ensuring all students received equal or consistent treatment, whereas, for students, fairness included being impartial, reasonable with homework, and flexible about deadlines.

The main finding associated with teachers' relational practices was that almost all teacher participants perceived ideal teachers had positive relationships with students. This finding emphasised the value that teachers placed on relating well to students. Both student and teacher participants described a range of different types of positive relationships. Some ideal teachers were approachable and welcoming, and easy to talk to. Others were friendly but professionally distant, and some had deeper, caring relationships that developed from getting to know students and taking an interest in their lives outside of school.

The non-ideal teacher profile. The non-ideal teacher profile that originated from the questionnaire responses of students and teachers was the antithesis of the ideal teacher profile, with a negative opposing characteristic for almost all the ideal teacher's positive characteristics. Non-ideal teachers were not perceived by participants to be focussed on achievement and learning and had low expectations for student success. Some participants

reported that non-ideal teachers gave low-level work or taught only partial course content which limited students' access to the higher 'Merit' and 'Excellence' grades. Non-ideal teachers also avoided or refused to answer students' questions, and struggled to explain the work. Participants said non-ideal teachers taught at the wrong pace or level, and described lessons as boring and unengaging. As well as not offering additional support to students outside of class time, some participants reported that non-ideal teachers were also unhelpful during classes and failed to provide enough support for students to pass assessments. Feedback from non-ideal teachers was described as 'poor' and did not inform students about how they could improve. In some cases, the feedback was non-existent because student work was either not marked or not returned to students.

Non-ideal teachers were said to lack passion and enthusiasm and were bored, disengaged, and negative. Some non-ideal teachers told students they did not like their job or teaching their classes. Asian students in particular perceived that non-ideal teachers had poor teaching competence and content knowledge, which led them to make frequent errors. Some teacher participants commented that due to the current teacher shortage, there were teachers who were required to teach outside of their subject area which meant that their content knowledge might have been inadequate.

Teacher-student interactions were limited in classes with non-ideal teachers, and a large percentage of the work was set from textbooks. Participants also described non-ideal teachers as disorganised, which was evidenced by persistent lateness, being unprepared to teach, wasting learning time, and keeping poor records of student achievement. Teacher participants also reported non-ideal teachers were negative about professional learning opportunities and educational initiatives and were less likely to want to work collaboratively with colleagues.

The key findings related to non-ideal teachers' personal attributes included disrespect and discrimination. Participants commented that non-ideal teachers were rude, sarcastic, and made derogatory comments that embarrassed and humiliated students. Numerous student participants reported that non-ideal teachers repeatedly mispronounced their names and others did not learn students' names at all. Some non-ideal teachers treated students differentially, exhibited favouritism, or were racist, sexist, or biased. Teacher racism was referred to by Māori, Pasifika, and Asian students, but not by Pākehā students. Māori and Asian students made the highest number of responses overall about teacher discrimination, and most often they referred to racism and differential treatment. Participants also reported that some non-ideal teachers lacked understanding of kaupapa Māori (a Māori-centric approach or customary practices), and deficit theorised about Māori and Pasifika students.

Non-ideal teachers' relational practices included poor relationships and non-learning-based connections with students, and ineffective classroom management. More than half of the teacher participants commented that non-ideal teachers had poor connections with students, which was significantly higher than the student participants' response rate. In their relations with students, non-ideal teachers were described as unfriendly, uncaring, and dismissive. Student participants reported that some teachers struggled to understand teenagers or did not appear interested in getting to know them. Conversely, some teachers disregarded professional boundaries with students and were overly friendly. A small group of students also reported that they had non-learning-related, positive emotional connections with their non-ideal teacher. These teachers were described as kind people, but poor practitioners.

Key findings from Study Three. Study Three was a mixed methods design which utilised confirmatory factor analysis and structural equation modelling to evaluate associations between teacher-student relationships, student engagement, and achievement.

Multiple group invariance testing also established factorial equivalence across the ethnic groups. Focus groups were used to examine high achieving students' perceptions of their relationships with their ideal and non-ideal teachers, and their reported engagement with school.

One finding that arose from the quantitative analysis in Study Three was that Māori students' supportive (positive) relationships with both their ideal and non-ideal teachers positively predicted engagement. The supportive (positive) relationship that students had with their ideal teacher was measured by two factors in the Network of Relationships Inventory (Furman & Buhrmester, 1985, 2009). These factors were 'intimate disclosure', which was the extent to which students felt that they could talk to their teacher about their problems and other important matters; and 'instrumental aid', which was the extent to which students perceived their teacher helped them solve problems related to their school work. Only the 'intimate disclosure' factor was used to measure students' perceived support from their non-ideal teacher. The instrumental aid factor had a poor fit during confirmatory factor analysis so was deleted (See Chapter Five for the full details of the analysis).

Confirmation that Māori students had positive associations with a non-ideal teacher was corroborated in the focus groups where Māori students reported positive emotional connections with teachers who they also perceived to have insufficient subject knowledge or poor teaching ability. A supportive teacher-student relationship did not positively predict engagement for any of the other ethnic groups. Instead, for Pākehā and Other students, a conflictual relationship with their non-ideal teacher negatively predicted engagement. Students' perceived conflict in their teacher-student relationship was measured by the extent to which students experienced arguments and disagreements with their teacher.

In Study Three, the associations between prior achievement and student engagement, and between prior achievement and teacher-student relationships were also explored.

Findings revealed that achievement positively predicted student engagement for Pākehā students. Achievement also negatively predicted the level of conflict that Pākehā students experienced with their non-ideal teacher, which meant that as achievement increased, conflict with their non-ideal teacher decreased.

‘Other’ students’ prior achievement negatively predicted the level of support they perceived in their relationship with their ideal teacher, which meant that as achievement increased, the support in their relationship with their ideal teacher decreased. Finally, for Māori students, there were no significant associations found between prior achievement and engagement, or between prior achievement and relationships with their ideal or non-ideal teachers. Above, the findings from each of the three research studies in this thesis were presented. In the next section, a discussion of the findings within and across the thesis’ three studies will be presented.

Discussion of the Findings

This section of the chapter discusses the key findings from within and across the three studies in this thesis. The key findings included students’ intrapersonal behaviours, personal qualities and attributes; academically-supportive peer relationships; types of teacher-student relationships; Māori student engagement, teacher-student relationships, and achievement; the importance of effective teaching for student success; culturally responsive teaching; students’ opportunities to learn and teacher expectations, and the role of whānau/parent support in students’ academic success.

Students’ Intrapersonal Behaviours, Personal Qualities, and Attributes related to Academic Success

Both student and teacher participants in Study One and students in Study Three reported that students’ intrapersonal behaviours and personal qualities such as motivation, self-regulation, hard work, and effort were fundamental to a student’s academic success. The

disposition of students who are motivated to engage in sustained periods of purposeful study, and who believe in their ability to achieve, can be considered to have an ‘academic identity’ (Webber, 2011; Worrell, 2016). Academic identity is where students are aligned with and have a sense of belonging to a learning community and behave in ways that facilitate their academic success. Self-regulation and motivation have also been found to positively predict academic achievement (McCoach & Siegle, 2001, 2003).

Academically-supportive Peer Relationships

A key finding concerning students’ academic success was that Māori and Pasifika students helped, supported, and encouraged their friends and classmates to achieve, as the collective success of their peer group was important to them. In collectivistic cultures, success is not an individual pursuit but involves and benefits everyone in the group (Bevan-Brown, 1999). Research has found that Māori students learn best when they are in a supportive whānau (extended family) environment where they have a sense of belonging and are connected to others (R. Bishop et al., 2014; McMurchy-Pilkington, 2013). The concept of ‘whānau’ is increasingly used metaphorically in educational settings about “collectives of people working for a common end, who are not connected by kinship” (R. Bishop & Glynn, 1999, p. 83). Therefore, building an academic learning community in classrooms, where students are encouraged to help and support each other to achieve is a model that fits with Māori and Pasifika students’ culturally understandings of collective success. The creation of an academic learning community in classes also aligns with the finding from Study Two, that student participants from all ethnic groups reported that they enjoyed lessons where they were able to interact with others, and discuss the work they were doing with their teacher and their peers. As well as academic benefits gained from their peers’ support, it also appeared that students obtained social and emotional benefits, which led to an increased sense of belonging at school. Prior research has found that high achieving Māori students prefer to be

in classes with friends rather than being the only Māori in an advanced or gifted and talented group where they were culturally isolated and unsupported (Macfarlane & Moltzen, 2005; Mitchell & Mitchell, 1988). Māori students often opted to be with their friends even if it meant they missed out on additional learning opportunities or other advantages offered to them. A study by Rubie-Davies and Peterson (2016) found a negative relationship between Māori student achievement and peer support: Māori students who perceived they had less support from their peers achieved at higher levels. The study's authors posited that high achievement for Māori students might come at a social cost if their friends were not at a similar academic level. Alternatively, some of the Māori students may have been placed in an extension class, separate from all their friends, which led them to feel socially and/or culturally isolated. It is therefore important that schools consult with students and whānau about how they can best support the learning needs of high achieving students. Decisions that schools or teachers make that they think are in the best academic interests of the student could have detrimental effects on students' social and emotional well-being.

Types of Teacher-student relationships

Student participants in this thesis identified two main types of relationships that they wanted with their teachers: (1) An academic-learning relationship or (2) A relationship that was both academic and emotionally supportive. Academic-learning relationships were focussed on learning and achievement, and the support that students sought from teachers was related to classwork rather than a personal or an emotional connection. For students who wanted an academic-learning relationship, emotional support was often satisfied by friends, family, or occasionally adults in the school with non-teaching roles.

A relationship that was both academic and emotionally supportive was also focussed on learning and achievement, but additionally, students wanted teachers to like, understand,

and care about them. The inclusion of an academic focus in both relationship types emphasised the value that students placed on learning and achievement.

There is existing research to support both types of teacher-student relationships sought by students in this thesis. Students may have chosen to have academic-learning relationships because high achieving students have been found to be less likely than low achieving students to need emotional support from their teachers (Capern & Hammond, 2014) and emotionally supportive relationships with teachers were also not rated highly by students who had supportive relationships elsewhere (Lempers & Clark-Lempers, 1992). Furthermore, high achieving students are sustained by their academic success (McGrath & Van Bergen, 2015; Webber et al., 2018) whereas lower achieving students' engagement and motivation appears to be aided by positive relationships with teachers. On the other hand, previous research also supports the finding that high achieving students benefitted from teacher-student relationships that were both emotionally supportive and achievement-focused (McHugh et al., 2013; Siegle et al., 2014). As the findings in this thesis and in existing research were mixed, further research could be conducted in the future to investigate other factors that contribute to the types of relationships that students seek with teachers.

A very small number of students did not appear to want any connection with their teachers, although this may have been a self-protective mechanism to avoid feeling as if they had been rejected by teachers, who they described as disinterested and unapproachable. Furrer, Skinner, and Pitzer (2014) argued that when teachers display rejecting behaviours towards students, they communicated [to students] that they were not valued and were not welcome, which could have negative effects on student engagement and motivation. Finn (1993) also reported that students had a decreased sense of connection and identification with school when teachers were hostile and disinterested in them.

As the students in this thesis were focussed on achieving and maintaining high grades, their teachers' attitudes towards them appeared to be less important than how effectively their teacher taught them. Moreover, it was evident that there was no 'all-inclusive' approach for teachers to follow that would guarantee a positive relationship with students would result. Instead, teachers needed to take the time and put in the effort to get to know their students and learn how best to relate to each of them.

Although student ethnic groups were heterogeneous, some findings appeared to apply for most students in each ethnic group. For Māori students in this thesis, it appeared important that teachers understood and valued their culture, and related to them respectfully (Macfarlane & Moltzen, 2005; Mahuika, 2007). Teachers who did not place importance on learning about and knowing their students' cultures risked alienating students, prevented connections being made, or irreparably damaged previously established relationships. Asian students valued academic support from their teachers and appreciated being provided with good notes and resources. They expected their teachers to be subject experts and were critical of disorganised teachers, could not answer their questions, or who made frequent errors. Pākehā students valued teachers who were passionate and enthusiastic about teaching, had advanced subject knowledge, provided good notes and resources, and treated students equally. They did not like it when it seemed teachers showed favouritism or gave special treatment to some students and not to others.

Positive Teacher-student relationships and Academic Success

In Study One, very few student participants responded that having a positive connection or relationship with their teacher was related to academic success, and some students in the Study Three focus groups reported that they were able to achieve despite negative relationships with teachers. Equally, the results from Studies One and Three highlighted that academic success was primarily related to students' intrapersonal attributes

and behaviours, and teachers' learning-related and professional behaviours rather than to the teacher-student relationship. However, in Study Two, around 75% of student participants and almost 100% of teacher participants responded that an ideal teacher had positive connections with students. Therefore, it appears that although students perceived that a positive relationship with a teacher was not a requirement for academic success, they still valued a positive connection.

Links between positive teacher-student relationships and achievement for Māori students have been established in New Zealand studies (R. Bishop et al., 2003; R. Bishop et al., 2014) and in international research with minority students (Decker et al., 2007; Delpit, 2012). Relationship building has also been emphasised within New Zealand Ministry of Education initiatives such as Ka Hikitia (Ministry of Education, 2008, 2013a) during the last decade, so it was somewhat surprising that Māori students did not assert more strongly in the qualitative data that relationships with teachers had positively influenced their achievement. Furthermore, in Study Three, a significant association was not found between prior achievement for Māori students and their teacher-student relationships.

Another finding from Study Three was that prior achievement for students from Other ethnicities negatively predicted their supportive teacher-student relationship, so as student achievement increased, the support from their ideal teacher decreased. One explanation for this finding is that because all students in this thesis were high achievers, their teacher may not have perceived that they needed as much support (McGrath & Van Bergen, 2015; Webber et al., 2018). It could also be speculated that teachers were less supportive of these students because of their ethnicity. The students in the Other ethnic group in Study Three were all ethnic minority students, and previous research has shown that teachers are less supportive of students from these groups (Hughes & Kwok, 2007). In Rubovits and Maehr's (1973) study (which was presented in more detail in the literature review), findings revealed

that Black students were disadvantaged compared to White students, but being Black and 'gifted' was even more unfavourable. Participants taught students who were randomly assigned with a label of 'gifted' or 'non-gifted' and allocated fake IQ scores. The Black 'gifted' student in each group received the most criticism and the least praise. They were also ignored more and asked to speak fewer times in the lesson.

In Study Three of the current thesis, Pākehā students' prior achievement negatively predicted their negative (conflict) relationship with their non-ideal teacher which meant that as achievement increased, teacher conflict decreased. Previous research has found that high achieving students are perceived by teachers to be more cooperative and less defiant than lower achieving students (Gregory & Thompson, 2010; Hamre & Pianta, 2001), and therefore teachers would be more likely to respond to high achieving students in positive ways. This finding did not apply for any of the other ethnic groups in this thesis, however, so similarly to the Rubovits and Maehr (1973) study, only high achievement levels for Pākehā students were positively associated with their teacher relationships. As discussed earlier, Other students' high achievement was negatively associated with teacher support, and there was no association at all between Māori student achievement and their teacher relationships. Māori student achievement and teacher-student relationships will be discussed in the next section.

Māori Student Engagement, Teacher-Student Relationships and Achievement

Māori students' supportive relationships with both their ideal and non-ideal teachers positively predicted engagement. Prior research has found positive associations between positive teacher-student relationships and engagement (R. Bishop et al., 2003; Roorda et al., 2017; Roorda et al., 2011) and the positive association occurred because teachers responded encouragingly and were more relational towards students who were engaged. Although it was somewhat unexpected that students' relationships with non-ideal teachers positively predicted engagement, this finding was supported across the thesis. Students in the Study

Three focus groups reported positive relationships with teachers who they said were poor practitioners, and several students in Study Two commented on having positive social-emotional relationships with teachers who they rated as their ‘worst’ teacher. The only study located with a similar finding reported that students had teachers who they did not respect (as teachers) because they did not help them learn (Hawk et al., 2002). No other research studies were located where secondary school students rated their teachers as both emotionally supportive and ineffective practitioners. Other school-based research studies have reported that when students rate their teachers as caring, they also tend to view them as better teachers (Stronge et al., 2011).

For Māori students, there were no associations found between achievement and teacher-student relationships, so although supportive teacher-student relationships were associated with engagement, and students enjoyed having positive relationships with teachers, it appeared that factors other than the teacher-student relationship were associated with Māori students’ academic success. This finding of the positive association between teacher-student relationships and engagement was like that reported in Te Kotahitanga (R. Bishop et al., 2009), but the authors in that study also found that positive teacher-student relationships were positively associated with achievement. As Te Kotahitanga involved students who were both engaged and disengaged with school, it could be that the changes teachers were taught to implement in their teaching practice, as part of Te Kotahitanga, and in the ways in which they related to students led to more dramatic effects for students who were not previously achieving well. But for students in this thesis who were already engaged with school and achieving highly, a positive teacher-student relationship did not make much more of a difference in terms of increasing their achievement even further.

Teacher Racism and Discrimination

Although teacher participants in this thesis espoused characteristics and behaviours that students said they valued in teachers, such as respect, cultural responsiveness, and positive relationships with students, the findings revealed that some teachers were not enacting these practices in their classes. Many student participants experienced disrespect, discrimination, and poor relationships with teachers. For example, Māori, Pasifika, and Asian students (but not Pākehā students) in this thesis reported that they were subjected to racism from teachers. Students also reported dealing with micro-aggressions, such as racist or demeaning jokes, and having their names mispronounced. Micro-aggressions are “brief and commonplace daily verbal, behavioural, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group” (Sue et al., 2007, p. 273). In isolation, micro-aggressions appear minor, but when students are subjected to them repeatedly, micro-aggressions have been shown to have long-term adverse consequences including increased psychological and physiological stress responses and decreased self-esteem (Torres, Driscoll, & Burrow, 2010).

Mispronunciation of students’ names has been discussed in many international studies (Bucholtz, 2016; Pennesi, 2016; Schlote, 2018), and their findings apply to both Māori and other ethnic minority groups in New Zealand. Bucholtz (2016) described naming as both a political and racialised issue in Western societies and argued that mispronunciation and Anglicisation of non-English words had little to do with a speaker’s language ability, and instead indicated racial dominance through language. Mispronouncing names is also one of the many ways that Indigenous and ethnic minority students experience their culture being devalued (Kohli & Solórzano, 2012). In New Zealand society and within schools, te reo Māori is regularly mispronounced, misused and avoided (Tito, 2008), which highlights the

low priority and value accorded to both te reo Māori as an Indigenous language and to Māori students as tangata whenua.

Although te reo Māori has had status as an official language of New Zealand since the Māori Language Act was passed by Parliament in 1987, New Zealand schools and the education system overall are still dominated by Pākehā Eurocentric knowledge, and very few non-Māori teachers speak te reo Māori (R. Bishop & Glynn, 1999). For New Zealand teachers to maintain their teacher registration, they are required to “practise and develop the use of te reo and tikanga Māori [and to] demonstrate commitment to tangata whenuatanga (the rights of Māori as the Indigenous people in Aotearoa New Zealand) and to [the] Te Tiriti o Waitangi partnership in Aotearoa New Zealand” (Education Council of Aotearoa New Zealand, 2017, p. 17). Additionally, the code of practice for teachers includes a statement about respecting the diversity of students’ heritage, language, identity, and culture which includes “pronouncing their [students’] names correctly and encouraging others to do the same” (Education Council of Aotearoa New Zealand, 2017, p. 24).

Teachers who persistently mispronounce students’ names or who do not try to learn the correct pronunciation of their students’ names are in breach of the professional teaching standards (Education Council of Aotearoa New Zealand, 2017). It appears there is a serious mismatch between the capability of many teachers in this thesis with regards to their knowledge of tikanga, te reo, and a commitment to tangata whenuatanga when compared to the requirements set out in the Education Council policy documents. Teachers are required to produce evidence of how they are using te reo and tikanga and practising tangata whenuatanga to be attested and to retain teacher registration. A suggestion for future research could be an investigation into the numbers of teachers in schools (or school leaders) who can produce evidence or demonstrate that these practices are occurring in their classes.

It appears that a much greater effort and commitment is required by schools to ensure their teachers have knowledge of te reo Māori and tikanga and that they are enacting culturally responsive practice, either through professional development or by hiring teachers who have this knowledge. Initial teacher education providers and the Education Council should also consider reviewing their practices and policies to address this very serious skill shortage. At the very least, a Māori student should be able to attend a school in New Zealand and be assured that their teacher(s) will pronounce their name correctly.

Culturally Responsive Teaching

This thesis builds on the research of Bishop et al., (2003) who posited that for Māori to achieve well in education, students needed to learn in ways that were both culturally relevant and significant to their lives. Although high achieving Māori students in the current study were resourceful, self-motivated, and worked hard to ensure that they achieved academic success, they also referred to effective learning taking place with teachers who were culturally responsive and used contexts that were relevant to them and their lives. Importantly, students from other ethnic groups, including Pākehā students, also said they benefitted from being taught culturally relevant content.

Bell (2011) reported that for culturally responsive teaching to be effective, it should acknowledge (and not ignore) both the students' ethnicities and cultures, and that of the teacher. She further stated that teaching should draw on "students' prior experiences, the communities in which they live, their cultural knowledge, values and practices, as well as those of the teacher" (p. 42). As discussed earlier in this chapter, and in Study Two, there was variation in teachers' understanding and enactment of culturally responsive teaching. Māori teachers viewed culturally responsive practice as teaching through culture to enhance learning and achievement and the development of students' positive cultural identity, whereas

Pākehā teachers did not focus on student learning, but instead on cultural celebration and acceptance of diversity and cultural differences.

For culturally responsive teaching to be effective, it must do more than celebrate students' culture and make them "feel good" (Ladson-Billings, 1995b, p. 160). Students must also achieve well at school. If culturally responsive teaching is not focused on teaching students challenging academic content, then it will do little to benefit the students who need it the most (Sleeter, 2012). When teachers choose not to teach content which is culturally relevant to their students, they not only deprive students of the opportunity to learn through familiar contexts, but they also teach students something about the value of the culture they are excluding (Milner, 2012).

In New Zealand, it is implied that Māori culture and language is not valuable enough to be compulsory in the curriculum (Ministry of Education, n.d.). Furthermore, the flexibility of the New Zealand Curriculum has meant teachers can opt out of teaching students' topics which contain Māori content and knowledge. For example, in NCEA history, teachers can elect to teach Eurocentric history topics such as Tudor-Stuart England (1557-1665) instead of New Zealand in the 19th Century, which incorporates the Treaty of Waitangi and other significant historical events in New Zealand's history (Manning, 2017).

A New Zealand History Teachers' Association survey found that 58% of schools offered the Tudor-Stuart England topic whereas 45% of schools offered New Zealand in the Nineteenth century (NZHTA, 2005, cited in Manning, 2017). Moreover, despite the availability of four 'Māori history' topics at NCEA Level 1, the History Teachers Association survey found that only 3% of schools out of 126 surveyed were teaching one of the topics (The place of the Tiriti [Treaty] of Waitangi in New Zealand Society, 1975 to 1985). The three remaining Māori topics were not taught at any of the 126 schools that the Association surveyed (NZHTA, 2005, cited in Manning, 2017). The implications of making Māori

history topics optional in the curriculum is that when a predominantly Pākehā teaching population is given a chance to opt out of teaching Māori content, most (as evidenced above), will teach English history ahead of Māori history. As a result, both Māori and non-Māori students lose an opportunity to learn about New Zealand history and the important place of Māori within that history.

Eisner (1985) has written about the three curricula present in schools. These are the explicit curriculum, the implicit curriculum, and the null curriculum. The explicit curriculum is the official curriculum which is written down, publicised, and explicitly taught to students. The implicit curriculum, although not written down is still taught to students through the culture of the school and the way that the school prioritises knowledge. For example, certain school subjects are allocated the most time in the timetable and are considered ‘core’, cognitive learning, or academic subjects. Mathematics and English are two subjects which are given priority in New Zealand schools whereas subjects like Te Reo Māori are given less time and status in the timetable and may only be offered as an option (Ministry of Education, 2013c; Stewart, 2014) Finally, the null curriculum is what is not taught in school. Students do not have the opportunity to learn it, but students learn about what is valued in society through its omission. An example of the null curriculum is the New Zealand Land Wars, which is not taught or included in the New Zealand schools’ history curriculum. Further, schools choosing not to teach any Māori history is also an example of the null curriculum.

Durie (2001, February) has argued that education needs to prepare Māori students to be successful in both Te Ao Māori and Te Ao Pākehā and this involves having access to, and being taught, both types of content and knowledge during their time at school. In schools where access to Māori language, knowledge and culture for students is limited, and teachers’ understanding of these concepts is often also limited, Māori students are less likely to get the opportunity to be prepared for dual success by the time they finish their education.

Opportunities to Learn and Teacher Expectations

As well as an absence of culturally responsive practice, some students in the current thesis encountered teachers who expressed low expectations and limited their opportunities to learn. Both teacher and student participants commented about teachers who restricted students' access and chances of achieving Merit and Excellence grades in NCEA by only teaching some of the course content. Other teachers only taught a basic (Achieved) level of content to their classes and not merit or excellence level. It was surprising to find that despite students in this thesis being high achieving, many commented that a teacher had told them they lacked ability. In general, students learn the content that their teachers teach them (Early et al., 2016; Porter, 2002), so if the content is excluded from the teaching programme, then students are not likely to learn it. In their study which investigated secondary school students' opportunities to learn in English, Wilson, Madjar, and McNaughton (2016) found inequities by ethnicity and socioeconomic background. Māori and Pasifika students and those from low decile schools were less likely to be enrolled in external English achievement standards than students of other ethnicities, and those who attended higher decile schools. They were also exposed to less challenging, simplified content that did not provide them with the skills needed to achieve at a high level on the reading achievement standards.

As students in the current thesis were academically successful, they had the resources and the resourcefulness to achieve highly. Therefore, they undertook research, self-taught content, or obtained support from other sources when they recognised that their teachers did not, or could not, provide them with what they needed. There are many other students, however, who depend on their teachers to teach them the skills and content necessary to pass important examinations and may lack the resources to be able to access material without teacher support. The long-term consequences of students not being taught subject content by their teachers are that those who cannot access it independently will not or cannot learn it,

and, will not obtain Merit or Excellence grades. Therefore, they will achieve at lower levels than those students who did have the opportunity to access the content.

It is essential, therefore, that all students are given every opportunity to learn at all levels of their schooling, especially in the years when they are completing formal qualifications. Limiting students' opportunities by only teaching part of the curriculum could potentially lead to student failure. Teachers must make every effort to align their teaching to the curriculum and the NCEA achievement standard. International research has shown that aligning instruction, curricula, and standards positively predict students' achievement outcomes (Early et al., 2016; Early, Rogge, & Deci, 2014; Porter, 2002). Students who do not have the opportunity to obtain Merit or Excellence grades, may not achieve a high enough grade point average to access senior courses that are pathways to University Entrance. Furthermore, they may not earn the grades needed for admittance to competitive entry university courses.

It is vital that teachers have high expectations for all students and do not constrain the learning of Indigenous, ethnic minority, or poor students, who are groups for whom teachers tend to have lower expectations or deficit beliefs. Brayboy and Maaka (2015) reported that Indigenous students were more likely to experience poor college preparation in high school than non-Indigenous students, which reduced their eligibility to attend college (university). The authors described three criteria that students needed to attain to be "college ready". These were: "(1) students must graduate from high school; (2) students must have taken certain courses in high school required by colleges in order to prove competency in particular subject areas and skill sets; and (3) students must demonstrate basic literacy and numeracy skills" (Brayboy & Maaka, 2015, p. 70). Similarly in New Zealand, to achieve 'University Entrance', students need to achieve (pass) NCEA Level 3, take three subjects at Level 3 that are on an approved list of subjects, and they must achieve 14 credits each in all three subjects.

Students must also achieve 10 literacy credits at Level 2 or above and 10 numeracy credits at Level 1 or above (New Zealand Qualifications Authority, n.d.-b). Brayboy and Maaka (2015) also reported that “poor and Indigenous students were less likely to have access to adequate college preparatory counselling” (p.70). Furthermore, academic counsellors in schools with large numbers of Black and Indigenous students tended to have preconceived ideas about who would be successful so presented Indigenous and other minority group students with more non-university options.

In contrast, Weinstein and Worrell’s (2016) research in a university-supported high school for African-American and Latinx students from low-income backgrounds is an example of high expectation teaching without restrictions. All the students were the first in their families to attend university, and many were well below their grade level academically when they enrolled in the school. The goal of the school is to prepare students for university and ensure they are successful once they get there. Every student from the first graduating class was accepted into university, and each student achieved an average of four university-level courses before they finished high school.

The Importance of Effective Teaching for Student Success

Primarily in this thesis, students wanted a teacher to teach them, so a teacher-student relationship not accompanied by effective teaching was not enough. Miller’s (2015) research concurred with this finding, stating “relationships alone were not enough to provide for students’ learning needs” (p. 234) and that students needed to be challenged by what they were learning, provided with academic support when they needed it, and feel that they belonged and had a place in their school. Research by Stronge et al. (2011) found that students who rated their teachers as caring also tended to view them as better teachers, but Aleamoni’s (1999) research on teacher evaluations in higher education, found that students did not give a high rating to lecturers unless they were proficient in all areas. Some students

rated lecturers highly on warmth/caring scales but lower on instructional ability. In the current thesis, teachers who were caring but lacked instructional ability were rated as ‘non-ideal’ teachers. Contrastingly, teachers who were effective practitioners were rated as ideal teachers irrespective of whether students perceived them to be emotionally supportive.

Previous research has also argued that care for students should not come at the expense of academic rigour (Williams & Wilson, 2012) and that a “culture of niceness” (Stein, 2001, p. 139) can undermine students’ critical and intellectual engagement with academic content, which is a necessary part of progressing learning and raising achievement. However, care can be shown by providing academic support and ensuring students achieve well. R. Bishop and Berryman (2006) reported that students perceived that teachers showed they cared for students when they focussed on their learning and achievement and maintained that focus even when students had difficulties in other aspects of school life. Therefore, although students liked teachers to be friendly and welcoming, the teacher-student relationship had to involve teaching that supported the learning of the student.

The Role of Whānau/Parent Support in Students’ Academic Success

In the current thesis, teacher participants referred to a supportive home background as vital to a student’s academic success, but very few students did. The small number of student responses about parents and whānau support was a surprising finding given that in previous research on high achieving students, it is often reported that parents and whānau have a major role in their success (Macfarlane et al., 2014; McClure et al., 2011; Webber et al., 2016). However, it is possible that students may have taken family support for granted and therefore it cannot be assumed from the small number of responses that students did not value or receive support from their parents or whānau. Furthermore, previous research studies (e.g. Macfarlane et al., 2014) asked participants questions explicitly about whānau involvement, whereas the open-ended question about success in the current thesis was broad and did not

specifically focus on whānau support, which may also have accounted for the lack of student responses about parents and whānau.

Teachers perceived overall that academically successful students had caring parents who were supportive of and interested in their child's education, but this belief was not extended to all parents. Some teachers did not think parents of Māori students, minorities, or those from low socioeconomic backgrounds were able to be as supportive of their child's education. This may have been due to negative societal perceptions and stereotypes that prevail about Māori parents having less education and being employed in low-level occupations (Wall, 1997) or poorer parents not being able to supply the necessary resources. A study by Hauser-Cram, Sirin and Stipek (2003) also found that teachers rated students as less capable and had lower expectations of them when they perceived that the students' parents had different educational values to their own, and these low assessments remained even when achievement and socioeconomic status were controlled. Māori teachers in the current study emphasised the importance of whānau/family support networks and perceived that parents could show they were interested in and valued their child's education in lots of ways, including with encouragement and moral support. Māori teachers did not think that the level of student support parents were able to provide to their children was dependent on their income or socioeconomic status.

In the current thesis, parental interest in education was often described as parents' presence at school events or volunteering their time to the school. Teachers, therefore, perceived that Māori parents, and those from ethnic minorities and lower socioeconomic groups, who were less visible at school than other parents, lacked interest in their child's education. This view may be based on a stereotype that teachers hold about a certain population of parents, even if teachers do not know each of the parents personally (Brinkworth & Gehlbach, 2015). Additionally, teachers may commit confirmation bias,

which is where they seek evidence to confirm the beliefs they have (Nickerson, 1998). Hence, when students' parents do not attend interviews, the teachers' stereotypical beliefs that Māori or poor parents do not care about their child's education are confirmed. With confirmation bias, people also subconsciously avoid alternative explanations that might challenge their bias (Brinkworth & Gehlbach, 2015). Consequently, teachers may not consider that inflexible working conditions or a lack of transport or childcare for younger children/babies may preclude parents from attending school interviews and that their non-attendance may not be related to the parents' ethnicity or their socioeconomic background.

When teachers and schools do not consider their role in the low or non-attendance of parents at school events, they may continue to maintain ineffective practices or processes instead of trying to make them more user-friendly or culturally appropriate to their parent community. A lack of flexibility may also mean that negative beliefs about parents persist, and the cycle of poor home-school relationships for Māori and low-income families continue.

Bower and Griffin (2011) reported that "Traditional definitions of parental involvement make demands of parents to help facilitate the success of the school, while reciprocal demands are not made of the school to ensure the success of families" (p. 78). Educators who limit their definition of parental involvement or interest in education to attendance at school events or doing unpaid work at the school, neglect to acknowledge a myriad of different but equally worthy ways that parents may support their children, such as providing their child with encouragement, moral and emotional support, and a quiet place to study at home. A meta-analysis on parental involvement strategies (N. E. Hill & Tyson, 2009) found that academic socialisation at home had the strongest positive relations with student achievement and not parents' school-based involvement which only had a small positive relationship. Academic socialisation involves parents communicating high

expectations, values, and educational aspirations to their child, discussing and setting achievement goals, and talking with their child about what they have learnt in school (N. E. Hill & Tyson, 2009). Conversely, parents helping with homework is negatively related to achievement (N. E. Hill & Tyson, 2009; Milne, Myers, Rosenthal, & Ginsburg, 1986). Finn's (1993) study concurred with that of Hill and Tyson (2009) about home-based parental support but found that the level of contact and involvement parents had with their child's school had no relation to academic achievement.

The findings from this thesis suggested that parental/whānau interest and involvement in education was of value when parents provided a supportive home-learning environment, articulated high expectations, and discussed aspirational future goals with their children. To address teachers' deficit views about Māori parents and those from low socioeconomic backgrounds, it is vital that school leaders provide appropriate professional development to their staff to address their misconceptions. It is also important for schools to work on finding ways to engage parents that are mutually beneficial, strengthen school programmes, and ultimately raise student achievement (Rubie-Davies, Webber, & Turner, 2018). Some effective practices for engaging parents have included "classroom and home learning programmes that build on whānau cultural practices," (Rubie-Davies et al., 2018, p. 228), so that parents and caregivers have the opportunity to take part and share their expertise, home teaching activities, and multiple opportunities for whānau to have informal contact and be involved in their child's education.

Limitations of the Thesis and Suggestions for Further Research

This section of the chapter is a discussion of the thesis' limitations to demonstrate an acknowledgement and understanding of what has been learnt during the research process. Limitations are discussed in relation to the research design, types of analyses, and the sample selected.

The studies in this thesis were cross-sectional and focussed on students in one of their final two years of secondary school. A limitation with a cross-sectional design is that it depicts a situation at a particular point in time, so if a different time frame was chosen, then there is a chance that the results could be different (Levin, 2006). Future research in this area could include a longitudinal study that tracks students' perceptions and academic success over their entire secondary school education. A longitudinal study could identify whether specific factors made a difference to student success over time and if students had entered secondary school as high achieving students or if factors during their time at school had altered their trajectories. Data collection at several time points could have also investigated more deeply the direct and indirect associations found between teacher-student relationships, engagement, and achievement to see whether they endured or changed over students' time at school.

This thesis defined student success as the achievement of Merit and Excellence endorsement in NCEA but did not investigate or consider other types of success such as leadership, cultural and performing arts, service to the school and the local community, and sports. Future research could extend the current research to include other aspects of success and could investigate whether there is a relationship between success in NCEA and high achievement at university, or between success in NCEA and university degree completion.

One of the factors related to students' academic success raised by teacher participants in this thesis was the role of parental support and students' home background. To keep the studies at a manageable size for a doctoral thesis, data were not collected from students' parents in any of the studies. Parents/whānau are important stakeholders in their child's education, so in future research, data about perceptions of academic success could be collected from parents/whānau of high achieving students in addition to teachers and students.

Finally, a limitation of qualitative research is that it is not possible for generalisations to be made from the data (C. Marshall & Rossman, 2014). Although there were large samples for Studies One and Two ($N = 857$), and the research included students and teachers from a diverse ethnic and socioeconomic population, who were situated in both urban and rural schools across New Zealand, qualitative findings cannot be generalised to the broader population of high achieving secondary school students and teachers. Additionally, structural equation modelling (SEM) was utilised in Study Three, and as SEM relies on correlational data, no conclusions could be made from the findings of causality or impact, and relationships among variables must be interpreted with caution. (Nachtigall, Kroehne, Funke, & Steyer, 2003).

Educational and Theoretical Implications, and Recommendations for Teachers and other Stakeholders in Education

Implications for teacher-student relationships. The findings related to teacher-student relationships in this thesis being of less importance for high achieving students contrasts with the theory put forward by Bishop and colleagues (2003) and Pianta and Allen (2008a) that teacher-student relationships are one of the most important factors in a student's education. Although there were indications in this thesis that students enjoyed having positive relationships with teachers, the link to academic success was weak in the qualitative data and showed no relationship in the quantitative analyses. These findings indicate the need for further research in the area of teacher-student relationships for high achieving students in the secondary school context. An implication for practice, however, is not that teachers should avoid forming relationships with students but that the focus should be on meeting their needs through demonstrating academic care for students learning and achievement.

Respect students' names and correctly pronounce them. This thesis highlighted the need for an increased focus on culturally responsive teaching in schools for Māori and other ethnic minority students. In many classes referred to by participants, it appeared that there was a lack of understanding about the importance of teaching through culture, acknowledging students' cultures, using te reo in teaching, or using correct pronunciation. The disrespecting of students' names was a significant issue for participants in this thesis, and it was a barrier that prevented some students from establishing positive relationships with their teachers. Therefore, a recommendation for teachers is that they ensure that they correctly pronounce all their students' names. This is an important first step in connecting with students and a meaningful way that teachers can show respect for students, their culture, and their language.

Obtain feedback from students about teachers' teaching practice. A recommendation for teachers is the regular use of evaluations to obtain feedback from their current cohort of students. Collecting student voice about teacher practice is important as it allows students the opportunity to let teachers know what works and where improvements are needed. A strength of this research was the use of students' perspectives (and teachers' perspectives) to find out the attributes of ideal and non-ideal teachers, and the practices that were considered of most value to student learning and achievement. Hattie (2009) reported that the lack of student evaluations used in secondary schools to assess the effectiveness of teachers was a concern, as students were in an ideal position to evaluate their teachers. He said,

A key is not whether teachers are excellent, or even seen to be excellent by colleagues, but whether they are excellent as seen by students—the students sit in the classes, they know whether the teacher sees learning through their eyes, and they know the quality of the relationship. The

visibility of learning from the students' perspective needs to be known by teachers so that they can have a better understanding of what learning looks and feels like for the students (p. 116).

The Measures of Effective Teaching (MET) Project (2012) was a large-scale research project that involved 3000 teachers and tested a wide range of different measures of effective teaching. The MET reported that student perception surveys were a useful and consistent measure of teacher effectiveness and that “teachers’ survey results were predictive of student achievement gains” (p. 2). For student perception surveys to be a useful form of feedback to teachers on their practice they needed to: measure what mattered, be accurate, reliable, and support improvement. Teachers also needed to be informed of their results and supported to make changes in their practice where weaknesses were identified.

Incorporate te reo Māori proficiency in initial teacher education. The low levels of Māori language reported in this thesis along with poor pronunciation, and a lack of reference to kaupapa or mātauranga Māori indicated that changes need to be made at the level of initial teacher education. Therefore, a recommendation for teacher education providers is to include a basic te reo Māori test as a minimum condition of entry (similar to the English language entry test), and students must pass a proficiency test in te reo Māori as a condition of graduation. This would ensure that all applicants entered teacher training with basic vowel sounds and greetings mastered, and time allocated to compulsory Māori lectures could be spent focussing on more advanced content, tikanga, and mātauranga Māori.

Another benefit of students obtaining basic te reo Māori competency before starting teacher education and their teaching careers is related to an increased understanding of Māori-Pākehā relations which appeared to be needed based on the numbers of reports of teacher racism in this thesis. Te Huia (2016) reported that Pākehā who engaged in Māori language learning became more aware of the inequalities that exist in New Zealand between

Māori and Pākehā, and as a result, were more likely to make positive contributions towards improving bicultural relationships. Jones (1999) also argued that cross-cultural understanding led to “a deeper understanding of one’s own culture, society, and history, and their political relation to those of others” (p. 314) which was critical to challenging and changing structural and societal inequalities.

Challenge racism and discrimination during teacher education training, and prior to entering the teaching profession. A concerning finding from this study was that Māori (and minority) students were subjected to racism and discrimination from their teachers. Teacher racism is an ongoing problem in New Zealand schools, and it is a serious concern (R. Bishop et al., 2003; Mitchell & Mitchell, 1988; Office of the Children's Commissioner and New Zealand Trustees Association, 2018). Initial teacher education providers are urged to adopt stricter entry processes to assess teacher trainees who are entering the profession carefully, and there needs to be a process of competency to follow if trainees display racist or discriminatory attitudes towards groups of students during their training. A much greater emphasis on teaching culturally responsive and anti-racist education is required in all training programmes, and universities need to ensure that there is a stringent assessment of graduating teachers to confirm that all graduates meet the requirements of the teaching standards pertaining to the Treaty of Waitangi and culturally responsive teaching.

A further recommendation is that all overseas trained teachers also participate in a Treaty of Waitangi and culturally responsive teaching course before they can teach in New Zealand schools. It is important that all teachers in New Zealand schools can confidently and appropriately support both Māori and non-Māori students to reach their educational potential and that schools are culturally safe, non-racist environments for students.

Thesis Contributions

Located in the New Zealand secondary school context, this thesis makes several contributions to the literature on academic success for Māori and non-Māori secondary school students, ideal and non-ideal teachers, teacher-student relationships, and student engagement, and Indigenous and minority education internationally. The first original contribution from this thesis is that no other research study has focused on ideal teachers for high achieving Māori students. Additionally, no other study has also investigated the perceptions of students from other ethnic groups together with Māori to see if their perceptions of teachers or academic success differed. Teacher and student views of academic success and ideal teachers were also compared in this study.

Existing New Zealand research studies which have focussed on high achieving students' academic success at secondary school level are primarily qualitative (Claxton, 2016; Horsley, 2009; MacDonald, 2011; Macfarlane et al., 2014; McRae et al., 2010; Miller, 2015; Mitchell & Mitchell, 1988). Methodologically, the current thesis differs from all the studies above by incorporating both a quantitative and qualitative research design with large samples of students ($n = 636$) and teachers ($n = 274$) of diverse ethnic and socioeconomic backgrounds, recruited from schools across New Zealand. This was an important difference in the current thesis which meant that questions related to participants perceptions were answered as well as those identifying relationships and associations between factors in the quantitative data. The participants were students and teachers who were currently studying and teaching in the school system, rather than participants who reflected on or recalled past experiences, so recent perspectives of education and schooling were presented.

This research also makes an important contribution to the literature on successful students by identifying that students' personal attributes and behaviours such as hard work and effort, and motivation and self-regulation, were the greatest contributors to their success.

This differs from other studies which have found that students perceived teachers or family were critical factors (Griffin & Allen, 2006; Hassinger & Plourde, 2005; Horsley, 2009; Macfarlane et al., 2014). Equally, the students' and teachers' reports provided a unique contribution to the literature on ideal and non-ideal teachers about the type of teaching that is most effective to support the academic success of high achieving students. The very large sample size ($N = 857$) from which qualitative data were collected and analysed also made this a unique study.

A further contribution was that the current research validated both the Network of Relationships Inventory–Social Provisions Version (NRI-SPV) and the Student Engagement Instrument (SEI) for use with a multi-ethnic sample of New Zealand secondary school students using CFA and multiple group invariance testing. The NRI-SPV and SEI had not previously been used in a New Zealand secondary school-level context to measure teacher-student relationships or student engagement for high achieving secondary school students, so this thesis adds to the research studies that have utilised these instruments and demonstrates support for their use with multi-ethnic and Indigenous populations. Multiple group invariance testing was an important step because most measurement scales are developed for an overseas Western context which is very different from New Zealand. Scales are often used indiscriminately in New Zealand with Māori and other ethnic groups which first undertaking invariance testing to ensure the measures work with those groups and that they measure what they are supposed to measure.

A structural equation model which included factors from both the NRI-SPV and the SEI, along with students' prior achievement in NCEA was developed and tested using data from 636 Year 12 and 13 students from schools across New Zealand. Multiple group invariance testing also established strong factorial invariance across the ethnic groups (for Māori students, Pākehā students, and students from other ethnicities). No studies were able

to be located that have used the NRI-SPV and SEI instruments together in one model to measure associations between engagement, teacher-student relationships, and achievement for students of different ethnicities at the secondary school level, so this is an important contribution to the teacher-student relationship and engagement fields.

For the students in this thesis, effective teaching was more important for academic success than a teacher-student relationship. A teacher who had a positive relationship with students but was not able to teach them effectively was not considered to be an 'ideal' teacher. This finding contrasts with previous research that has argued that teacher-student relationships were one of the most important factors in a student's education (R. Bishop et al., 2003; Pianta & Allen, 2008a) and has implications for improving students' educational outcomes. Although the focus of this thesis was on high achieving, academically successful students, the disparities in educational achievement that have existed between Māori and non-Māori in New Zealand for decades remain unchanged. Consequently, it is essential that teachers direct their focus not only on relationships with students but also onto effective teaching strategies that promote student learning and raise achievement. All students need to be given every opportunity to reach their educational potential.

This thesis has investigated the factors that contributed to academic success for high achieving students at secondary school. The three studies brought together students' and teachers' perceptions about academically successful students, ideal and non-ideal teachers, teacher-student relationships, engagement with school, and how these concepts were associated with academic achievement. This thesis provided several insights into the effective teaching and learning of academically successful Māori and non-Māori students in senior secondary school. Although some findings in this thesis were specific to Māori, who occupy a unique position as tangata whenua in New Zealand, there are also implications for educators who work with Indigenous and minority students in other countries.

Internationally, Indigenous and minority students experience many of the same inequities in education that are faced by Māori, and the findings presented in these studies may provide further insights into the effective teaching of Indigenous and minority students and ways in which disparities in education could be addressed.

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APPENDIX A:



PARTICIPANT INFORMATION SHEET FOR PRINCIPAL/BOARD OF TRUSTEES

Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?
Degree: Doctor of Philosophy (PhD)
Researcher: Hana Turner

Dear Principal and Board of Trustees members,

My name is Hana Turner, and I am a PhD student in the Faculty of Education & Social Work at The University of Auckland. I am seeking your permission to access your school to conduct a research study about academically successful secondary school students. This document provides detailed information about the study and about the expected involvement of students and teachers who agree to participate.

Also enclosed with this letter are:

- Participant Information Sheets (PIS) and Consent Forms (CF) for teachers and students
- An information letter about the study for parents
- An information letter for your school kaumātua or the Māori whānau representative
- Copies of the student and teacher questionnaires and interview questions

The overall aim of this research study is to explore factors which contribute to high student achievement at secondary school from the perspective of successful students and their teachers. While the experiences of high achieving students from all ethnic groups will be examined, special interest will be paid to Māori students. This is due to the disparities in educational achievement between Māori and non-Māori and because there has been a particular interest in Māori student success 'as Māori' in recent research (Macfarlane et al., 2014; Ministry of Education, 2013a).

This research is comprised of three studies:

Study One: Exploring the attributes of successful students and their teachers

Study Two: Student-teacher relationships, engagement with school and student success

Study Three: Teacher-student interactions and student success

Consent is being sought for all three studies at this time. As students who will be involved in the study are over the age of 16, parental consent is not required. However, a letter will be sent to parents informing them of the research study and about their child's involvement in it.

Student participants – Studies 1 and 2: I would like to invite high achieving Year 12 and Year 13 students to take part in this study. These students will need to be at least 16 years of age and have either (i) NCEA Level 1 or Level 2 certificate endorsement with Merit or Excellence; or (ii) achieved three or more courses endorsed with Excellence at NCEA Level 1 or NCEA Level 2. The student participants will be asked to complete a questionnaire, and a sub-sample of students will also be invited to participate in focus group interviews. With your permission, NCEA achievement data will be accessed at the school for students who are participating in the study. I will also obtain permission from all the students involved in the study to do this.

The questionnaire will collect data about the students' achievement in NCEA, their perceptions about student success, effective and ineffective teachers, teaching practices, the student-teacher

relationship, and student engagement. Demographic data will also be collected.

The questionnaire will take approximately 30 minutes to complete and administering of it will take place during school hours at a time that is least disruptive to the students' learning. Students will have the option to complete a pencil and paper or an online version. The students who are invited to participate in focus group interviews will take part in a discussion around student-teacher relationships, engagement and student success. The focus group interviews will take approximately one hour, and will most likely happen at lunchtime. Food will be provided.

Teacher participants – Studies 1 and 3: I would like to invite teachers from any subject area who have taught high achieving Year 12 and 13 students to take part in this study. The students they have taught must have achieved Merit or Excellence in the teachers' subject area and also achieved NCEA Level 1 or Level 2 Certificate endorsement with Merit or Excellence OR achieved three or more courses in one year endorsed with Excellence.

In Study One, teacher participants will complete a questionnaire about student success, effective and ineffective teachers, and teaching practices. Demographic data will also be collected including gender, ethnicity, qualifications and teaching experience. The questionnaire will take approximately 15 minutes, and teachers will have the option to complete a pencil and paper or an online version. Teacher participants are not required for Study Two, but some teachers from Study One may also consent to participate in Study Three.

In Study Three, teachers will complete an Estimation of Achievement Survey about the students in one of their Year 12 or Year 13 classes and provide demographic data. They will also be observed for 5 x 30-minute classroom observation sessions. The purpose of the observations is to see how teachers of academically successful students teach their classes. Two observers will visit the class, and the observations will be audio-recorded. One observer will complete an observation protocol recording details of the teacher's instructional activities, questioning techniques, feedback to students, class climate, productivity and classroom management. The second observer will complete a narrative running record of the lesson. The teacher will receive a copy of the forms used before the observations. Any student-teacher interactions recorded in the running record will use a numbered code for the student and will not include any details that could identify the student.

Student Participants – Study Three: The student participants for this study will be one Year 12 or Year 13 class selected by the Study Three teacher participants. All student participants will complete a questionnaire which includes questions about teacher-student interactions, student-self perceptions and demographic data. Students who do not consent to participate in Study Three will be provided with a worksheet to complete while the other students complete their questionnaire. Students will also be observed as part of the 5 x 30-minute classroom observation sessions. A sub-sample of students from each class who give their consent will be invited to participate in semi-structured interviews following the classroom observations.

Teacher and student participants will have the right to withdraw from participating in any of the studies at any time, and to withdraw information they have provided up until two weeks after the questionnaire/s, classroom observations and/or interviews have taken place. It will not be possible, however, to remove individual comments from focus group interviews once these have started as it is a group discussion. Audio recordings of semi-structured interviews and classroom observations will be made only with the agreement of those recorded.

Participation in this research is voluntary. I seek your assurance that should teachers or students

choose or not choose to be part of this study that this will not affect your relationship with them or affect student grades. The data collected will be transcribed and analysed, and will be kept for six years upon which point they will be destroyed. Transcripts and consent forms will be stored separately and securely for six years and then destroyed. All electronic data, including interviews, will be stored on a password-protected computer and will be permanently deleted after six years. Every effort will be taken to ensure confidentiality when the findings are reported. The researcher will use pseudonyms and/or codes for participants and schools, so they are not specifically identifiable. However, total anonymity cannot be fully guaranteed as it is possible that participants may speak to others about their involvement in the research study.

The final report will be submitted in fulfilment of a Doctor of Philosophy (PhD) degree from The University of Auckland, and a copy of the thesis will be accessible at The University of Auckland library and online. Findings may also be used for publication and conference presentations. No reference will be made to individual schools or any persons connected with them. Once the study is complete, I will provide you with either a summary report or a presentation of the results at your school or at the university.

If you agree to give permission, please sign and return the attached consent form in the attached postage-paid envelope. Once I receive your signed consent form, I will provide you with copies of Teacher Participant Information Sheet and Consent Forms for all Year 12 and 13 teachers at your school. If teachers meet the criteria for the study and are interested in participating, they are invited to complete and sign the consent form and either return it by email or to the box I will leave in the school office. Thank you very much for your time and help in making this study possible. I look forward to your positive response.

Regards,

Hana Turner, PhD Student
 School of Learning, Development and Professional Practice
 Faculty of Education & Social Work, The University of Auckland
 Email: h.turner@auckland.ac.nz
 Ph: (09) 373 7999 ext 48788

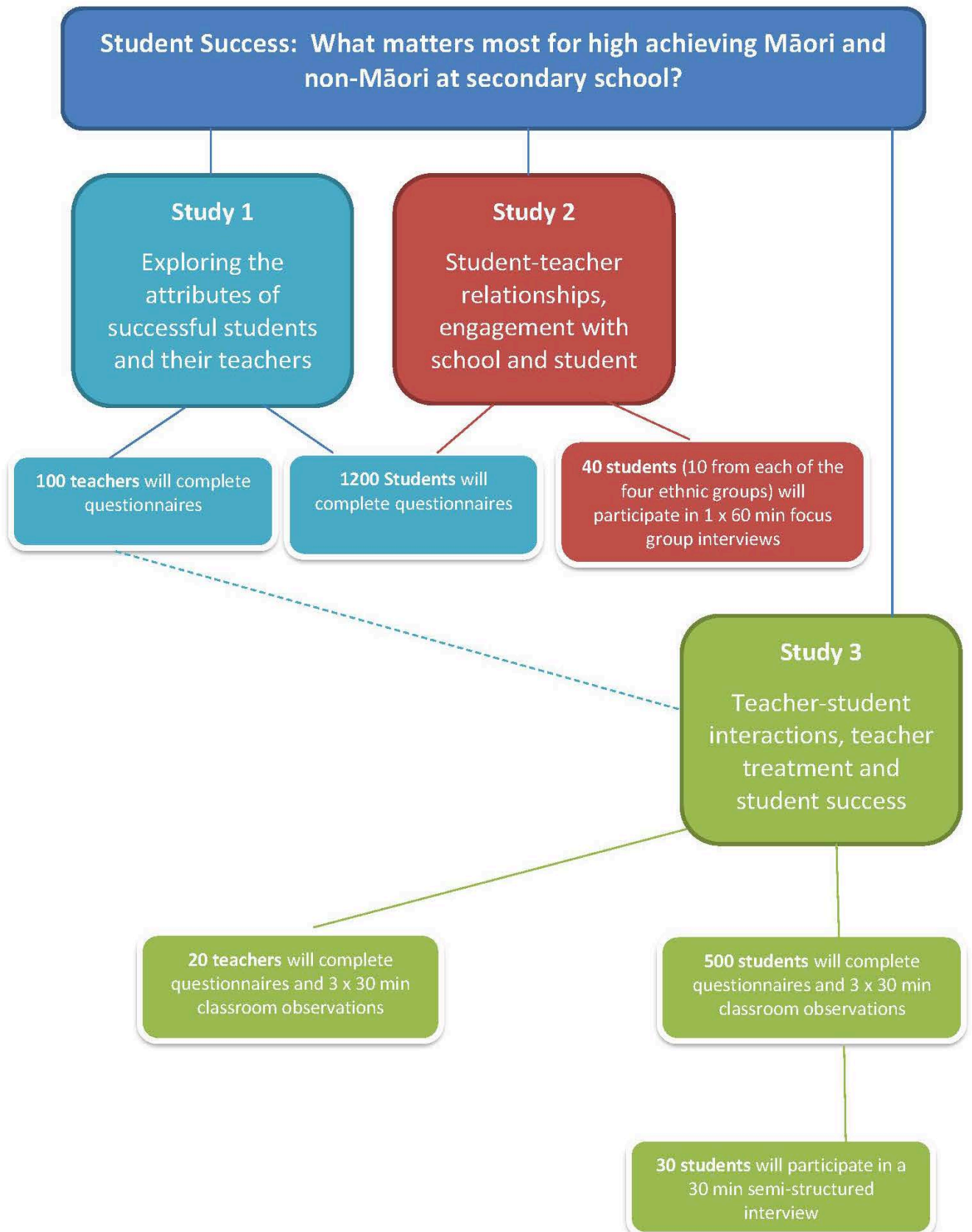
University of Auckland contacts:

Supervisor	Co-Supervisor	Head of School
Professor Christine Rubie-Davies	Dr Melinda Webber	Associate Professor Lorri Santamaria
School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland	School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland	School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland
c.rubie@auckland.ac.nz	m.webber@auckland.ac.nz	l.santamaria@auckland.ac.nz
(09) 373 7999 ext 82974	(09) 373 7999 ext 48456	(09) 373 7999 ext 46353

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711. Email: ro-ethics@auckland.ac.nz.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102

Overview of the Research Study



APPENDIX B:



PRINCIPAL/BOARD OF TRUSTEES' CONSENT FORM

This Consent Form will be held for a period of six years

Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Degree: Doctor of Philosophy (PhD)

Researcher: Hana Turner

I have been given and understand the Participant Information Sheets for this research project. I have had an opportunity to ask questions and have had them answered.

- I give permission for the researcher to have access to our school and students.
- I give permission for this research to be carried out as outlined in the Participant Information Sheets.
- I understand that I may withdraw approval at any time up to the day before the arranged questionnaires, focus group interviews, classroom observations and semi-structured face-to-face interviews without giving a reason.
- I am granting the researcher permission to survey and observe teachers from this school during school time.
- I am granting the researcher permission to survey, run focus group interviews, observe and interview students from this school during school time.
- I am granting the researcher permission to access NCEA data relating to the student participants.
- I understand that neither participants nor the school will be identified in any written report or oral presentation arising from this research; however, I understand that complete confidentiality cannot be guaranteed.
- I give an assurance that the teacher and student participants will not be disadvantaged or advantaged by participation or non-participation in this research.
- I understand that any data collected related to this school, its teachers and its students will be kept in a locked cabinet at the University of Auckland and will be destroyed after six years.

Signed: **Date:**

Name: **School:**
(Please print clearly)

Phone: **Email address:**

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102

APPENDIX C:

PARTICIPANT INFORMATION SHEET FOR TEACHERS – STUDY ONE



Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Degree: Doctor of Philosophy (PhD)

Researcher: Hana Turner

Dear Teacher,

My name is Hana Turner, and I am a PhD student in the Faculty of Education and Social Work at The University of Auckland. I am conducting a research study about academically successful secondary school students. This document provides information about the study and about your expected involvement if you choose to participate.

The overall aim of this research study is to explore factors which contribute to high student achievement at secondary school from the perspective of successful students and their teachers. While the experiences of high achieving students from all ethnic groups will be examined, special interest will be paid to Māori. This is due to the disparities in educational achievement between Māori and non-Māori and because there has been a particular interest in Māori student success 'as Māori' in recent research (Macfarlane et al., 2014; Ministry of Education, 2013a). It is proposed that this study will provide valuable data about what students and their teachers perceive is most important for student success.

This research is comprised of three studies:

Study One: Exploring the attributes of successful students and their teachers

Study Two: Student-teacher relationships, engagement with school and student success

Study Three: Teacher-student interactions and student success

I would like to invite you to take part in **Study One** of this research. **To be eligible for this study**, you need to have taught a high achieving NCEA student or students who achieved either Merit or Excellence in your class in the previous year. The student(s) must also have achieved either NCEA Level 1 or Level 2 Certificate endorsement with Merit or Excellence OR achieved Excellence in two or more courses.

If you consent to participate in **Study One**, you will be asked to complete a short anonymous questionnaire about student success, effective and ineffective teachers, and teaching practices. Demographic data will also be collected. The questionnaire will take 10-15 minutes to complete.

If you decide to participate in this research, you have the right to withdraw from participation at any time before the point of submitting the questionnaire. However, due to the nature of anonymous responses, you are unable to withdraw data provided by you from the research after the point of submitting the questionnaire.

Participation in this research is voluntary. If you are willing to participate, you will not be asked to sign a consent form. However, there will be an electronic consent at the beginning of the online

questionnaire. Please note that by submitting the online questionnaire you agree to take part in this research.

The data collected will be transcribed by a third party who will have signed a confidentiality agreement; it then will be analysed and kept for six years, upon which point they will be destroyed. Transcripts and consent forms will be stored separately and securely for six years and then destroyed. All electronic data will be stored on a password-protected computer and will be permanently deleted after six years.

We will do our best to keep your information anonymous. Please note that there is always some small risk of exposing data on the Internet, in which your privacy may be breached. To help protect your privacy, you will not be asked to provide any information that will personally identify you. If you accidentally or mistakenly reveal any personal information in your responses, this information will be removed.

The final report will be submitted in fulfilment of a Doctor of Philosophy degree from The University of Auckland, and a copy of the thesis will be accessible at The University of Auckland library and online. Findings may also be used for publication and conference presentations. No reference will be made to individual schools or any persons connected with them.

If you agree to participate, please proceed to the online questionnaire and indicate your consent. Thank you very much for your time and help in making this study possible. If you have any further questions about the study, please contact me by email or at the phone number listed below.

Regards,

Hana Turner, PhD Student
School of Learning, Development and Professional Practice
Faculty of Education & Social Work, The University of Auckland
Email: h.turner@auckland.ac.nz, Ph: (09) 373 7999 ext 48788

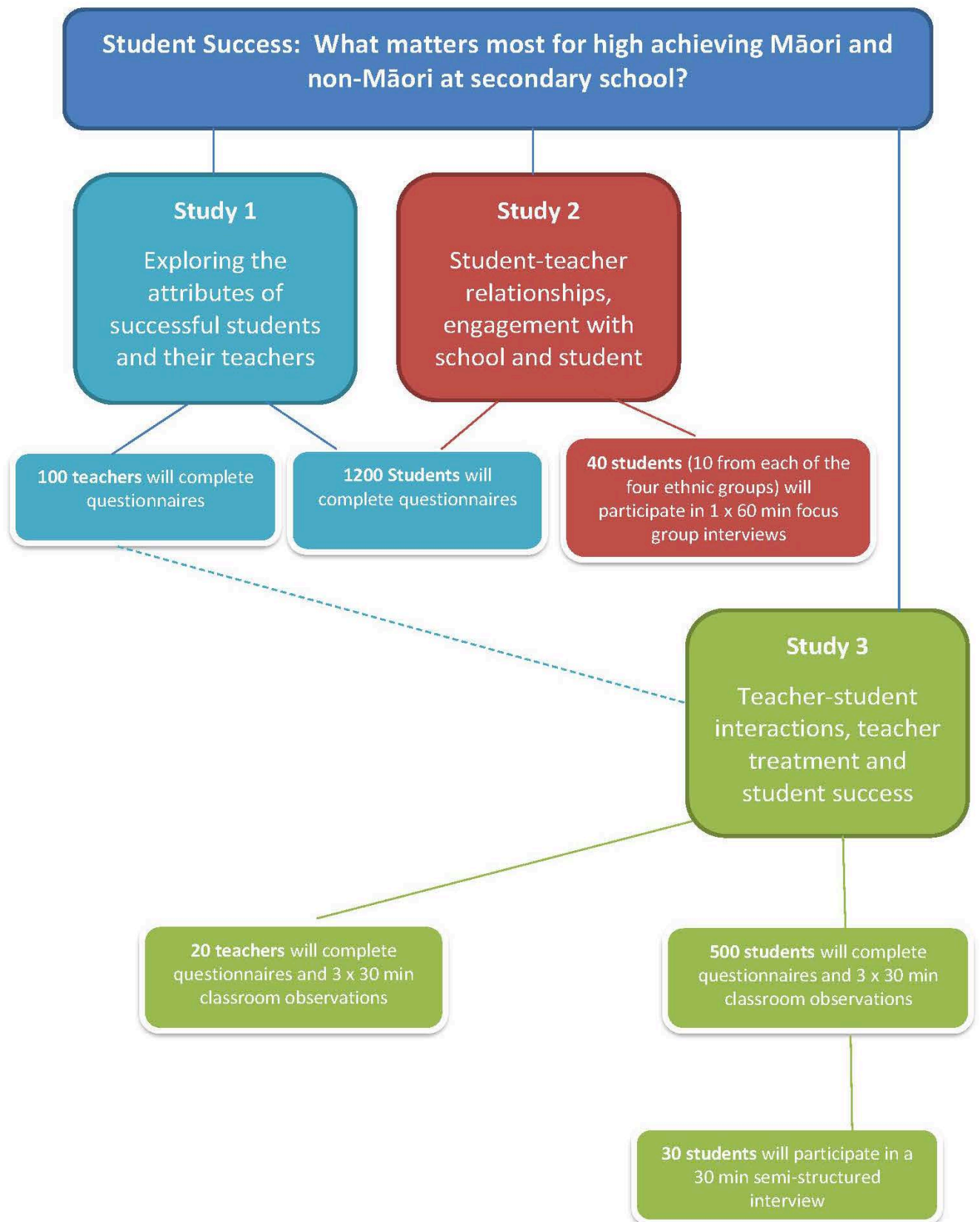
University of Auckland contacts:

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c.rubie@auckland.ac.nz (09) 373 7999 ext 82974	m.webber@auckland.ac.nz (09) 373 7999 ext 48456	l.santamaria@auckland.ac.nz (09) 373 7999 ext 46353

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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102

Overview of the Research Study



APPENDIX D:

KAUMĀTUA AND/OR MĀORI WHĀNAU SUPPORT INFORMATION SHEET



Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Researcher: Hana Turner (Ngāti Ranginui)

Tēnā koe,

My name is Hana Turner, and I am a PhD student at The University of Auckland. I am about to undertake a research study at [school name]. This letter provides information about the research and the involvement of Māori students in the study. The research in this Study is consistent with the Treaty of Waitangi principles of partnership and protection. The rights and interests of Māori will be actively respected, protected and promoted in this study which aims to be beneficial to and for Māori.

The overall aim of this research study is to explore factors which contribute to high student achievement at secondary school from the perspective of successful students and their teachers. While the experiences of high achieving students from all ethnic groups will be examined, special interest will be paid to Māori. This is due to the disparities in educational achievement between Māori and non-Māori and because there has been a particular interest in Māori student success 'as Māori' in recent research (Macfarlane et al., 2014; Ministry of Education, 2013a). It is proposed that studying the beliefs and behaviours of these students will provide valuable data about what students and their teachers perceive is most important for student success.

This research is comprised of three studies:

Study One: Exploring the attributes of successful students and their teachers

Study Two: Student-teacher relationships, engagement with school and student success

Study Three: Teacher-student interactions and student success

Student participants – Studies One and Two: Student participants for this study will have achieved either (1) NCEA Level 1 or Level 2 certificate endorsement with Merit or Excellence OR (2) Achieved two or more courses endorsed with Excellence at NCEA Level 1 or Level 2. Students will be asked to complete a questionnaire, and a sub-sample of students who give their consent will be invited to participate in focus group interviews. NCEA achievement data will also be collected. The questionnaire will collect data about the students' achievement in NCEA, their perceptions about student success, effective and ineffective teachers, teaching practices, the student-teacher relationship, and student engagement. Demographic data will also be collected.

The questionnaire will take approximately 30 minutes, and students will have the option to complete a pencil and paper or an online version. Study Two is comprised of student focus group interviews. The students who are invited to participate in focus group interviews will take part in a discussion around student-teacher relationships, engagement and student success. The focus group interviews will take approximately one hour, will be held during lunchtime and kai will be provided. As the study is investigating differences by ethnicity, there will be one group for Māori students, one group for Pasifika students, one group for Pākehā students and one group for students from other ethnicities.

Student Participants – Study Three: Students for this study will be in a Year 12 or Year 13 class selected by the Study Three teacher participants. All student participants will complete a questionnaire which includes questions about teacher-student interactions, student-self perceptions and demographic data. Students who do not consent to participate in Study Three will be provided with a worksheet to complete while the other students complete their questionnaire. The students' class will also be observed for 5 x 30-minute sessions. A sub-sample of students from each class will be invited to participate in semi-

structured interviews following the classroom observations. The interviews will take approximately 30 minutes and will take place during school hours at a time that is least disruptive to your child's learning. Students will be able to bring a friend or support person to the interview with them if they wish.

Students will have the right to withdraw from participating in any of the studies at any time, and to withdraw information they have provided up until two weeks after the questionnaire/s, classroom observations and/or interviews have taken place. It will not be possible, however, to remove individual comments from focus group interviews once these have started as it is a group discussion. Audio-recordings of semi-structured interviews and classroom observations will be made only with the agreement of those recorded.

Participation in this research is voluntary. The data collected will be transcribed by a third party who will have signed a confidentiality agreement; it then will be analysed and kept for six years, upon which point they will be destroyed. Transcripts and consent forms will be stored separately and securely for six years and then destroyed. All electronic data, including interviews, will be stored on a password-protected computer and will be permanently deleted after six years.

Every effort will be taken to ensure anonymity when the findings are reported. The researcher will use false names or codes for participants and schools, so they can't be identified. However, total confidentiality cannot be fully guaranteed as it is possible that participants may speak to others about the research study. The final report will be submitted in fulfilment of a Doctor of Philosophy (PhD) degree from The University of Auckland, and a copy of the thesis will be accessible at The University of Auckland library and online. Findings may also be used for publication and conference presentations. No reference will be made to individual schools or any persons connected with them. At the end of the study, participants will be contacted and invited to attend a hui at the school or university to discuss the findings of the research study. All participants will also receive a written report on the main findings. All groups consulted will be acknowledged in the thesis and in other reports and publications and will also be invited to attend the hui where the findings are discussed. If you have any further questions about the study, please do not hesitate to contact me.

Nga mihi,

Hana Turner, PhD Student
 School of Learning, Development and Professional Practice
 Faculty of Education & Social Work, The University of Auckland
 Email: h.turner@auckland.ac.nz. Ph: (09) 373 7999 ext 48788

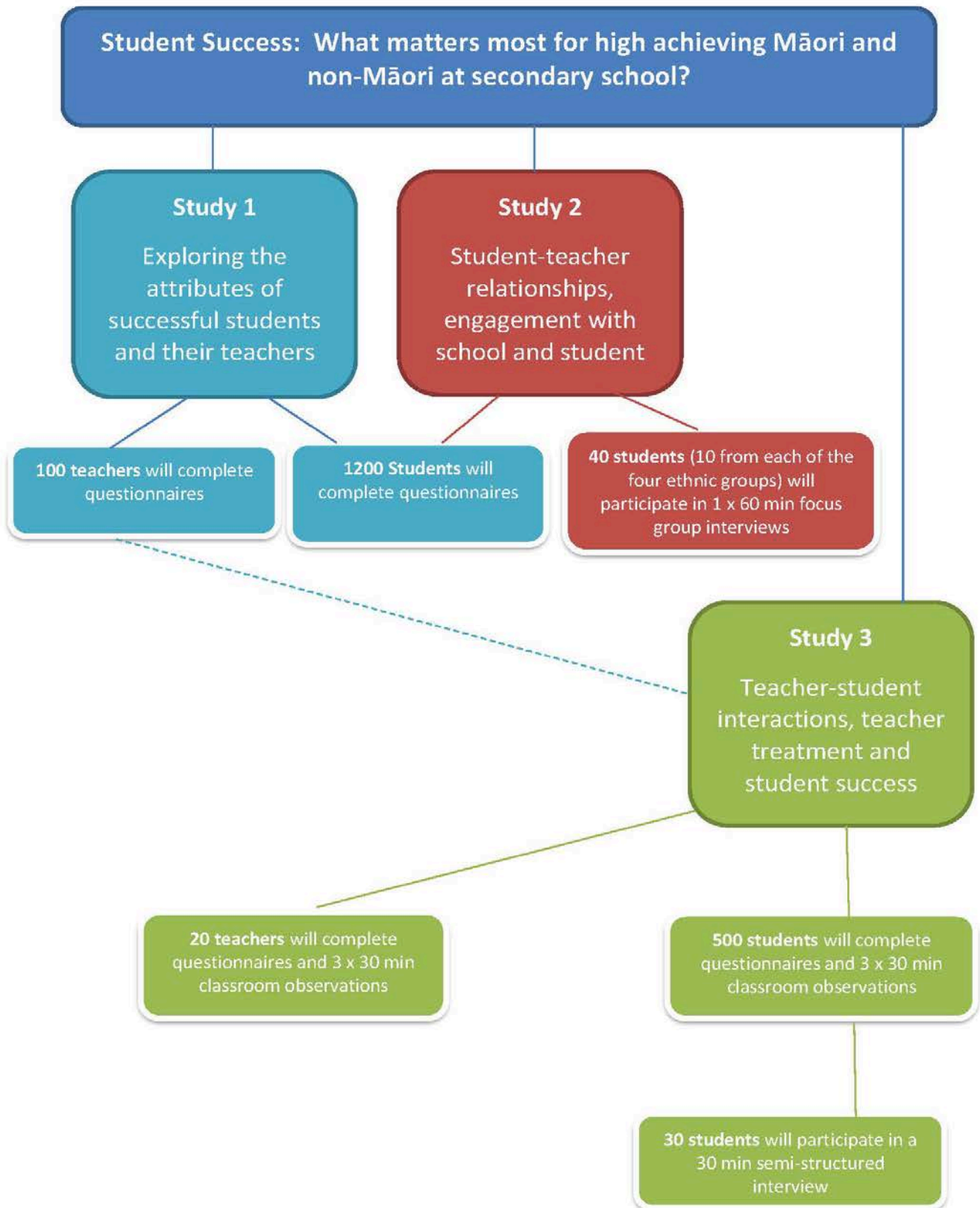
University of Auckland contacts:

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c.rubie@auckland.ac.nz	m.webber@auckland.ac.nz	l.santamaria@auckland.ac.nz
(09) 373-7999 ext 82974	(09) 373 7999 ext 48456	(09) 373 7999 ext 46353

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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102

Overview of the Research Study



APPENDIX E:

PARENTS INFORMATION SHEET



Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Dear Parents/Caregivers

My name is Hana Turner, and I am a PhD student at The University of Auckland. I am about to undertake a research study at your child's school. This letter provides information about the study and your child's involvement.

The overall aim of this research study is to explore factors which contribute to high student achievement at secondary school from the perspective of successful students and their teachers. It is proposed that studying the beliefs and behaviours of these students will provide valuable data about what is most important for student success.

This research is comprised of three studies:

Study One: Exploring the attributes of successful students and their teachers

Study Two: Student-teacher relationships, engagement with school and student success

Study Three: Teacher-student interactions and student success

Student participants – Studies 1 and 2: Student participants for this study will have achieved either (1) NCEA Level 1 or Level 2 certificate endorsement with Merit or Excellence OR (2) Achieved two or more courses endorsed with Excellence at NCEA Level 1 or Level 2. Students will be asked to complete a questionnaire, and a sub-sample of students who give their consent will be invited to participate in focus group interviews. NCEA achievement data will also be collected. The questionnaire will collect data about the students' achievement in NCEA, their perceptions about student success, effective and ineffective teachers and teaching practices, the student-teacher relationship, and student engagement. Demographic data will also be collected.

The questionnaire will take approximately 30 minutes, and students will have the option to complete a pencil and paper or an online version. The students who are invited to participate in focus group interviews will take part in a discussion around student-teacher relationships, engagement and student success. The focus group interviews will take approximately one hour and will be held during lunchtime. As the study is investigating differences by ethnicity, there will be one group for Māori students, one group for Pasifika students, one group for Pākehā students and one group for students from other ethnicities.

Student Participants – Study Three: Students for this study will be in a Year 12 or Year 13 class selected by the Study Three teacher participants. All student participants will complete a questionnaire which includes questions about teacher-student interactions, student self-perceptions and demographic data. Students who do not consent to participate in Study Three will be provided with a worksheet to complete while the other students complete their questionnaire. The students' class will also be observed for 5 x 30-minute sessions. The purpose of the observations is to see how teachers of academically successful students teach their classes. Two observers will visit your child's class, and the observations will be audio-recorded. One observer will complete an observation protocol recording details of your child's teacher's instructional activities, questioning techniques, feedback to students, class climate, productivity and classroom management. The second observer will complete a narrative running record of the lesson. Any student-teacher interactions recorded in the running record will use a numbered code for the student and will not include any details that could identify your child. A sub-sample of students from each

class will be invited to participate in semi-structured interviews following the classroom observations. The interviews will take approximately 30 minutes and will take place during school hours at a time that is least disruptive to your child's learning.

Students will have the right to withdraw from participating in any of the studies at any time, and to withdraw information they have provided up until two weeks after the questionnaire/s, classroom observations and/or interviews have taken place. It will not be possible, however, to remove individual comments from focus group interviews once these have started as it is a group discussion. Audio recordings of semi-structured interviews and classroom observations will be made only with the agreement of those recorded.

Participation in this research is voluntary. The data collected will be transcribed by a third party who will have signed a confidentiality agreement; it then will be analysed and kept for six years, upon which point they will be destroyed. Transcripts and consent forms will be stored separately and securely for six years and then destroyed. All electronic data, including interviews, will be stored on a password-protected computer and will be permanently deleted after six years.

Every effort will be taken to ensure anonymity when the findings are reported. The researcher will use false names or codes for participants and schools, so they can't be identified. However, total confidentiality cannot be fully guaranteed as it is possible that participants may speak to others about the research study.

The final report will be submitted in fulfilment of a Doctor of Philosophy (PhD) degree from The University of Auckland, and a copy of the thesis will be accessible at The University of Auckland library and online. Findings may also be used for publication and conference presentations. No reference will be made to individual schools or any persons connected with them. At the end of the study, participants will be contacted and invited to attend a hui at the school or university to discuss the findings of the research study. All participants will also receive a written report on the main findings. If you have any further questions about the study, please do not hesitate to contact me.

Regards,

Hana Turner, PhD Student
 School of Learning, Development and Professional Practice
 Faculty of Education & Social Work, The University of Auckland
 Email: h.turner@auckland.ac.nz, Ph (09) 373 7999 ext 48788

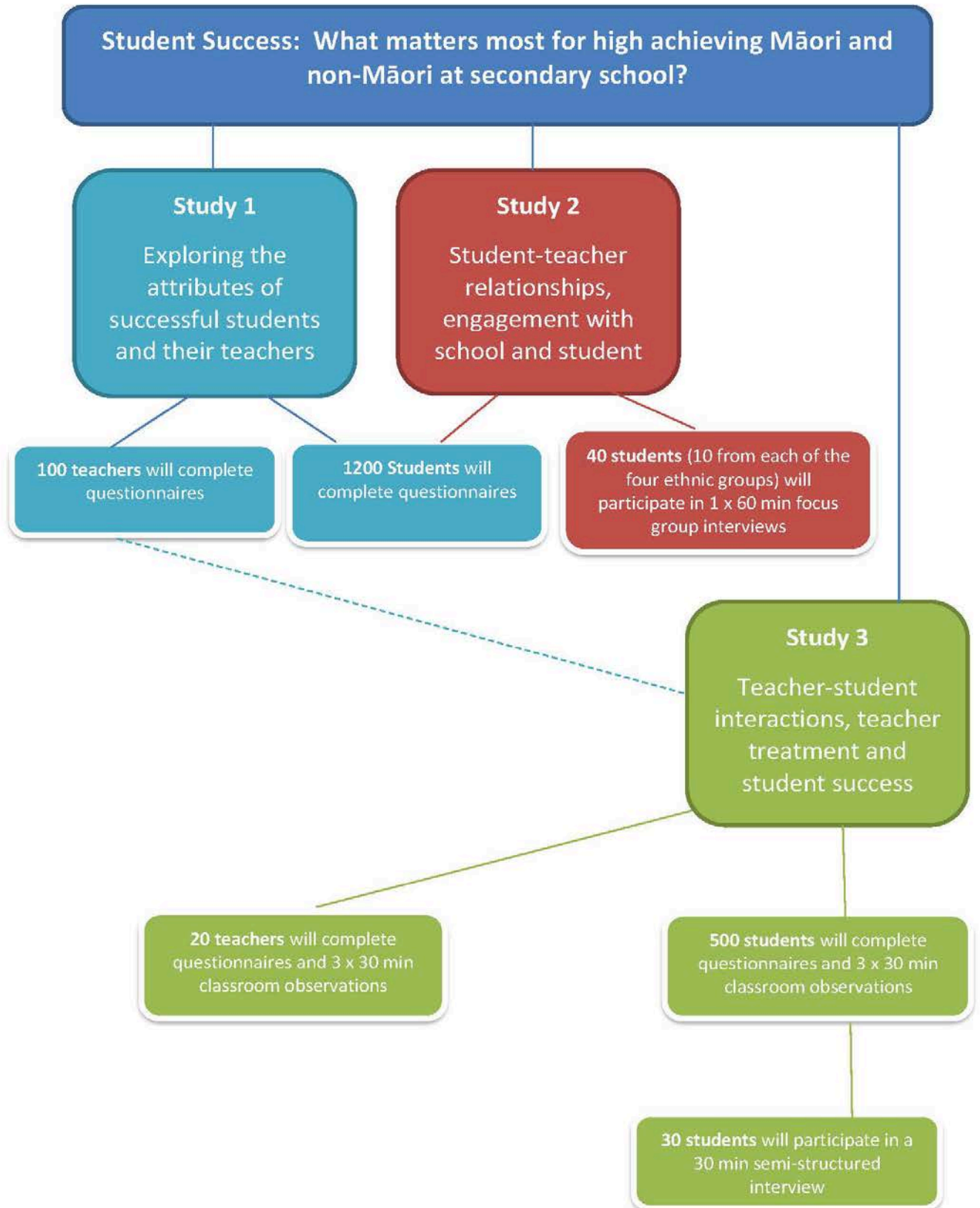
University of Auckland contacts:

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Overview of the Research Study



APPENDIX F:

Participant Information Sheet for Students



Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Degree: Doctor of Philosophy (PhD)

Researcher: Hana Turner

Dear Student,

My name is Hana Turner, and I am a PhD student at The University of Auckland. I would like to invite you to take part in a research study about academically successful secondary school students. This letter provides information about the study and what you would do if you agree to take part.

I am doing this research to find out from high achieving students and their teachers the reasons why some students do well at secondary school. Studying the beliefs and behaviours of these students may provide useful information about what is most important for student success. **To be eligible to take part, you need to be 16 years or older, have achieved either (1) NCEA Level 1 or Level 2 certificate endorsement with Merit or Excellence OR (2) two or more courses endorsed with Excellence at NCEA Level 1 or Level 2.**

If you are eligible and you agree to be in the study, I would like you to invite you to complete an anonymous questionnaire. The questionnaire will ask you about your achievement in NCEA, your views about student success, your best and worst teachers, teaching practices, your relationships with your teachers, and your engagement with school. Background information about you will also be collected in the questionnaire including your gender, date of birth, year level, ethnicity, parents' ethnicity, parents' highest qualification, the highest qualification you expect to achieve, and your extracurricular involvement. The questionnaire will take approximately 20 minutes.

If you decide to participate in this research, you have the right to withdraw from participation at any time before the point of submitting the questionnaire. However, due to the nature of anonymous responses, you are unable to withdraw data provided by you from the research after the point of submitting the questionnaire.

Participation in this research is voluntary. If you are willing to participate, you will not be asked to sign a consent form. However, there will be an electronic consent at the beginning of the online questionnaire. Please note that by submitting the online questionnaire you agree to take part in this research.

To thank you for participating, if you complete all parts of the questionnaire, you will have the chance to go into a draw to win one of ten \$30 gift cards. You may choose from an iTunes, Westfield, Warehouse, Event or Hoyts gift card. A draw will be made at the end of September 2016. Your contact information for the prize draw will be collected and stored separately from your questionnaire responses.

The data collected in the questionnaire will be transcribed by a third party who will have signed a confidentiality agreement; it then will be analysed and kept for six years, upon which point they will

be destroyed. All electronic data will be stored on a password-protected computer and will be permanently deleted after six years.

We will do our best to keep your information anonymous. Please note that there is always some small risk of exposing data on the Internet, in which your privacy may be breached. To help protect your privacy, you will not be asked to provide any information that will personally identify you. If you accidentally or mistakenly reveal any personal information in your responses, this information will be removed. As indicated earlier, contact information for the prize draw will be collected and stored separately.

The final report will be submitted in fulfilment of a Doctor of Philosophy (PhD) degree from The University of Auckland, and a copy of the thesis will be available at The University of Auckland library and online. Findings may also be used for academic publications and conference presentations. No reference will be made to individual schools or any persons connected with them. Once the study is complete, if you would like a copy of the main results, please provide your email address at the end of the questionnaire. You will also be invited to attend a presentation about the study at the university.

If you agree to participate, please indicate your consent on the online questionnaire. Thank you very much for your time and help in making this study possible. If you have any further questions about the study, please contact me by email or at the phone number listed below.

Regards,

Hana Turner, PhD Student
 School of Learning, Development and Professional Practice
 Faculty of Education & Social Work
 The University of Auckland
 Email: h.turner@auckland.ac.nz
 Ph: (09) 373 7999 ext 48788

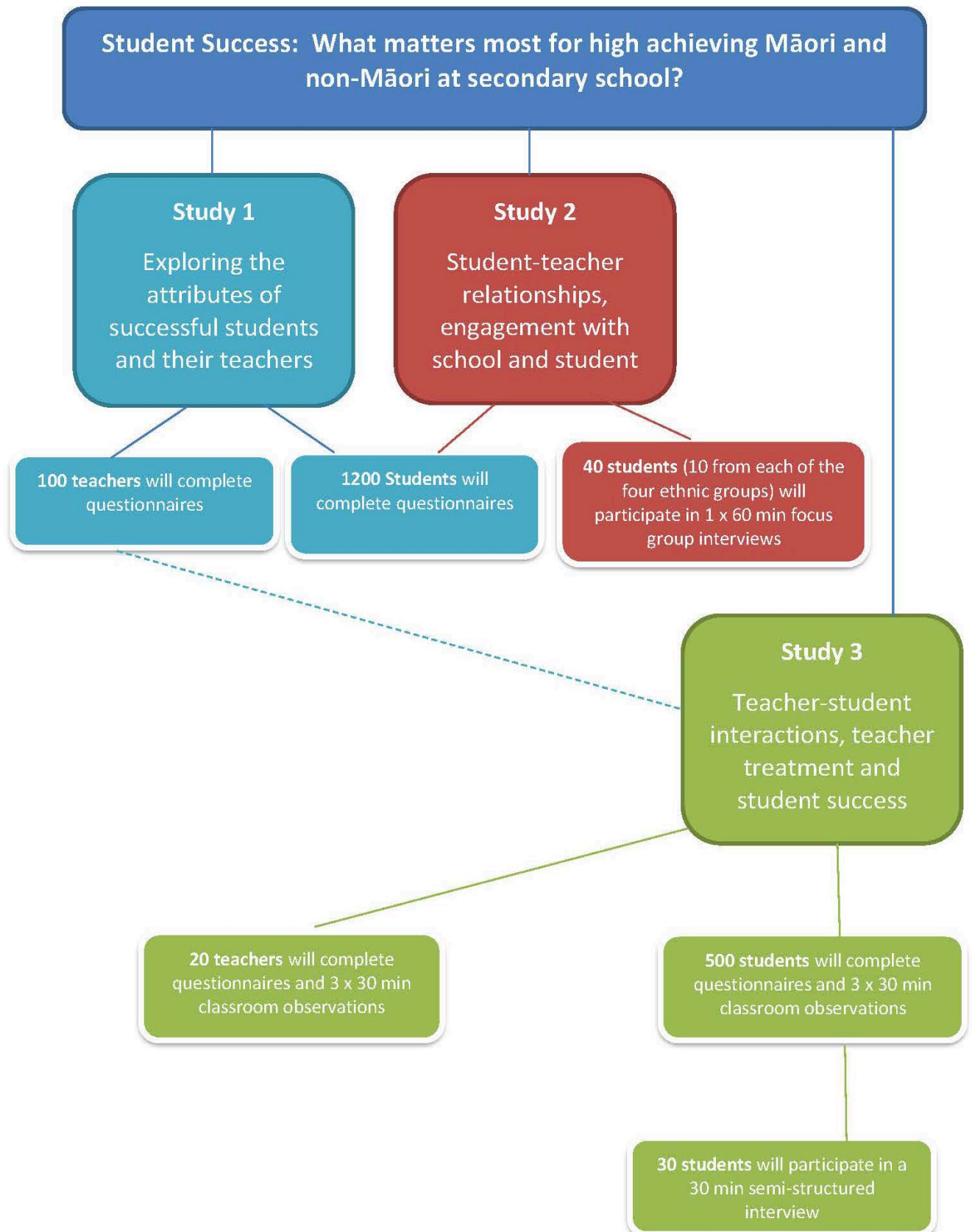
University of Auckland contacts:

Supervisor	Co-Supervisor	Acting Head of School
Professor Christine Rubie-Davies	Dr Melinda Webber	Dr Melinda Webber
School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland	School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland	School of Learning, Development and Professional Practice, Faculty of Education & Social Work, The University of Auckland
c.rubie@auckland.ac.nz	m.webber@auckland.ac.nz	m.webber@auckland.ac.nz
(09) 373 7999 ext 82974	(09) 373 7999 ext 48456	(09) 373 7999 ext 48456

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711. Email: ro-ethics@auckland.ac.nz

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102

Overview of the Research Study



APPENDIX G:

CONSENT FORM FOR STUDENTS



This Consent Form will be held for a period of six years

Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

Degree: Doctor of Philosophy

Researcher: Hana Turner

I have been given and understand the Participant Information Sheet for this research project (*The Participant Information Sheet was attached to the Online Questionnaire you completed*). I have had an opportunity to ask questions and have had them answered.

I confirm that I have achieved either (1) NCEA Level 1 or Level 2 certificate endorsement with Merit or Excellence OR (2) Achieved TWO or more courses endorsed with Excellence at NCEA Level 1 or Level 2 YES NO

• **I confirm that I am 16 years of age or older.** YES NO

• **I agree to participate in a focus group interview** YES NO

- If I participate in the focus group interview, I understand that the interviews will be audio-recorded. I agree not to talk to anyone about what is discussed.
- I understand that a third party who has signed a confidentiality agreement will transcribe the digital audiotapes.
- I understand that neither participants nor the school will be identified in any written report or oral presentation arising from this research; however, I also understand that complete confidentiality cannot be guaranteed.
- I understand that I will not be disadvantaged or advantaged at school by participation or non-participation in this research.
- I understand that it will not be possible to remove my individual comments once the focus group interview has started, as it is a group discussion, so my comments will be mixed in with those of other students.
- I understand that the questionnaire data, focus group interview data and any other data related to this study will be kept in a locked cabinet at the University of Auckland and will be destroyed after six years.

- I would like to receive a summary of the main findings when the study is completed.

YES NO

Signed: **Date:**

Name: **School:**
(Please print clearly)

Class: **Email address:**.....

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102.

APPENDIX H:

STUDENT QUESTIONNAIRE – STUDY ONE



This is NOT a test. There are no right or wrong answers, and everyone’s answers will be different. Be sure that your answers show how you feel about your schooling experiences. We will not share your answers with anyone. They will be completely private.

For some questions in this questionnaire, you will be asked to circle the number corresponding to your response. For example:

	To what extent do you agree or disagree with the following statements about your experience at school?	Completely disagree	Mostly disagree	Slightly disagree	Slightly agree	Mostly agree	Completely agree
A.	Other students at this school listen to what I say.	1	2	3	4	5	6

If you **completely agree** that other students listen to what you say, circle the number **6**. If you **completely disagree** that other students listen to what you say, circle the number **1**. You can also choose the numbers 2, 3, 4 and 5 which are in-between. If you want to change your answer, cross it out and circle a new number.

For other questions in this questionnaire, you will be asked to write a short response. Again, there are no right or wrong answers. Your opinion is what is wanted. Please answer all questions. Thank you.

SECTION 1: Please complete this background information about you:

1. School:
.....

2. Date of Birth:/...../.....
Day / Month/Year

3. Gender: Male Female

4. What year level are you in?
 Year 12 Year 13

5. NCEA Grades last year

Subjects studied last year	The grade awarded (Please tick)			
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Excellence	Merit	Achieved	Not achieved
	Excellence	Merit	Achieved	Not achieved
	Excellence	Merit	Achieved	Not achieved
	Excellence	Merit	Achieved	Not achieved
	Excellence	Merit	Achieved	Not achieved
	Excellence	Merit	Achieved	Not achieved

6. What was YOUR achievement level in NCEA last year?

<input type="radio"/> NCEA Level 1 endorsed with Merit	<input type="radio"/> NCEA Level 1 endorsed with Excellence
<input type="radio"/> NCEA Level 2 endorsed with Merit	<input type="radio"/> NCEA Level 2 endorsed with Excellence
<input type="radio"/> NCEA Level 3 endorsed with Merit	<input type="radio"/> NCEA Level 3 endorsed with Excellence
<input type="radio"/> Other (please describe):	

7. Select the highest level of education YOU expect to complete

<input type="radio"/> Secondary school	<input type="radio"/> Certificate or Diploma at a university or technical institute
<input type="radio"/> Bachelor's Degree at university	<input type="radio"/> A Master's Degree or other advanced Degree at university
<input type="radio"/> I Don't know	<input type="radio"/> Other (Please explain):

8. Which ethnic group(s) do you belong to? Please tick the box or boxes that apply to you:

<input type="radio"/> Māori <i>Iwi:</i>	<input type="radio"/> NZ European/Pākehā
<input type="radio"/> Pasifika (<i>Which island(s) do your family come from?</i>)	
<input type="radio"/> Asian (<i>Which country do your family come from?</i>)	
<input type="radio"/> Other Ethnicity (<i>Please state</i>):	

9. If you belong to more than one ethnic group, please tick your MAIN ethnicity:

<input type="radio"/> Māori <i>Iwi:</i>	<input type="radio"/> NZ European/Pākehā
<input type="radio"/> Pasifika (<i>Which island(s) do your family come from?</i>)	

- Asian (*Which country do your family come from?*)
- Other Ethnicity (*Please state*):

10. Which ethnic group(s) does your mother belong to? Please tick ALL the boxes that apply:

- Māori *Iwi:* NZ European/Pākehā
- Pasifika (*Which island(s) does your mother come from?*)
- Asian (*Which country does your mother come from?*)
- Other Ethnicity (*Please state*):

11. Which ethnic group(s) does your father belong to? Please tick ALL the boxes that apply:

- Māori *Iwi:* NZ European/Pākehā
- Pasifika (*Which island(s) does your father come from?*)
- Asian (*Which country does your father come from?*)
- Other Ethnicity (*Please state*):

12. What is the highest level of education that EITHER of your parents/guardians completed?

<input type="radio"/> Did not complete secondary school	<input type="radio"/> Secondary school
<input type="radio"/> Certificate or Diploma at a university or technical institute	<input type="radio"/> Bachelor’s Degree at university
<input type="radio"/> Master’s degree or another advanced degree at university	<input type="radio"/> Don’t know
<input type="radio"/> Other (please explain):	<input type="radio"/> Not Applicable

SECTION 2:

Part 2A—A successful student

Please describe an **academically successful secondary school student**. *Include their characteristics, attitudes, beliefs, behaviours, skills and/or habits. What makes them succeed?*

.....

.....

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.....

Part 2B—The characteristics of your best teacher

Please describe your current **best** teacher. **(DO NOT name them)**. *What s/he does and says, and how does s/he act or behave? How does s/he teach? How does she relate to his/her students?*

.....

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.....

.....

What subject does your best teacher teach you?

Gender of your **best** teacher: Male Female

Which <u>main</u> ethnic group does your best teacher belong to? (Please tick the box):		
<input type="radio"/> Pasifika	<input type="radio"/> Māori	<input type="radio"/> Pākehā
<input type="radio"/> Asian	<input type="radio"/> Other (Please name):	
<input type="radio"/> Don't know		

Part 2C – Your worst teacher

Describe your current **worst** teacher (**DO NOT name them**). *What does s/he do and say and how does s/he act or behave? How does s/he teach? How does she relate to his/her students?*

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What subject does your worst teacher teach you?

Gender of your **worst** teacher: Male Female

Which <u>main</u> ethnic group does your worst teacher belong to? (Please tick the box):		
<input type="radio"/> Pasifika	<input type="radio"/> Māori	<input type="radio"/> Pākehā
<input type="radio"/> Asian	<input type="radio"/> Other (Please name):	
<input type="radio"/> Don't know		

SECTION 3: Part 3A– Your experience at school.

This section is about how you relate to your teachers, your family and other students, and how you feel about your education. Please circle the number which applies to you for each statement.

	To what extent do you agree or disagree with the following statements about your experience at secondary school?	Completely Disagree	Mostly Disagree	Slightly Disagree	Slightly Agree	Mostly Agree	Completely Agree
1.	Overall, adults at my school treat students fairly.	1	2	3	4	5	6
2.	The tests in my classes do a good job of measuring what I'm able to do.	1	2	3	4	5	6
3.	Students at my school are there for me when I need them.	1	2	3	4	5	6
4.	I plan to continue my education following secondary school.	1	2	3	4	5	6
5.	I'll learn, but only if my family/guardian(s) give me a reward.	1	2	3	4	5	6
6.	Adults at my school listen to the students.	1	2	3	4	5	6
7.	Most of what is important to know you learn in school.	1	2	3	4	5	6
8.	Other students at school care about me.	1	2	3	4	5	6
9.	Going to further education after secondary school is important.	1	2	3	4	5	6
10.	I am hopeful about my future.	1	2	3	4	5	6
11.	My family/guardian(s) are there for me when I need them.	1	2	3	4	5	6
12.	The assessments in my classes do a good job of measuring what I'm able to do.	1	2	3	4	5	6
13.	At my school, teachers care about the students.	1	2	3	4	5	6
14.	What I'm learning in my classes will be important in my future.	1	2	3	4	5	6
15.	Other students here like me the way I am.	1	2	3	4	5	6
16.	The school rules are fair.	1	2	3	4	5	6
17.	Overall, my teachers are open and honest with me.	1	2	3	4	5	6
18.	When I do schoolwork, I check to see whether I understand what I'm doing.	1	2	3	4	5	6
19.	Learning is fun because I get better at something.	1	2	3	4	5	6
20.	I enjoy talking to the students here.	1	2	3	4	5	6
21.	Most teachers at my school are interested in me as a person, not just as a student.	1	2	3	4	5	6
22.	After finishing my schoolwork, I check it to see if it's correct.	1	2	3	4	5	6
23.	My education will create many future opportunities for me.	1	2	3	4	5	6
24.	I enjoy talking to the teachers here.	1	2	3	4	5	6
25.	When I do well in school, it's because I work hard.	1	2	3	4	5	6
26.	I feel like I have a say about what happens to me at school.	1	2	3	4	5	6
27.	I have some friends at school.	1	2	3	4	5	6
28.	School is important for achieving my future goals.	1	2	3	4	5	6
29.	I feel safe at school.	1	2	3	4	5	6
30.	Students here respect what I have to say.	1	2	3	4	5	6
31.	My family/guardian(s) want me to keep trying when things are tough at school.	1	2	3	4	5	6

32.	I'll learn, but only if the teacher gives me a reward.	1	2	3	4	5	6
33.	When something good happens at school, my family/guardians want to know about it.	1	2	3	4	5	6
34.	My teachers are there for me when I need them.	1	2	3	4	5	6
35.	I put a lot of effort into doing my school work	1	2	3	4	5	6
36.	When I have problems at school my family/guardian(s) are willing to help me.	1	2	3	4	5	6

Part 3B – Student-Teacher Relationships

This section asks you about your relationship with TWO of your teachers. Please select ONE teacher who is **currently your best teacher** and ONE teacher who is **currently your worst teacher**. Please circle the number of the statement which applies to each teacher.

How do these statements apply to your relationship with your best and worst teacher?		Completely disagree	Mostly agree	Slightly disagree	Slightly agree	Mostly agree	Completely agree	Completely disagree	Mostly agree	Slightly disagree	Slightly agree	Mostly agree	Completely agree
		Your best teacher						Your worst teacher					
1.	This teacher and I often disagree and quarrel with each other.	1	2	3	4	5	6	1	2	3	4	5	6
2.	This teacher and I often get mad or get into fights with each other.	1	2	3	4	5	6	1	2	3	4	5	6
3.	This teacher and I often argue with each other.	1	2	3	4	5	6	1	2	3	4	5	6
4.	This teacher teaches me how to do lots of things that I don't know.	1	2	3	4	5	6	1	2	3	4	5	6
5.	This teacher often helps me to figure out or fix things.	1	2	3	4	5	6	1	2	3	4	5	6
6.	This teacher gives me a lot of help when I need to get something done.	1	2	3	4	5	6	1	2	3	4	5	6
7.	I often tell this teacher about things that I don't want others to know.	1	2	3	4	5	6	1	2	3	4	5	6
8.	I often tell this teacher everything that I am going through.	1	2	3	4	5	6	1	2	3	4	5	6
9.	I often share secrets and private feelings with this teacher.	1	2	3	4	5	6	1	2	3	4	5	6
10.	This teacher likes me lots.	1	2	3	4	5	6	1	2	3	4	5	6
11.	This teacher really cares about me.	1	2	3	4	5	6	1	2	3	4	5	6
12.	This teacher treats me as if I'm really admired and respected.	1	2	3	4	5	6	1	2	3	4	5	6

13.	This teacher treats me like I am good at many things.	1	2	3	4	5	6	1	2	3	4	5	6
14.	This teacher really likes or approves of the things that I do.	1	2	3	4	5	6	1	2	3	4	5	6
15.	This teacher has a strong feeling of affection (liking) towards me.	1	2	3	4	5	6	1	2	3	4	5	6

Thank you for your participation in this research study. If you would like to make any further comments about the topics covered in this questionnaire, please write them in the space below:

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END OF QUESTIONNAIRE

APPENDIX I:

TEACHER ONLINE QUESTIONNAIRE



STUDENT SUCCESS AT SECONDARY SCHOOL *Teacher Questionnaire*

Participant Information Sheet for Teachers - *Please click the link below to download.*

I confirm I have been given the opportunity to download and have read the Participant Information Sheet

YES (1)

Before beginning the questionnaire, please take a moment to confirm your consent I have read and understood the Participant Information Sheet for this research project.

I understand that by submitting this questionnaire electronically, I agree to take part in this research under the terms indicated in the information supplied.

If you consent to participate in this study, please tick the appropriate box to access the questionnaire. If you do not wish to participate, please tick the appropriate box or close your browser.

Yes, I consent (1)

No, I do not consent (2)

Skip To: End of Survey If Before beginning the questionnaire, please take a moment to confirm your consent I have read... = No, I do not consent

Thank you for agreeing to participate in this research study. Please answer all questions as honestly as possible - there are no right or wrong answers. Your answers will not be shared with anyone. They will be completely private. This study is looking for teachers of high achieving students. Please confirm you are a teacher of a high achieving student by agreeing to one of the following statements:

YES, I confirm I have taught a student (or students) who achieved a Merit or Excellence grade in my class. The student(s) also achieved NCEA Level 1 or Level 2 Certificate Endorsement with Merit or Excellence or achieved TWO or more courses endorsed with Excellence. (1)

NO, I have not taught a student (or students) who achieved a Merit or Excellence grade in my class (2)

Skip To: End of Survey If Thank you for agreeing to participate in this research study. Please answer all questions as h... = NO, I have not taught a student (or students) who achieved a Merit or Excellence grade in my class

SECTION 1: Background Information

Q1 School Name - *Your school will not be named in any report. School name is collected so that data can be analysed by school type, geographic area and decile.*

Q3 Gender:

- Male (1)
- Female (2)

6 What is your age?

- 25 years or younger (1)
- 26 to 35 years (8)
- 36 to 45 years (9)
- 46 to 55 years (10)
- 56 + years (11)
- Prefer not to answer (12)

Q8 Which ethnic group(s) do you belong to? Please tick the box or boxes that apply to you:

- Māori (Please type Iwi in box if known) (1)
-
- NZ European/Pākehā (2)
- Pasifika (Please type which Pacific Island(s) your family originates from): (3)
-
- Asian (Please type which Asian country your family originates from): (8)
-
- Other ethnicity (Please type in box below): (9)
-

Q9 If you belong to more than one ethnic group, please tick your **MAIN** ethnicity:

- Māori (Please type Iwi in box if known) (1)

- NZ European/Pākehā (2)
- Pasifika (Please type which Pacific Island(s) your family originates from): (3)

- Asian (Please type which Asian country your family originates from): (8)

- Other ethnicity (Please type in box below): (9)

Q12 What is the **highest level of education** that **EITHER** of your parents/guardians completed?

- Did not complete secondary school (1)
- Certificate or Diploma at a university or technical institute (2)
- Bachelor's Degree at university (3)
- A Master's Degree or other advanced Degree at university (4)
- Secondary school (5)
- I don't know (6)
- Other (please explain) (7) _____

Q38 How many years of **teaching experience** have you had?

- 0 to 5 years (1)
- 6 to 10 years (2)
- 11 to 17 years (3)
- 18 to 24 years (4)
- 25 years or more (5)
-

Q41 Subjects/classes you are **teaching** this year (eg. *Year 10 Maths; Year 12 Biology*):

- Subject 1 (1) _____
 - Subject 2 (2) _____
 - Subject 3 (3) _____
 - Subject 5 (4) _____
 - Subject 6 (5) _____
 - Subject 8 (6) _____
-

Q42 Subjects you are **qualified** to teach:

- Subject 1 (1) _____
 - Subject 2 (2) _____
 - Subject 3 (3) _____
 - Subject 5 (4) _____
 - Subject 6 (5) _____
 - Subject 8 (6) _____
-

Q38 Teacher training organisation and/or university attended:

Q39 Teaching /Education qualifications *(Please select all that apply):*

- Diploma of Teaching (2)
- Graduate Diploma of Teaching (3)
- Bachelor of Education (4)
- Bachelor of Teaching (5)
- Master of Education (6)
- Master of Teaching (7)
- Postgraduate Diploma of Education (8)
- Higher Degree in Education (Please specify (9) _____)

Other (Please specify) (10) _____

Other qualifications *(Please select all that apply):*

- Certificate or Diploma (2)
- Bachelor's Degree (3)
- Master's Degree (5)
- Doctorate (6)
- Postgraduate Diploma (8)
- Other (Please specify) (10) _____
- Other (Please specify) (9) _____
- Other (Please specify) (7) _____

Previous occupation/s (if applicable):

Non-teaching roles or responsibilities in the school? eg. *Sports, music, kapa haka, Pacific Island group, clubs, Dean, HOD, Assistant HOD, etc.*

What are the attributes of an **academically successful secondary school student**? What are *their characteristics, attitudes, beliefs, behaviours, skills and/or habits? What makes them succeed?*

What are the characteristics and attributes of an **'ideal'** teacher? *What does s/he do and say and how does s/he act or behave? How does s/he teach? How does she relate to his/her students?*

What are the characteristics and attributes of a teacher who is **'less than ideal'**? *What does s/he do and say and how does s/he act or behave? How does s/he teach? How does she relate to his/her students?*

Thank you for your participation in this research study. If you would like to make any further comments about the topics covered in this questionnaire, please write them in the space below:

Please click the **BLUE >>** button below to submit your answers.

APPENDIX J:

FOCUS GROUP INTERVIEW SCHEDULE



Study Two

Project Title: Student success: What matters most for high achieving Māori and Non-Māori students at secondary school?

1. In your experience, do you think high achieving students need to have a positive relationship with their teachers in order to be successful at school? If so, why? If not, why not?
2. What type of relationship do you have with your best teacher(s)? Is it more emotionally supportive, academically supportive or equally emotionally and academically supportive?
3. Are student-teacher relationships more important for some groups of students than others? For example, do you think that Māori students value relationships with their teachers more than other groups of students?
4. You achieved high grades in NCEA. Were your grades related to having a positive relationship with your teachers? In what way?
5. Student engagement with school is generally considered to be a positive thing. Could you explain what you think student engagement with school is? Do you think students need to be engaged with school in order to be successful or to achieve highly? Why or why not?
6. What do teachers need to do to help students achieve better at school?
7. What do lower achieving students need to do to achieve as well at school as you do?
8. What does the statement 'Māori achieving educational success *as Māori*' mean to you?

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 8371. Email: ro-ethics@auckland.ac.nz.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 15/09/2015 for a period of three years. Reference Number 015102.