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Exploring Behaviour Support for Australian Aboriginal and Torres Islander Students: A Mixed Methods Study

By

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A thesis submitted in fulfilment of the degree of Doctor of Philosophy, College of Arts, Society and Education, James Cook University.

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Personal thanks go to my PhD colleagues, Donna Goldie and Caroline Blackley; metaphorically holding each other's hands is the best support. Further thanks to my immediate family and brother Chris Davis and his wife Kelly, and my colleague Toni Simmonds for their endless encouragement. Then wider, family and friends for being the cheer squad when things got tough and celebrating the small achievements with me.

Statement of the Contribution of Others

Chapter No	Details of Input or Publication on which chapter is based	Nature and extent of the intellectual input of each contributor and the candidate.
2	Llewellyn, L., Boon, H. J., & Lewthwaite, B. (2018). Effective behaviour management strategies for Australian Aboriginal and Torres Strait Islander students: A literature review. *Australian Journal of Teacher Education*, *43*(1), 1-27. https://doi.org/10.14221/ajte.2018v43n1.1	This paper is based on doctoral research done by Llewellyn with some editorial support from then supervisors, Lewthwaite and Boon.
5	Rasch analysis	After I prepared the data, Professor Trevor Bond, co-author of "Applying the Rasch Model", conducted the Rasch analysis. We collaborated closely to analyse and interpret the results.
6	Rasch analysis and support with Chi-Squared analyses	Professor Trevor Bond collaborated on the Rasch, and Chi-Squared tests of independence and Trevor Bond provided advice as we interpreted the results.

Co-Author Agreement

Consent from co-authors of the published literature review.

Thesis Title:			
Name of Candidate:	Details of publication(s) on which chapter is based	Nature and extent of the intellectual input of each author, including the candidate	I confirm the candidate's contribution to this paper and consent to the inclusion of the paper in this thesis
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Consent from co-authors of the published literature review.

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Chapter No. 2	Llewellyn, L., Boon, H. J., & Lewthwaite, B. (2018). Effective behaviour management strategies for Australian Aboriginal and Torres Strait Islander students: A literature review. *Australian Journal of Teacher Education*, *43*(1), 1-27. https://doi.org/10.14221/ajte.2018v43n1.1		Name: Brian Lewthwaite Signature: Name: Signature:

Dedication

This thesis is dedicated in part, to the Yugambehnga jahjum (children of the Yugumbeh language people) who were forced off their lands by my ancestors. I acknowledge that my current position comes from five generations of land ownership and education as a result.

It is also dedicated to a woman who, without the opportunity of formal education, has been an intelligent and capable leader throughout her life. Lily Davis (nee Burton) was forced to leave school at the age of 14 to work in a factory because she was a girl. She promised her only daughter at birth that I could study for as long as I wished.

Abstract

Australian Aboriginal and Torres Strait Islander (Indigenous) children receive disproportionate number of suspensions and exclusion from Australian schools. This research is underpinned by the argument that supporting Indigenous children's behaviours in schools in ways that are recommended by their communities, ways that honour their heritage and treats them with respect, will encourage them to engage with and remain at school. An examination of the literature identified a significant gap in Australian research about culturally appropriate ways to interact with Indigenous students' behaviour when it was categorised in discordant ways. A set of themes emerged from the literature review that carried through the study.

Two regional schools in Queensland, one Catholic primary school and one Indigenous P-12 school were the sites for the study. Indigenous staff, students and families provided insights in semistructured interviews. The result became framed as Teacher Attitudes and Strategies to Support Australian Indigenous Students (TASSAIS). In this study, these were examined through Rasch analysis survey with 125 participants for the purpose of determining a single construct. This was followed by an investigation into the effectiveness of the TASSAIS to support teachers' practice in the classroom. Four teachers volunteered and were observed using the TASSAIS attitudes and strategies with two classes. Nine students were observed with these teachers to ascertain their on-task times (engagement) and reactions after interactions with the teachers.

Methods included capturing classroom data through qualitative field notes as teachers went about their day-to day teaching, and quantitative observations, evaluated through Pearson's Chi-squared analyses. Teachers completed the TASSAIS survey designed to capture their frequency of use of the attitudes and strategies. Their answers were added to the Rasch analysis and identified on a Wright Map to determine differences between self-report and observed use of strategies. This study locates cultural awareness and ensuing strategies of the classroom teacher as an important factor in shaping a supportive environment for Indigenous students. The TASSAIS offers an entry point for teacher reflexivity about the elements of their practice which would contribute to more equitable outcomes for Indigenous students. The results suggest elements located in the TASSAIS support an ethic of practice, one which honours the cultural strengths and practices that Indigenous children carry with them into schools.

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Chapter 1 Introduction

1.1 Introduction

In Australia, managing student misbehaviour is widely recognised as a major issue for both experienced and novice teachers (Australian Education Union, 2007; Byrne, 1999; Commonwealth Department of Education Science and Training, 2002; Hepburn et al., 2020; Martin, 1999). In the public discourse, attention given to student behaviour typically focuses on inappropriate behaviour and its consequences, such as suspension rates and violence (Sullivan et al., 2014). Also, attention is given to inappropriate behaviour and its contribution to teacher stress and attrition (Australian Education Union, 2007). Inappropriate behaviour was identified as the third highest reason for beginning teachers leaving the profession in 2007 (Australian Education Union, 2007). A quarter of new teachers left the profession within four years and failed to gain full registration (Queensland College of Teachers, 2019). In addition, because of increased attention on student achievement, focus has shifted to the negative influence of inappropriate behaviour on student learning. In the School Opinion Survey, Queensland, 30% of students surveyed felt that behaviour was not managed well at their school (Department of Education Queensland, 2021a, c.f.; Thomson & Hillman, 2018). According to John Hattie (2009), who is concerned with effective teaching, a positive, well-managed learning environment is one of the most significant influences on student learning.

In the state of Queensland, Australia, where this research is located, the attention given to inappropriate behaviour over the past two decades has resulted in a variety of state-located initiatives, especially within the state school system under the direction of Education Queensland. These initiatives, largely unsubstantiated through research, are evidenced in the number of resources being made available to assist teachers to deal with inappropriate behaviour. In Queensland, one such initiative was led by Christine Richmond, initially a Queensland Department of Education consultant. She observed the classroom actions of effective teachers and systematically identified and labelled the strategies used by these teachers to manage behaviour. These strategies were published as a resource and were known as the Microskills for Managing Behaviour (1996). They were later repackaged by Education Queensland as the Essential Skills for Classroom Management (ESCM) (2007) and have been evaluated by Hepburn and Beamish (2019).

Paralleling Richmond's contribution is the work of Bill Rogers, a Victorian educator, who has also published several resources focusing on practical skills for classroom and school management (1989, 1990; W. A. Rogers, 1994d; Rogers, 1995, 1999, 2001, 2002b, 2008,

2010). More recently, Mark Davidson, another Education Queensland employee, extended Richmond's work by developing a data collection tool that allowed teachers to systematically reflect on their behaviour support practices through a process called Classroom Profiling (Davidson & Goldman, 2004). In recent years, Blackley et al. (2021) built on Classroom Profiling to research teacher decision-making about behaviour support. Further to this, Education Queensland schools are increasingly drawing upon the work of American researcher Robert Marzano, especially the practices encouraged by his comprehensive framework for effective instruction, *The Art and Science of Teaching* (2007), which draws attention to strategies for effective classroom management. Classroom Profiling, ESCM and the work of Rogers, Richmond and Marzano are common practices across Queensland State schools, and, increasingly, the Catholic Education and Independent school sectors in Queensland.

Notwithstanding the significant contribution these behaviour management practices might be having on the effectiveness of teacher practice, what is not evident in the discourse is any reference to whether these practices are responsive to the particular needs of Indigenous (Aboriginal and Torres Strait Islander) students. This consideration is of utmost importance, considering Indigenous students are overrepresented in every negative indicator that is associated with student behaviour; such as student suspension (Graham et al., 2022; Mills & McGregor, 2014; Partington et al., 2001; Stehbens et al., 1999), attendance (Auditor General of Queensland, 2012; Graham et al., 2022; Keddie et al., 2013), exclusion (Graham et al., 2022; Partington et al., 2001), retention (Bain, 2011) and achievement (Stehbens et al., 1999). These data parallel student behaviour in the United States, where African American children are 2.19 times more likely than white children to get an office referral in elementary school and 3.78 times more likely in middle school (Skiba et al., 2011). African American students were dealt harsher punishments than white children for similar offences (Skiba et al., 2011). In New South Wales state schools, Indigenous students constitute 6.1% of the overall student population, yet they account for 23% of long term suspensions (Mills & McGregor, 2014). In Queensland, Indigenous students accounted for 10.9% of the state school enrolments in 2021 (Department of Education Queensland, 2021b). In 2020, 38% of Indigenous students in state schools were suspended, excluded, or had enrolments cancelled (Graham et al., 2022). Indigenous students also represented 55% of young people under youth justice supervision (Graham et al., 2022). Further, inequitable consequences for Indigenous students has been described in Western Australia (Gillan, 2008) and New South Wales (Lester, 2016).

Considering that the Australian Professional Standards for Teachers require teachers to "Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and

needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds" (Australian Institute for Teaching and School Leadership, 2011b), one would expect that behaviour support strategies would also be grounded in actions consistent with the cultural backgrounds of students. Alarmingly absent in the effective teaching discourse is any discussion of the role culturally located teaching practices are likely to have on improving behaviour support[1] for Indigenous students. As asserted by Sarra (2011a), enacted curriculum, including teaching practice and behaviour support, *must* demonstrate links between school and the everyday realities of Indigenous peoples life practices and cultures.

In Australia, little systematic and empirically-based research provides any evidence of 'what works' in influencing Indigenous students' learning (Lewthwaite et al., 2015; Price & Hughes, 2009) and classroom learning environments, specifically in regards to behaviour support. Culturally Responsive Pedagogy is often quoted as the panacea for improving Indigenous student outcomes but it is commonly proposed as advice literature written from the authors' personal experience, unsubstantiated by research (Lewthwaite et al., 2015). Several authors (Castagno & Brayboy, 2008; Griffiths, 2011; Perso, 2012) argue for empirically-based research to investigate culturally located practices that contribute to Indigenous students' school success. What is missing from Australian research is any research that responds to what Indigenous students and their communities are saying about the teaching practices that influence student behaviour. As Rowe (2003, p. 22) notes, "there is a growing uneasiness [in Australian education] related to how little is known about teacher quality from Indigenous students' own perspectives". Further, as Craven et al. assert (2007, p. 4), "there is astoundingly little known about what Aboriginal students see as the qualities of effective teachers and the impact this has on educational outcomes." She adds:

> There is a need to critically validate the generalisability of [Hattie's and Rowe's] findings to Aboriginal students to tease out facets of quality teaching that are salient to Aboriginal students; elucidate their perspectives of teacher quality; and test the influence of specific facets of quality teaching on academic outcomes and the consequences of the findings for developing interventions for Aboriginal school students. (Craven et al., 2007, p. 4)

Further, Griffith (2011, p. 69) states: "Indigenous education programs in Australia are overwhelmingly designed with good intentions and with laudable goals, but with little reference

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[1] As will be explained in Chapter 2, the term behaviour support will be used throughout this study instead of the terms behaviour management or classroom management.

to the evidence base or to the 'big picture' of competing programs and the actual needs of Indigenous people".

In response to these concerns, the research in this study has a twofold focus on first identifying behaviour support practices, as identified by Indigenous Australians, and investigating the influence of these strategies in supporting Indigenous student behaviour at the classroom level. In order to locate the researcher in this current project, in the next section I begin by introducing myself and what brings me to this field of study.

1.2 Locating the Researcher in this Study

I am a non-Indigenous middle-class woman with some 34 years' experience in schools. As a beginning teacher in 1983 my behaviour support skills were self-taught, learned through experience and an initial struggle. In my experience, at that time, university preparation for preservice teachers was sadly lacking in the necessity of understanding of and training for student behaviour. That knowledge gained was sufficient until I had difficulty in managing class '8A' in my tenth year of teaching. When I complained to the Deputy about their behaviour, he asked me if I could have done anything differently, several times.

This disruptive event started my search for understanding through self-reflection and subsequent empowerment for change. A university subject in behaviour management with Bob Cope (Queensland University of Technology, 1992) expanded my knowledge and whetted my appetite for more skills and self-awareness that could allow me to consciously respond to the needs of the students and create an environment in which students felt safe and supported. I held the initial view, that when this kind of environment had been established students can learn. That was what was important to me.

My professional learning continued through Christine Richmond and Bill Rogers who provided information over several years via teacher workshops. Their approaches introduced me to an understanding that behaviour support was more than just reactive strategies; that is, the strategies that a teacher implements after an inappropriate behaviour has occurred. They emphasised that behaviour support also involved proactive strategies; that is, what a teacher does before inappropriate behaviour occurs to prevent its occurrence. As I continued to learn, I began to encourage development necessary for teachers to respond to the needs of their students and create an environment in which their students felt safe and supported in this area of behaviour support. I did this for myself and preservice teachers who did their placements in my classroom. Helping others to succeed in the area of behaviour support became my immediate and long term professional goal.

Over my career in the classroom working in northern Queensland State High schools, as might be expected, I was always working with Indigenous students. When I moved to teach at an Independent Indigenous school, I experienced a steep learning curve as a classroom teacher. It was a new experience to be the only non-Indigenous person in a classroom. My behaviour support skills developed profoundly as I adjusted to suit the context and, especially, what students were communicating to me about behaviour support. I was also privileged to be working with an Indigenous teacher aide who responded to my request for advice about my strategies for behaviour support. I realised, through what the students and teacher aide were telling me, that the opinion of Indigenous staff and students was being ignored in the programs available and advocated for to support teachers with behaviour support. I had been the Wellbeing Coordinator in two other schools and took on a role as Assistant Principal Pastoral Care at a Queensland school with a primary focus on serving Indigenous students. As my understanding grew, so did my commitment to working positively with Indigenous students and from this Indigenous education became a professional passion. This also took on a personal quality because, as circumstances arose, I stepped in to unofficially foster an Aboriginal teenager who needed support during his senior years of high school. The young man boarded with me during this time and my experience in supporting Indigenous students moved from professional to personal. As a caregiver, I was able to witness, first-hand, his experience with prejudice when he related to me his encountered strangers. The thought that anyone would judge him by the colour of his skin brought my maternal instincts to the surface, especially with regards to his safety and care. At that time Indigenous youth were at risk of physical harm from gangs at night in the town where we lived. My experiences with this young man have been significant in developing my deep personal commitment to Indigenous education and students' learning and success.

Thereafter, after several years of teaching, I started working in the university context as a lecturer in Professional Experience, where issues with behaviour support regularly arose on practicum. Challenged by these issues, I put into place several actions that sought to support preservice teachers in this area. These actions involved both proactive and reactive strategies, and further extended teachers' awareness to making conscious decisions based on contextual issues and how these influenced a teacher's approach to behaviour support. The end product, many years later, was a training package that helped others to be more conscious of their choices in behaviour support and develop their skills in response to context (Appendix A). The focus of this product was to stress the importance of behaviour support as a process involving more than just proactive and reactive strategies, which had been the dominant message at the time pronounced by informants such as Richmond (1996), Rogers (2001) and Rogers (1989).

My next role seemed made to fit. As a consultant in behaviour for an education system in a large Queensland city I was required to develop a Behaviour Support Department from its genesis, helping 134 schools and teachers learn about behaviour and how to support and manage it. This gave me understanding of behaviour beyond the classroom level and extended it to the whole school and systemic levels where policy decisions were being made which influenced schools and classrooms. The role also increased my understanding of behaviour at the individual student level. I began to realise more about underlying causes of behaviour and the necessity of understanding that inappropriate behaviour is a child's way of expressing an unmet need and if teachers understand this, they can respond accordingly. This role in particular cemented a clear direction and passion in helping others to understand and succeed in supporting student behaviour.

My interest in student behaviour led to a Masters' research dissertation. It focused on the behaviour support of a secondary teacher and her responses to differences in teaching contexts, observing her in a 'challenging' class and an 'easy' class. This well-respected teacher adjusted her proactive strategies and used fewer reactive strategies when dealing with a 'challenging' class. The study affirmed that contextual issues were an important variable in influencing teacher choices in planning for and responding to student behaviour.

The influence of context on student behaviour was particularly evident in my next role, whereupon returning to North Queensland I worked in an Indigenous school in a behaviour support role. My role was to implement a whole school approach to behaviour support and provide training for staff. I encouraged teachers to follow a problem solving approach where teachers were encouraged to understand the source of children's inappropriate behaviour and to respond proactively, and with awareness of how to adjust reactive strategies accordingly. Evident within this context was the awareness that a generalised approach to behaviour support required more than 'uniform' strategies. It was imperative that teachers responded to students individually. This warranted that teachers needed to be mindful of the school context, especially schools that sought to operate in a responsive manner to students' cultural backgrounds. During this time, I became mindful of the importance of teachers listening to what students, especially Indigenous students, were saying both through verbal and non-verbal cues about what behaviour support strategies worked best for them and their classmates.

This current research offered the opportunity to blend my passions for behaviour support and Indigenous students' learning and success. I brought a rare skill set in behaviour support to the Indigenous context, so I could work alongside my Indigenous colleagues (Smith, 2012) at the cultural interface (Nakata, 2007b). The role of a non-Indigenous 'ally' is to "speak

up against systems of oppression and to challenge other [non-Indigenous] people to do the same" (Tatum, 1994, p. 474). The larger Australian Research Council grant in which this study was embedded focused on determining the characteristics of effective teaching practice as voiced by Indigenous students and their parents (Lewthwaite et al., 2015). It discusses children achieving their potential and I refer readers to this work for discussion of pedagogy generally. In order to respect the expert contributions of the Indigenous co-researchers working with Lewthwaite, the focus of this current research was specific to behaviour strategies within an Indigenous context. I worked as a non-Indigenous "ally" (MacGill, 2016; Newell, 2020), to identify culturally responsive behaviour support strategies as expressed by Indigenous voices, and present them to teachers, most of whom are non-Indigenous. Further, I sought to investigate the influence of these practices, when implemented, on student behaviour. My goal was to give teachers of Indigenous students awareness of the culturally responsive behaviour support skills necessary to support behaviour to improve relationships and learning outcomes for their students.

Although my experience is primarily in state schools, I have experienced, first-hand, more recently the 'ethic of care' (Noddings, 1996, 2012) that exists in Queensland Catholic schools to support students from all socioeconomic backgrounds and cultures. Working with Catholic staff in Brisbane and Townsville has demonstrated to me the 'mission' of Catholic staff. Their ethic of care extends to staff and students. On many occasions I have witnessed among although exhausted staff, renewed patience and compassion once they had increased their understanding of and skills for dealing with challenging behaviour. Townsville Catholic Education, in their Strategic Action Plan (2012), listed a set of effective practices, resources and initiatives to specifically target the needs of Indigenous students. This research project added to these initiatives through the voices of the Indigenous community, detailing culturally responsive behaviour support strategies for Indigenous students.

Although Catholic Education has a reputation of providing high quality education, it continually seeks to improve the educational experience for Indigenous learners (Lewthwaite & Day, 2014). One of the fundamental missions of Catholic Education was to seek to overcome the educational disadvantage of Aboriginal and Torres Strait Islander students and achieve equitable education outcomes (Queensland Catholic Education Commission, 2012). "Of central importance to Catholic Education is ensuring that its schools, especially its students, teachers and administrators challenge the prevailing view that disparity in educational outcomes of Indigenous students is 'normal' and modest incremental gains are acceptable" (Lewthwaite & Day, 2014, p. 6). Each Catholic Education Authority seeks to improve equitable outcomes for

its Indigenous students especially regarding the classroom learning experiences provided for its students. It does this through developing sustainable procedures (Queensland Catholic Education Commission, 2012). Catholic Education recognised that supporting teachers in inclusive pedagogical practices was key in its commitment to provide equitable learning outcomes (Queensland Catholic Education Commission, 2012). Teachers are instrumental in providing equitable education for Indigenous students (Lewthwaite & Day, 2014). Catholic schools can improve outcomes for Indigenous students by ensuring that teachers are equipped with an evidence-based repertoire of behaviour support skills that are effective in meeting their developmental and behaviour needs (Lewthwaite & Day, 2014). Although I value the work of Richmond (1996, 2002b, 2007, 2009), Rogers (1989, 1990, 2001, 2002c, 2007) and Davidson and Goldman (2004), as an educator committed to classroom practices that are responsive to the cultural backgrounds of students, I question whether these strategies are proven to be appropriate for Indigenous students. This query underpins the focus of the research described in this thesis.[2] In the next section, I outline the research questions that underpin this study.

1.3 Research Questions

Inappropriate student behaviour is a major issue for teachers in Australia. While initiatives have been implemented in Queensland to increase teacher understanding and skills in behaviour support, it is unclear whether these initiatives have included input from the Indigenous community. Also, if these initiatives were grounded in what the community was saying, would they provide more positive consequence on student behaviour? Indigenous students experience greater rates of suspension and exclusion from schools than non-Indigenous students, so clearly, behaviour support is an issue for this population. The initial research question emerged from a motivation to determine, through the voiced expressions of Indigenous students, families and teachers of Indigenous students, what behaviour support practices work best for Indigenous students. This led to the first question:

1. According to Indigenous students, family members and staff working with Indigenous students, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved positive learning outcomes?

Following from this, the study seeks:

2. To investigate the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate).

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[2] The word ‘thesis’ in Australia is a ‘dissertation’ in the United States

1.4 Significance of the Study

The study is significant because it addresses the national imperative for targeted educational priorities and reform directions which seek to reduce Indigenous disadvantage and provide equitable educational outcomes (Council of Australian Governments Education Council, 2019). The Alice Springs (Mpartnwe) Declaration also promotes culturally supportive and responsive learning environments (Council of Australian Governments Education Council, 2019). Some of the problems that contribute to this disadvantage are influenced strongly by current practices in schools, and these practices often continue unquestioned. Generally, when Indigenous performance in schools is considered, this performance is usually painted in a negative light and the problems are attributed to students (Griffiths, 2011; Lester, 2016). In Queensland, for example, the problems faced by Indigenous students include more frequent discipline events (Graham et al., 2022; Perso, 2012), higher rates of absenteeism (Department of the Prime Minister and Cabinet (DPMC), 2020), higher rates of suspensions (Graham et al., 2022; Mills & McGregor, 2014; Perso, 2012) and higher rates of exclusions (Graham et al., 2022; Perso, 2012), all of which are usually attributed to home and cultural deficit (Lester, 2016). As well, school completion rates are lower for Indigenous students than non-Indigenous students (DPMC, 2020; Lester, 2016) and Indigenous students have much lower achievement outcomes (Perso, 2012). Again, these negative indicators are usually attributed to home and cultural deficit. Previous statewide and national policies have failed to address these differences. For example, the Improving Student Attendance initiative failed to improve Indigenous student attendance relative to that of non-Indigenous students (Auditor General of Queensland, 2012; DPMC, 2020).

Campbell (2000) and Holt (2021) claim that national agendas and strategies are more likely to fail because they do not meet the diverse requirements and expectations for Indigenous students and their communities. In brief, Campbell asserts that Indigenous voices are rarely used to inform their strategies. This study listened to and responded to Indigenous voice. By so doing it attempted to address the mismatch between classroom and home culture. As stated by Perso (2012), some of the reasons for the failure of education initiatives can be attributed to the mismatch between classroom and home and the inability of educators to listen to Indigenous voices. These voices can lead to increased teacher awareness of student cultural norms and, accordingly, adjusted classroom practice.

The current study is particularly significant because there are few empirically-based studies within the Indigenous context nationally that have identified culturally responsive behaviour support strategies. There is very little written in the national literature about

Indigenous views regarding effective behaviour support strategies. The effectiveness of the teacher's behaviour support strategies is critical to effective learning (Evertson, 1982; Hattie, 2009; Marzano, 2003). Since rates of Indigenous student inappropriate behaviours are higher than those of non-Indigenous students (Edwards-Groves & Murray, 2008; Graham et al., 2022; Mills & McGregor, 2014; Partington et al., 2001; Perso, 2012; Stehbens et al., 1999), culturally responsive strategies might ameliorate this problem; alternatively if left unaddressed, inequity and disadvantage will likely be perpetuated (Bazron et al., 2005).

Most literature deals either with behaviour support and ignores 'colour' or talks about education for First-Nations peoples and ignores behaviour (Miranda & Eschenbrenner, 2013). This study will identify and determine the influence of behaviour support strategies as expressed by Indigenous students, parents and staff.

Further, by identifying students' views on culturally appropriate behaviour support practices, this study can help teachers to consider their existing practice. Teachers are not adequately prepared to manage behaviours that may be culturally different from their own (Craven, 2014; Labone et al., 2014; Perso, 2003; Townsend, 2000; Trent et al., 2008). Teacher reflection, especially in monitoring their own behaviour to determine equity of treatment and change in practices, will be essential to any change in classroom practice, moving towards culturally responsive behaviour support practices (Perso, 2012). This view is supported in the literature. Richmond found reflective practice contributed to teacher development; increasing teacher awareness of their use of strategies and increasing their skills led to more learning conversations and less managing conversations in classrooms (Richmond, 2002b). Teachers who engage in self-reflection are more likely to try new strategies that more appropriately match the needs of their students (Cartledge & Kourea, 2008; G. Gay, 2000 c.f. Bolton, 2018). In the future, an extension of this project will lead teachers towards culturally responsive behaviour support practices. That future project will ask teachers to be reflexive (Bolton & Delderfield, 2018) in light of identified strategies as voiced by students and communities.

Determining the influence of such expressed enacted practices has not been investigated in Australia. Current behaviour management practices in North Queensland, including the work of Richmond (1996, 2002b, 2007, 2009), Rogers (1989, 1999, 2001, 2007), Marzano (2003, 2007) and Davidson and Goldman (2004), while valued, are unquestionably implemented with little consideration as to whether they correspond with what is voiced by Indigenous students.

The outcomes of this project are important because the project will not only make clear an understanding of what effective behaviour support practices are for Indigenous students; it

will lay the foundations for future research into teachers' reconceptualisation of behaviour support for Indigenous students. The study is innovative because it uses a mix of rich qualitative methods grounded in Indigenous peoples' voiced experience with rigorous quantitative methods, then classroom observations to investigate this area of concern in Australian education that disturbingly has not been previously addressed.

Furthermore, the depth of study involved in examining culturally responsive behaviour support strategies associated with this thesis provides a significant contribution to the academic literature by attempting to understand the broad and complex factors influencing teacher use of behaviour strategies. The development of a list of Teacher Attitudes and Strategies to Support Australian Indigenous Students (TASSAIS) and the creation of an observation instrument pertaining to teacher use of those, has the potential to be a valuable addition to the area of culturally responsive student behaviour support. In all, the study has the potential to make a significant contribution to improved classroom practice and educational outcomes for Indigenous students.

1.5 Organisation of the Thesis

The thesis is organised into seven chapters, documenting the phases of the study. Chapter 2 summarises the current literature, using the headings international literature (advice and research) and Australian literature (advice and research), demonstrating the need for relevant Australian research. This chapter is centred around a published literature review where Llewellyn is the lead author. Chapter 3 describes the methodology and Chapter 4 presents the data from qualitative interviews. Chapter 5 describes the quantitative phase, the use of a survey instrument, the TASSAIS, to refine the list of attitudes and strategies suggested in the interviews. Chapter 6 presents the data and findings from Phase 3 of the study, taking the survey instrument tool (TASSAIS), modified as an observation tool, into the classroom to investigate the effect of the strategies. Finally, Chapter 7 presents discussion, findings, limitations and recommendations for further research.

1.6 Chapter Summary

In this first chapter, the focus of the research for this thesis has been described. The chapter started by identifying concerns in classroom practice in the area of behaviour support and its influence on education outcomes for Indigenous students. The researcher was introduced, highlighting the rationale behind the research focus. Following this the research questions were identified, and the significance of the study was described, and the organisation of the thesis

was outlined. The chapter that follows, Chapter 2, will introduce the literature pertaining to the focus of this study.

Chapter 2 Literature Review

2.1 Introduction

2.1.1 Thesis Chapter Introduction

Chapter 1 introduced the focus of the thesis. In this chapter, the literature that informs the study is presented. Common topics were highlighted in the research and related articles, resulting in the emergence of a set of themes. The bulk of this chapter is a published literature review (Llewellyn et al., 2018). Sections have been added to review local initiatives, discuss methods used and include more recent literature. Some minor edits update citations and language. Figure 2.1 illustrates the arrangement of the literature review included in the thesis, showing which parts are from the published thesis and which sections have been added to the published article to meet the requirements of a thesis.

Figure 2.1

Structure of Chapter 2

Section of Thesis	Added to the Published Article	Published Article
2.1 Introduction	2.1.1 Thesis Chapter Introduction	
		2.1.2 Article Introduction
2.2 Definitions and Concepts in Behaviour Support	2.2 Definitions and Concepts in Behaviour	
2.3 Behaviour Management Resources Prominent in the Local Context		2.3.1 Introduction
	2.3.2.1 Bill Rogers 2.3.2.2 Christine Richmond 2.3.2.3 Mark Davidson 2.3.2.4 Caroline Blackley 2.3.2.5 Essential Skills for Classroom Management 2.3.2.6 John Hattie 2.3.2.7 Robert Marzano 2.3.2.8 Summary of Behaviour Support Literatures Prominent in the North Queensland Context	
		2.3.2.9 Summary
2.4 Literature Review Methodology	2.4.1 Introduction	
		2.4.2 Problem Identification
		2.4.3 Data Evaluation
		2.4.4 Data Analysis and Interpretation

2.5 International non-Empirical Publications

2.6 International Empirical Studies

2.7 Australian Non-Empirical Publications

2.5 International non-Empirical Publications

2.6 International Empirical Studies

2.6.1 Knowledge of Self and Other and Power Relations
2.6.2 Knowing Students and Their Culture
2.6.3 Qualities of the Teacher
2.6.4 Positive Relationships
2.6.5 Culturally Responsive Pedagogy
2.6.6 Proactive Behaviour Support Strategies
2.6.7 Culturally Appropriate Reactive Behaviour Support Strategies
2.6.8 Connections with Families and Communities

2.6.9 Methodology of International Studies

2.7 Australian Non-Empirical Publications

2.7.1 Knowledge of Self and Other and Power Relations
2.7.2 Knowing Students and Their Culture
2.7.3 Qualities of the Teacher
2.7.4 Positive Relationships
2.7.5 Culturally Responsive Pedagogy
2.7.6 Proactive Behaviour Support Strategies
2.7.7 Culturally Appropriate Reactive Behaviour Support Strategies
2.7.8 Connections with Families and Communities

2.8

Australian Empirical Literature – Behaviour Discussed Implicitly

2.8 Australian Empirical Studies – Behaviour Discussed Implicitly

2.8 cont. Australian Empirical Literature – Behaviour Discussed Implicitly

2.8.1 Knowledge of Self and Other and Power Relations
2.8.2 Knowing Students and Their Culture
2.8.3 Qualities of the Teacher
2.8.4 Positive Relationships
2.8.5 Culturally Responsive Pedagogy
2.8.6 Proactive Behaviour Support Strategies
2.8.7 Culturally Appropriate Reactive Behaviour Support Strategies
2.8.8 Connections with Families and Communities

2.9 Australian Empirical Literature – Behaviour Discussed Explicitly

2.9 Australian Empirical Literature – Behaviour Discussed Explicitly

2.9.1 Merridy Malin
2.9.2 Sandra Hudsmith
2.9.3 Stehbens, Anderson & Herbert
2.9.4 Partington, Waugh & Forrest
2.9.5 Edwards-Groves & Murray
2.9.6 Kevin Gillan

2.9.7 Lester

2.9 cont Australian Empirical Literature – Behaviour …Explicitly

2.9.8 Methodology of Australian Research

2.10 Discussion and Summary

2.10.1 Discussion and Summary

2.11 Conclusion

2.11 Conclusion

2.12 Article Abstract

2.12 Article Abstract

2.13 TASSAIS Themes

2.13 The TASSAIS Themes

2.14 Summary Table

2.14 A Summary Table of the Literature

Section 2.2 begins by introducing and explaining concepts that are central to the study. In this section definitions are presented, and clarification is provided for the selection of terms to be used. It is within this section that an argument will be presented for the use of the term 'behaviour support' as the central construct informing this study. Section 2.3 provides an overview and critique of the behaviour support practices that historically, and are currently employed, within North Queensland. Section 2.4 explains the literature review methods and interpretation. Section 2.5 presents international non-empirical publications. Section 2.6 presents international empirical studies. This is followed by Australian non-empirical publications (section 2.7) and Australian empirical publications which discuss behaviour implicitly (section 2.8). Section 2.9 covers Australian empirical literature where behaviour is discussed explicitly. Discussion and summary follow in 2.10, identifying limitations of the research and gaps in the literature. The section ends by proposing the focus of the research on culturally responsive behaviour support pedagogical practice. The conclusion is in section 2.11. The abstract from the article is in section 2.12 and a summary table of the literature review is in section 2.13

Using the procedure for carrying out a literature review espoused by Randolph (2009), emphasis is placed on identifying and describing the peer reviewed, empirically-based research findings. A priori themes emerged from the research as common ideas surfaced and these were recorded in a table. As Aboriginal and Torres Strait Islanders are unique to Australia, local ideas are more relevant. The literature was separated into Australian and international context and includes writing which focuses on behaviour support practices within the Indigenous and marginalised/minority student context. The supplemental sections include relevant methodologies used in conducting these studies. Formatting of the published article has been adjusted for consistency within the thesis. In the published article, the word 'management' was used to attract the appropriate audience. The word 'management' has been replaced with 'support' to reflect my growing knowledge and consistency with the rest of the thesis. What follows is the published review unless otherwise stated.

2.1.2 Article Introduction

Australian Aboriginal and Torres Strait Islander (Indigenous) students are perpetually overrepresented in every negative indicator associated with schooling such as discipline events (Perso et al., 2012), suspensions (Mills & McGregor, 2014; Partington et al., 2001; Stehbens et al., 1999) low attendance (Auditor General of Queensland, 2012; Keddie et al., 2013), exclusions (Partington et al., 2001; Perso et al., 2012), low retention (Australian Bureau of Statistics, 2011; Bain, 2011) and performance (Perso et al., 2012; Stehbens et al.,

1999). This overrepresentation persists despite a decade's focus on targeted interventions nationally on Indigenous education to reduce Indigenous disadvantage and increase educational outcomes (Auditor General of Queensland, 2012; Ministerial Council on Education Employment Training and Youth Affairs, 2008). These negative indicators and perpetuating inequities in Indigenous student performance are usually attributed in the public discourse to student qualities rather than school system features (Gillan, 2008; Griffiths, 2011).

In response, Campbell (2000) claims that national agendas and strategies are more likely to fail because they do not meet the diverse requirements and expectations of Indigenous students and their communities. Griffiths (2011) states that "Indigenous education programs in Australia are overwhelmingly designed with good intentions and with laudable goals, but with little reference to the evidence base or to the 'big picture' of competing programs and the actual needs of Indigenous people" (p. 69). The Melbourne Declaration also asserts that any attempt to ameliorate these negative propensities in Indigenous students' education should be grounded in Indigenous students' cultural norms (Ministerial Council on Education Employment Training and Youth Affairs, 2008). This implies that the reasons for the failure of education initiatives is thought to be attributed to the mismatch between classroom and home (Malin, 1990a) and the failure of educators to listen to Indigenous communities (Bond, 2010; Yunkaporta & McGinty, 2009). Perso et al. (2012) maintain that what is needed to address these issues is increased teacher awareness of Indigenous cultural norms that, accordingly, lead to adjusted classroom practice. Teacher education in culturally responsive strategies might lead to ameliorating this problem; otherwise, if left unaddressed, inequity and disadvantage will likely be perpetuated (Bazron et al., 2005).

2.2 Definitions and Concepts in Behaviour Support

This section has been added to the published article to define terminology. Reading in the area of behaviour management suggests that the terms 'classroom management', 'discipline', 'behaviour management', and 'behaviour support' are used interchangeably when referring to student behaviour, usually student misbehaviour.

The use of these words in this thesis will now be clarified. 'classroom management' is used as a synonym for 'student behaviour management' by several authors (Arthur-Kelly et al., 2006; Brady & Scully, 2005; Cope, 2005; Jones & Jones, 2001). In this thesis it will be used in the same way as it is used by Emmer et al., (1997), Marzano (2003), Jackson, Simoncini, Davidson (2013), Pinto (2013) and Miranda & Eschenbrenner (2013) who refer to classroom

management as all facets of management employed in a classroom. Included in this description are the strategies teachers use to encourage, deflect and manage student behaviour, other staff, physical space and student work. 'Classroom management' is the broadest concept used when discussing student behaviour and the more specific terms 'behaviour support' and 'behaviour management' are embedded within this construct.

A prominent word within the behaviour support literature is 'discipline'. Historically, 'discipline' was used to describe behaviour management and support practices (Charles, 1989, 2005; Rogers, 1989), and it is still used by some (Porter, 2000, 2007). Charles (2005) explained the shift towards 'behaviour management', because the word 'discipline' was associated with "control, coercion and forceful tactics" (Charles, 2005, p. 4). Miranda and Eschenbrenner see the term 'discipline' as punitive as evident in their reference to "Discipline … [as] the negative consequences that a student receives when disobeying the rules" (2013, p. 208).

There are trends evident in the terminology associated with behaviour support. Bill Rogers' work is an example of how the language associated with behaviour support has evolved. Rogers is an Australian researcher who has contributed significantly to the area. Rogers used the word 'discipline' (Rogers, 1989), followed by 'classroom management' (Rogers, 1990), and then moved to the term 'behaviour management' (Rogers, 1995, 2002a, 2002b), without explaining the differences between the terms or more importantly, his reasons for the change in word use.

When authors use the term 'behaviour management', they relate it specifically to the behaviour of students and the teacher actions that respond to such behaviour. Within this scope of student and teacher behaviour, different authors add their own emphasis. In her definition of behaviour management Richmond (2002b, 2009) focused on communication used to engage students in curriculum and how teachers modify their behaviour to influence others. Other authors focused on actions, conscious or unconscious (Papatheodorou, 1998), and processes a teacher uses to prevent, reduce and respond to misdemeanours (Ministerial Advisory Committee for Educational Renewal, 2005). These authors all use the term 'behaviour management' with the same intended meaning, while emphasising different aspects. In this thesis the term 'behaviour management' will be explored further, but in general it refers specifically to the management of student behaviour, without the extras that may be included in 'classroom management'; for example, staff management and physical arrangement of space.

More recently, with increased emphasis on preventative strategies, the term 'behaviour support' has gained momentum in the literature in the United States and in Australia (Dunlap & Fox, 1999; Education Queensland, 2008; Sugai et al., 2008). Much school-wide 'behaviour

support' literature discusses how, at a whole school level, proactive work on systems, data use and teaching, expected behaviours can reduce numbers and severity of behaviours that interrupt learning (Cohen et al., 2007; Dunlap, 2006; Lewis & Sugai, 1999; Sugai et al., 2008). At an individual level, proactive plans based on the function of behaviour provide effective measures to change the environment around children and make their inappropriate behaviours unnecessary and less successful at meeting their needs (Crone et al., 2004; Dunlap & Fox, 1999; Fox et al., 2002; Lane et al., 2007; Simmonds & Llewellyn, 2017). The term 'behaviour support' has come to mean preventing and supporting inappropriate behaviour.

To explain behaviour support further, what a teacher does about student behaviour is a process that exists over time and is broader than simply what happens within the classroom (see Appendix A). 'Behaviour support' denotes strategies that are enacted prior to a behaviour occurring, or responses that support student self-management. These could also be called proactive strategies or supportive reactions to inappropriate behaviour. When student behaviour escalates and the student is no longer able to control his or her behaviour, intervention is used by staff to control or manage the situation. Those interventions could be called 'behaviour management', but will be included as 'behaviour support', using more appropriate language. These are called reactive or responsive strategies to manage behaviour when a student has lost control of his or her behaviour or is making choices that require staff intervention. To reduce word length and emphasise a proactive approach, I will use 'behaviour support', throughout this thesis, meaning to combine both aspects; proactive adjustments and supportive responses as well as reactive intervention to control a situation when a student has lost control, with an emphasis on proactive support. To reiterate, 'classroom management' is a broader concept and includes management of staff, space and resources and it is the term used in international literature. Where an author uses a particular term, that term will be used in discussion of their work.

Now that the terms 'behaviour support' and 'behaviour management' are clarified, this thesis will now focus on what is known about the importance or influence of context generally in relation to behaviour support. Most texts written about behaviour support give little attention to context, assuming that there is a generic homogeneity in practice regardless of context for implementing behaviour support. The influence of context is very poorly investigated in the behaviour support literature. For example, authors who mention context without further investigating its influence are Brady and Scully (2005). They state, "What works in one situation with a particular student or groups of students may not be as effective in another context, so we need to be seeking to increase our understanding of the individuals we teach"

(Brady & Scully 2005, p.199) and "[t]he changing contexts in which we teach make it vital to develop continually a variety of integrated strategies for classroom management that are embedded in the learning environment" (Brady & Scully, 2005, p. 200). Inherent within their comment is an expectation that contexts will be examined, but they fail to provide any illustration or explication as to how this might occur in detail. Other authors also mention context, but, again, without giving any evidence that contextual features can influence behaviour and behaviour management (LePage et al., 2005; McInerney & McInerney, 2006; Papatheodorou & Ramasut, 1993; Richmond, 2002a; Rogers, 1995). Where specific attention is given to context, different aspects of context are examined by various authors and, again, in general terms with little attention to detail. As examples, class size (Bourke, 1986; Kreiger, 2002; Papatheodorou & Ramasut, 1993; Soodak, 1994), time of day (Papatheodorou & Ramasut, 1993), subject matter (Stoldosky, 1988), support services, or lack thereof (Soodak, 1994), and the teacher (Anthony et al., 2005) are all contextual features identified as influences on behaviour and, consequently, behaviour support. As will be evidenced later in this chapter, little attention is given to the potential influence of cultural context on behaviour support. In this thesis behaviour support literatures is discussed, specifically with regard to the context of classrooms that include Indigenous or marginalised students.

In this section, the terms central to the focus of this thesis have been clarified. Distinctions were made among 'classroom management', 'behaviour support' and 'behaviour management'. As well, an explanation is provided for the use of the term 'behaviour support' for this thesis. Finally, attention is given to discussion of the influence of context on behaviour support. In the next section, attention is given to programs popular in Queensland schools. I return now to the published article.

2.3 Behaviour Management Resources Prominent in the Local Context

2.3.1 Introduction

In North Queensland, where this multiphase study is situated, initial teacher education places unquestioned emphasis on six behaviour management resources that are implemented without rigorous evaluation of their efficacy for Indigenous students. The six resources are (1) Behaviour Management Skill Training Handbook, better known as the "Microskills" (Richmond, 1996), later repackaged as (2) The Essential Skills for Classroom Management (Education Queensland, 2007); (3) numerous works by Bill Rogers (Rogers, 1990; W. A. Rogers, 1994b; Rogers, 2001, 2008); (4) Classroom Profiling by Mark Davidson (Davidson & Goldman, 2004; Jackson et al., 2013), which records teacher and student behaviours, allowing teachers to reflect on their strategies; (5) the work of John

Hattie (Hattie, 2009, 2012) and (6) the work of Robert Marzano (Marzano, 2003, 2007).

2.3.2 Details of Local Behaviour Support Resources

What follows is detailed evaluation of the local behaviour support practices that was not included in the published article. In the section that follows, each of these behaviour support practices are described. Further, each of these are evaluated according to their relevance to this study. Attention is given to whether these practices include (1) consideration of the needs of Indigenous students; (2) in-depth understanding of behaviour support; and (3) research verification of the claims made.

2.3.2.1 Bill Rogers.

Bill Rogers' career began as an educator, and then consultant for the Victoria Education Department. He later became a travelling presenter for Scholastic Australia. Currently he lectures in the United Kingdom and Australia on topics such as colleague support, stress, discipline and behaviour management. His publishing career started in 1989 with *Making a Discipline Plan* (Rogers, 1989) and continued with 19 books and book chapters, expanding to several editions and translations into other languages. At a time when little or no preparation was provided in tertiary education in Queensland (Richmond, 2002b), his books helped teachers, myself included, to increase their understanding and frame their responses to student behaviour. As a keen observer, entertaining raconteur, knowledgeable presenter and cartoonist, his workshops and books have provided Australian teachers with valuable practical strategies.

Employing a pragmatic approach, his areas of interest cover general behaviour management (Rogers, 1989, 1990), whole school approach to behaviour management (W. A. Rogers, 1994a; Rogers, 1995), classes and students with challenging behaviour (W. A. Rogers, 1994d; Rogers, 2001, 2003a), leadership (Rogers, 2002b, 2002c) colleague support (Rogers, 1992; Rogers, 2007), supply teaching (Rogers, 2003b), and teacher stress (Rogers, 2012), with a more recent focus on transition into teaching in the yearly years (Rogers, 2008; Rogers & McPherson, 2009). Significant contribution to schools have been made through a four video set published during 1994 (W. A. Rogers, 1994c), although these are now somewhat outdated. The value of his work is encompassed by the practicality of the strategies and his understanding of classroom dynamics. He is the author responsible for strategies that have become a familiar lexicon in the language of Queensland teachers. For example: the 'least to most intrusive' scale of teacher responses, 'take up time', 'secondary behaviour', 'certainty rather than severity' of consequences and the 'broken record' (Rogers, 1989, 1990). Although Rogers' work was seen as applicable to all contexts, he provides evidence of a nuanced understanding of contextual

features on behaviour. For example, in *Behaviour Recovery: Practical Programs for Challenging Behaviour*, Rogers (2003a), mentioned students from disadvantaged groups and teacher expectations. If a teacher expected that students would perform poorly, then students were likely to do so, not because of their ability or background, but because of expectations placed on them (Rogers, 2003a). Despite his attention to context, there was no particular focus in his work on marginalised or Indigenous students and their needs, with specific advice for teachers.

While most of Rogers' work is advice literature, his own empirically-based doctoral study focused on an investigation into colleague support in schools (1999). This case study compared several schools, focusing on their support of teaching staff. While Rogers' thesis contains useful information, it is not relevant to this study. The abstract contains no reference to the needs of Indigenous or marginalised students. Notwithstanding his significant contribution to the understanding of behaviour management in Queensland schools, Rogers' work is largely advice literature with a pragmatic approach; it lacks both research evidence and consideration of behaviour support practices from an Indigenous perspective for Indigenous students.

2.3.2.2 Christine Richmond.

Christine Richmond has contributed significantly to behaviour support knowledge in Queensland, specifically, and Australia, generally, for over three decades. Her work is largely pragmatic; although her thesis tested her ideas with teachers. While working as a senior guidance counsellor for Education Queensland she wrote the *Behaviour Management Skills Training Handbook* (Richmond, 1996), more commonly known as 'Microskills for Managing Behaviour'. Richmond observed effective teachers and labelled the strategies they used to manage behaviour. (The package will be referred to in the following materials by the word 'Microskills' with a capital to distinguish them from microskills in general). Her work recommended a set of Microskills that were used by effective teachers, presented in a training package to assist school leaders to teach others (Richmond, 1996). The aim of the Microskills was to enhance teacher effectiveness by increasing conversations related to curriculum and reducing conversations related to management. This was achieved by teachers learning and implementing the 10 Microskills and associated understanding (Richmond, 1996). The models and language contained in the package were well received by teachers and made such an impact that they have become a familiar lexicon to teachers and behaviour specialists in Queensland. While the package claimed that the Microskills were practical, informally classroom tested and proven to be successful, (as is my personal experience), it lacked a theoretical framework or research evidence. It contained no mention of context and no mention of Indigenous or

marginalised students, assuming that these skills were context independent or applicable to all, likely without modification.

Richmond's work includes several articles, but in only one of these did she mention context (Richmond, 2002a), in which she discussed the possibility of an experienced and capable teacher changing schools. She noted that an experienced teacher, whose management practice seemed invisible in a school where he or she was established, would have to become intentional and visible with his or her use of strategies in a new context (Richmond, 2002a). In this article there was no mention of sociological context and Indigenous or marginalised students. Richmond was perhaps best known for her work training educators. As a presenter for Ashton Scholastic and as a travelling scholar for The Australian Council for Educational Leaders, she travelled Australia sharing her expertise. Her work has had widespread influence.

A recurrent theme in Richmond's work was that teachers are able to learn and improve their effectiveness with behaviour management. In her doctoral thesis, *Searching for balance: A collective case study of 10 secondary teachers' behaviour management language*, she was able to provide evidence for this claim. She conducted a study into the development of 10 secondary teachers' management language (Richmond, 2002b). Richmond used her considerable knowledge and two further models, "The Balance Model" and the "Richmond Framework" (Richmond, 2002b) to challenge teacher beliefs and enhance effectiveness of participating teachers' skills. The teachers were observed before and after the four month training process and results indicated that eight of the 10 teachers changed their classroom practice (Richmond, 2002b). Rather than assume teacher naivety and confront it, the process of teacher change used data collection, increased awareness, learning conversations and training in skill development to build on strengths (Richmond, 2002b). Richmond's use of the word 'naivety' was important because it indicated that she did not see mistakes as intentional. Her opinion was that teacher failings are through lack of awareness and knowledge. She states that "by planning for and intentionally practising this craft teachers can incrementally reduce the net amount of behaviour management interaction with students" (Richmond, 2002a, p. 6). Rather than learning how to control students' problematic behaviour (Jones & Jones, 2001; Rogers, 1993), she saw behaviour management as the teacher learning to control the self, and choosing to engage in productive conversations to influence students (Richmond, 2002b). In her thesis, she listed the challenges teachers faced, and Richmond mentioned racial differences and social class as issues pertaining to relationships between teachers and students (Richmond, 2002b). She also discussed how sociological frameworks provided directions for teachers so that their interactions with students valued cultural differences, for example, but she did not investigate

further (Richmond, 2002b). Though Richmond's work was insightful, and it highlighted the use of a training intervention for teacher practice, she did not focus her research on the effectiveness of her models particularly for teachers of Indigenous or marginalised students.

Richmond has published two books based upon her work. Both are loosely based on the scholarly literature, and, consequently, are presented from more a technical-pragmatic approach (Richmond, 2007, 2009). These two books are regarded as very practical resources, coming from her extensive work with teachers and schools. For the purpose of this thesis, what stands out in Richmond's pragmatic publications is the lack of a theoretical framework, evidence of effectiveness of implementation and consideration of culture, especially the Indigenous context. Richmond's thesis is the exception.

Richmond's thesis was based on the practices of 10 secondary teachers, especially the methodology she used (Richmond, 2002b). In this study, she observed 10 teachers before and after receiving behaviour support training. The observations captured management and learning interactions in the classroom, with a focus on measuring student on-task time. Through these observations and interviews, she was able to measure the development of teacher skills and the impact this had on student on-task learning time. Indigenous or marginalised learners were not specifically focused upon in her study.

2.3.2.3 Mark Davidson.

Following on from the work of Rogers and Richmond, Mark Davidson, working for Education Queensland in the Far North region in 1996, developed a pragmatic tool to record teacher use of the Microskills (Davidson & Goldman, 2004; Jackson et al., 2013). Davidson noted that the teachers who implemented Richmond's Microskills had developed relationships with students and managed their behaviour successfully. The data collection tool evolved into the 'Classroom Profiling' system (Davidson, 2002). It was described as a "data-driven, non-judgemental process to allow teachers to reflect on the classroom management strategies they employ" (Jackson et al., 2013). The program has spread across all sectors in Queensland (M. Davidson, personal communication, November 18, 2014).

Empirical evidence for the impact of Classroom Profiling is minimal. In 2004, The Barrier Reef Institute of Technical and Further Education conducted an action research project (Davidson & Goldman, 2004) in which teachers were profiled and data collated across classes. The authors planned to train an employee in 2004 to conduct training in the Microskills and profile staff to collect collated data as a method of creating positive change in teaching practices. Information about any follow up to this activity was not available. A study was

undertaken by Jackson et al. (2013) with 15 preservice teachers in their last or second-last semester at university. These preservice teachers were trained as profilers to enhance their understanding of classroom management with an aim to measure the effectiveness that knowledge of the Microskills had upon participants' practice as teachers (Jackson et al., 2013). He used an open ended survey and focus group interviews. The survey was completed before and after the participants undertook Classroom Profiling training, and the focus group interviews occurred on the last day of the training. While the results were for preservice teachers, and not from observations of teachers in the classroom, the benefits were consistently positive with participants expressing their increased confidence and knowledge (Jackson et al., 2013). Of course, this begged the question whether it was the teachers' reflections that effected a change, or the explicit knowledge of the Microskills training. There have been no further publications from this study. Until evidence-based research is undertaken into the effectiveness of the ESCM and Classroom Profiling, there remains no comprehensive empirical data about the success of Classroom Profiling.

Although empirical data about the impact of Classroom Profiling on student behaviour is not available, some non-evidence-based support was recorded. Data recorded in the Classroom Profiling Database showed its effectiveness in schools on Cape York and in the Torres Strait schools with high Indigenous enrolments. In these schools, incidents of disruptive behaviour decreased from one incident every three minutes at the start of implementation to every eight minutes in 2014 (M. Davidson, personal communication, November 18, 2014). Also in these schools, incidents of verbal or non-verbal aggression decreased from one incident every 26 minutes to one incident every one hundred and 17 minutes over the same time period (M. Davidson, personal communication, November 18, 2014). Currently there is no independent observational research to support claims made. There is also no evidence available to filter confounding variables in that data. While non-empirical information supports its utility, research evidence of the success of Classroom Profiling is lacking.

With 10 years' experience teaching in Indigenous schools in the Northern Territory, Davidson did not make distinction between Indigenous and non-Indigenous students; an attitude known as 'colour blindness' (Bostick, 2017; Cochran-Smith, 1995; MacGill, 2016). Davidson believed that Classroom Profiling helped all students. His work measured teacher implementation of Richmond's Microskills and other teacher strategies found to be effective. According to Davidson, Indigenous voice was included in the creation and implementation of Classroom Profiling, but for the purpose of this thesis there is no evidence this consultation was recorded, responded to, or tested within a research framework and validated by evidence.

2.3.2.4 Caroline Blackley.

In a further study Blackley [nee McCarty], personal communication, November 17, 2014) asked teachers, to evaluate their impressions of classroom management and its impact on teaching practices. Empirical data from this study led Blackley to investigate teacher decision-making around behaviour and design of the 4D (Dimensions) protocol and Classroom Observation tool (McCarty, 2019), which encourages teachers to consider how much time they allocate to establishing expectations, reinforcing those, redirecting behaviours, and following through recommending practices within these. She examined teacher decision-making and cognitive load. Research evidence in this study (Blackley, 2022) will contribute to knowledge about behaviour support in Australia, and while this study included teachers of Indigenous students, the primary focus of the study was not on an Indigenous context.

2.3.2.5 Education Queensland, Essential Skills for Classroom Management.

In 2007, Education Queensland repackaged the Microskills with some theoretical background, now referring to these as “The Essential Skills for Classroom Management (ESCM)”. They are essentially pragmatic. The new version was expanded to three books including the Microskills or Essential Skills in one, a facilitator’s handbook for delivery of the training in the second and a small group coaching program in the third book. The package was launched as part of the “Better Behaviour Better Learning Professional Development Suite” (Education Queensland, 2007). The package detailed how the ‘Essential Skills’, or ESCM, as they are now known, could be delivered to staff. The package was not situated within a theoretical framework, but cited a coaching approach because of improvements in the effects of training when a coaching method is employed (Barkley, 2005; Joyce & Showers, 1990). The work of Glasser (1998) was also used to explain ‘quality’, with respect to classroom management and how it could be achieved through the program. The ESCM or Essential Skills were promoted widely in schools in Queensland, not only those in Education Queensland. Catholic Education in Queensland use the ESCM package, contextualising it within the ethos of Catholic Education, and the ESCM are taught to preservice teachers in several universities.

Notwithstanding the pragmatic value of the ESCM, there is no mention of context in which the teacher is managing behaviour. The skills are largely reactive and only a few are supported by research evidence (Hepburn et al., 2020). The needs of Indigenous and marginalised students are not considered. There is no Indigenous voice mentioned in the writing, rewriting or implementation of the skills. There is also no empirical evidence that supports or refutes their utility.

2.3.2.6 John Hattie.

The empirically-based work of John Hattie has, most recently, come to be extensively used and endorsed in Queensland, especially by Education Queensland. A search of the Education Queensland website brought 610 results, including links to research articles, policy documents linked to funding (Department of Education Training and Employment, 2014), and articles in *Education Views*. One article quoted a school principal: “Hattie’s philosophy is an integral part of our School Improvement Days which are held each term” (Tannock, 2012). Hattie’s popularity extended into the Catholic and private systems as well. Brisbane Catholic Education contracted training for school staff in the work of Hattie 2012-2013 (A. Smith, personal communication, February 23 2015) and it also appeared in a search of the website (Brisbane Catholic Education, 2015). Independent Schools Queensland’s website had several mentions of Hattie (Independent Schools Queensland, 2015). His work continues to influence schools across Queensland.

Hattie’s main contribution is his “Visible Learning” meta-analysis of research in education (Hattie, 2009, 2012). He examined quantitative research and devised a measurement system to compare effects on student achievement, which he referred to as effect size (Hattie, 2009). Coming from a research design and measurement background, his work was empiricist and based on effects on achievement that could be quantified. He listed interventions that happen in classrooms that had most effect on student achievement which he called “Visible Learning” (Hattie, 2009). These included: making learning the explicit goal; providing work that is appropriately challenging; fostering cooperation and negotiation between teacher and student to ascertain to what extent the goal has been achieved; deliberate practice aimed at mastery of the goal; and, finally, provision of feedback given and sought, and active, passionate and engaging people, that is, teacher, student and peers (Hattie, 2009). He chose 0.4 as the effect size to indicate minimum effect required because that was the average effect size across all the studies. He asserted that for effect sizes less than 0.4, the benefits must be weighed against cost, because the impact seemed minimal. For effect sizes over 0.4 there was a benefit on student learning (Hattie, 2009).

In his own words, Hattie noted the limitations of his work. “This book is not about classroom life and does not speak to the nuances and details of what happens within classrooms, as it is more concerned with main effects than interactions” (Hattie, 2009, p. xiii). “There are many outcomes of schooling, such as attitudes, physical outcomes, belongingness, respect, citizenship and the love of learning. This book focuses on student achievement, and

that is a limitation of this review" (Hattie, 2009, p. 6). Because of these limitations on his work, the results contained in "Visible Learning" must be viewed within that scope.

While Hattie's contributions have drawn attention to significant influences and the importance of measuring the impact of interventions, his coverage of cultural background was minimal. "Indeed, they [class and poverty] may be more important than many of the influences discussed in this book" (Hattie, 2009, p. 6). Differences due to marginalisation or cultural difference may be more important than the effects Hattie has studied, but they were not measured and promoted in his evaluations. He mentioned that a colleague remarked that it was amazing that he could reduce the complexity of a classroom to two decimal places, which prompted him to add that it was a "sobering reminder of the importance of the cultural context of the classroom and what students and teachers bring to the class from cultural and sociological perspectives" (Hattie, 2009, p. 248). He mentioned Bishop, Berryman and Richardson's (2002) study that looked at effective teaching for Maori students. He included recommendations from Bishop that the student's culture is involved in a process of co-learning which involves the negotiation of learning contexts and content. Also, he emphasised the requirement for teachers to acknowledge students' prior learning and experiences, give feedback, and check if students know the focus of learning (Hattie, 2009). But Hattie did not explicitly include any explicit aspects of 'culture' as a measure of effect size on achievement. The only measurements he cited relevant to culture were that there was little difference between African Americans and white students on several measures, except in the benefits of group work (Hattie, 2009). African Americans benefited more from group work than mainstream students. The difference in benefit was 0.49, which was significant. This was his only noted difference between cultures. Hattie did record that expert teachers were more sensitive to context and this effect size was fifth highest at 0.84 (Hattie, 2009). This means that teacher sensitivity to context had a large impact on learning, but this attribute did not appear in his list of suggestions for teachers. For this study, Hattie's findings provide limited information for application.

A further area which has received minimal attention by Hattie is 'classroom management'. Hattie's analyses identify classroom climate as being a major influence on student learning. He cited the work of Marzano (2003) who found that the effect size of classroom management on student achievement was 0.52 and on engagement was 0.62 (Hattie, 2009). He listed separate statistics within that: the mental set of the teacher 1.28; with-it-ness 1.42; the ability to act quickly and unemotionally to problems, 0.71; disciplinary interventions 0.91; group expectations, 0.98; rules and procedures, and tangible reinforcement 0.82 (Hattie,

2009). Though these effect sizes were high in terms of effect on achievement, Hattie did not focus on classroom management. He focused, instead, on teacher-student relationships, 0.72, and classroom climate, and mentioned them frequently (Hattie, 2009). Both classroom climate and relationships are key areas of teaching that impact on student achievement and both rely heavily on successful classroom management strategies or skills, but Hattie paid little attention to details about how these effects were achieved.

In his book *Visible Learning for Teachers* (Hattie, 2012), Hattie translated the data into systems and strategies for teachers. What was disappointing in his commentary was the lack of detail and understanding of what it takes to succeed with student-teacher relationship and classroom climate. He stated,

> A positive caring respectful climate in the classroom is a prior condition to learning. Without students' sense that there is a reasonable degree of 'control', sense of safety to learn, and sense of respect and fairness that learning is going to take place, there is little chance that much positive learning is going to occur. (Hattie, 2012, p. 78)

He then listed three 'skills' needed by teachers to achieve these: with-it-ness, students needing to know boundaries and consequences, and students needing to know how to do group work and team work (Hattie, 2012). While he understood that 'control' was needed, he demonstrated little understanding of how it could be achieved. These three skills hardly detail how relationship and control were achieved. He also mentioned a study by Wilson and Corbett (2007), in which students who had not performed well at school listed characteristics of teachers they wanted to see in their classrooms (Hattie, 2012). In the rank order of teacher characteristics mentioned by the students, number two was someone who was able to control student behaviour without ignoring the lesson and number six was someone who understood students' situations and factored that into their lessons (Wilson & Corbett, 2007). Both classroom management and recognition of culture were a priority for that group of students, but these were minimally addressed by Hattie, and not included in his list of effect sizes.

In *Visible Learning for Teachers*, Hattie (2012) included the mention of culture several times. First, he mentioned helping a group of committed educators who had implemented direct instruction to a group of minority students in a rural remote area (Hattie, 2012). His advice was to measure the impact of the intervention, not the dosage given to students (Hattie, 2012). Second, he mentioned differences between cultures in the way they accepted feedback, and what kinds they appreciated (Hattie, 2012). Collectivist cultures appreciated different kinds of feedback from individualist cultures. Third, in Chapter nine, he recommended that we not

discriminate against students whose parents may not know how to give them good schooling habits (Hattie, 2012). Fourth, he reported that Levin (2008) in Canada suggested that strong relationships with parents and effective engagement with the broader community be created (Hattie, 2012). Finally, he mentioned Bishop's (2003) study in New Zealand where teacher beliefs about culture, race, learning, and development were the starting point for change in teacher practice (Hattie, 2012). While culture was mentioned more in this book than the previous one, culture was not examined closely, and any suggestions were not included in his lists for teachers to follow.

Hattie's work must be read with an understanding of his methods and limitations. While the work of John Hattie has been questioned in New Zealand (Snook et al., 2009), in Australia his work seems to be accepted with little criticism or evaluation and is being implemented in several school systems. For the benefit of the current study, while his work is based on empirical evidence, because it simplifies only quantitative research, it misses nuances in behaviour support. An understanding of the culture of students is missing and his discussion of classroom management lacks in-depth understanding. His work has value, but these limitations must be acknowledged as it is used in schools.

2.3.2.7 Robert Marzano.

The work of Marzano (2003, 2007; 2009), while based in the United States, is privileged in Education Queensland schools as evidenced in its presence in the Education Queensland website (Department of Education Training and Employment, 2012). It is also the foundation for professional development in several local high schools. Like Hattie, Marzano conducted a meta-analysis of more than one hundred research projects to ascertain the effect size of various strategies that contributed to successful classroom management and presented the results in his book, *Classroom Management that Works: Research-based Strategies for every Teacher* (Marzano, 2003). He began with a summary of the history of research into classroom management which was useful to set the scene for the strategies that followed. This section had an historical focus, while the remainder of the book was based on empirical evidence. Marzano divided the work of classroom management into elements of effective classroom management that group the research in his meta-analysis. These were: rules and procedures; discipline and consequences; teacher-student relationships; mental set; student responsibility; getting off to a good start; and, management at the school level. For each section he provided effect size and confidence intervals according to research available in that area. The confidence interval was useful as some evidence relied on only one or two studies. Also included was the percentage of difference each strategy made to the number of disruptions due to inappropriate behaviour in

classrooms when that strategy was applied. In Marzano's work, each element was effectively grounded in research, though not all strategies within each element were accompanied by research evidence.

The accompanying *Handbook for Classroom Management that Works* (Marzano et al., 2009) offered teachers a way to reflect on their beliefs and implement the strategies in their practice. Each section had a set of questions that prompted reflection on the assumptions or mind set behind teacher current actions. Suggested strategies linked to each element for effective classroom management were presented for teachers to practice. Each section ended with a reflection for teachers to check that they understood what has been presented. There was no evidence provided that implementation of these strategies had an impact on the behaviour of the teacher or students.

In *The Art and Science of Teaching* (2007), Marzano recorded work that was useful to teachers, including three chapters relating to classroom management. The first examined how to establish classroom rules and procedures. The second gave suggestions for recognition and acknowledgement for adherence and lack of adherence to rules and procedures and the third examined teacher-student relationships. Marzano included literature at the start of each chapter, and action steps providing practical strategies, procedures or behaviours to implement. Marzano referred to a meta-analysis by Harris and Rosenthal (1985) which highlighted that "teacher behaviour, then, is the language of relationship. Students 'listen' to every behaviour made by the teacher as a statement of the type of relationship the teacher desires even when the teacher's actions have no such intent" (Marzano, 2007, p. 152). In this study teacher behaviours demonstrated to students the teacher's relationship goals. Marzano included a table of specific behaviours by teachers that could be observed and recorded. These include eye contact, gestures, touch, and praise, and their effect size on several student outcomes (Marzano, 2007). This included more detail of specific teacher behaviours and their impact on students. Like Richmond (2002b), Marzano believed that good classroom managers are made, not born. "Good classroom managers are teachers who understand and use specific techniques. Awareness of, and teacher training in, these techniques can change teacher behaviour which, in turn, changes student behaviour and ultimately affects student achievement positively" (Marzano, 2003, pp. 10,11). This allowed for teachers to learn appropriate ways of managing students. His recognition of a mental set pointed to the beliefs underlying choices that teachers made when managing behaviour (Marzano, 2007).

While much of Marzano's work, like Hattie's, was useful, if implemented without consideration of socio-cultural context, practices could contribute to perpetuating inequities in

relation to culture that come from treating all students the same in rights and duties, however much they differ (Bourdieu, 1990). Weinstein, Tomlinson-Clarke and Curran (2004) suggested understanding differences between the culture of the teacher and the culture of the student and using strategies to manage behaviours that are consistent with strategies used at home. If the teacher employed a strategy that was different from the home culture it might cause embarrassment in public or 'shame' for the student or the parents, and the strategy may not be successful at changing student behaviour (Christie, 1987a; Groome, 1995). For example,

Marzano listed "overcorrection" as a suitable strategy to use.

> Overcorrection is employed when a student has done something to damage class property. In such cases, the student must not only pay for the damaged object or return it to its original state but also overcompensate by making things better than they were before… As a form of overcorrection, the teacher requires the student to summarize the information contained in the presentation [that a student has disrupted] and provide a copy to every student in the class. (2007, p. 144)

This strategy could cause problems for families from another culture because it lacks cultural sensitivity when approaching parents and some parents may find this humiliating (Christie, 1987a; Weinstein et al., 2004).

A second strategy that could be harmful is the use of "Home Contingency" (Marzano, 2007). This is a meeting with parents or guardians, the teacher and the student. Discussion focuses on the student's problem behaviours and the student has the right of reply (Marzano, 2007). The negative behaviour is identified, a positive behaviour is decided, and a data collection system is devised so that teacher and student can keep track of instances of both positive and negative behaviours (Marzano, 2007). Then, consequences that have been agreed to can be implemented (Marzano, 2007, p. 145). If not working within culturally appropriate protocols and approached from a culturally appropriate ethic of care and support, this could be harmful to students of different cultures or class (Christie, 1985, 1987a; MacGill, 2016; Weinstein et al., 2003). Students and families may not have the capacity to meet expectations (Ngarritjan-Kessaris, 1995).

A third strategy of concern lists physical behaviours that communicate interest to students (Marzano, 2007). Among them are eye contact and touching. If applied with 'cultural blindness', that is, with no regard for students' cultural context, these behaviours could be inappropriate or misunderstood by students (Christie, 1987a; Malin, 1990a; Pinto, 2013). For

example, not making eye contact is a sign of respect in some Indigenous cultures (Harrison, 2011; Malin, 1990a; West, 1995). As illustrated, home contingency is listed as a strategy useful for implementing consequences (Marzano, 2007). Without cultural consideration, these strategies could be damaging to relationships with students and families. While Marzano's work used an empirical approach and provided practical details of commonly identified effective behaviour support strategies, Marzano failed to contextualise the work of teachers. He mentioned context briefly and only in relation to the problems faced by students (Marzano, 2007). The needs of Indigenous or marginalised students were not considered and there was no mention of Indigenous voice used in his work.

2.3.2.8 Summary of Behaviour Support Literatures Prominent in the North Queensland Context.

This section has examined behaviour support practices privileged in the North Queensland context. In all, it is evident that there is considerable history and, more recently, considerable scholarship, informing behaviour support. In review, both Rogers and Richmond have produced numerous texts providing recommendations for teachers. Except for their theses, their claims and advice are qualified by personal experience rather than research evidence. Education Queensland initially published Richmond's Microskills, and more recently has delivered this as a widely used package referred to as the Essential Skills for Classroom Management (ECSM). Drawing upon Richmond's work, Davidson's work helps teachers to reflect on their practice using the Microskills and has been developed further in Blackley's work.

Acknowledging that the work of Rogers, Richmond, Davidson and Blackley has been groundbreaking and provides Queensland teachers with much sought after and valued advice, only Richmond's thesis contains relevant empirical evidence for enhancement of behaviour support. As well, despite the significance of the contributions of these regional authors, there is limited mention of Indigenous context in their assertions. This limited attention given to Indigenous context is also reflected in the contributors from further afield. Hattie's work provides guidance based on empirical evidence but lacks any attention to cultural nuance and its potential implications for behaviour support. Similarly, Marzano's work on classroom management, although supported by empirical evidence, lacks any acknowledgment of the nuance of behaviour support responsive to the Indigenous or minority population, assuming a uniform practice for all. The next section will return to the published literature review and updating discussion.

2.3.2.9 Summary of Local Resources.

Evident within this resource base is that only [two] of these resources explicitly give any consideration to Indigeneity and the plight of Indigenous students (K. Ahmat, personal communication, June 1, 2015; M. Davidson, personal communication, November 13, 2014). Despite [these two references], any benefits of such assertions for Indigenous students are not supported by empirical evidence. Teacher education appropriately requires preservice teachers' exposure to evidence-based practices. A shortcoming of these suggested practices is the lack of empirical evidence with consideration of the influence of the socio-political context in informing responsive behaviour [support] practices. The dilemma in addressing this concern in teacher education is that it appears that there is little empirically-based research that provides any evidence of what works in positively influencing learning outcomes (Lewthwaite et al., 2015; Price & Hughes, 2009) and assists in positive behaviour [support] practice for Indigenous students. Many argue for empirically-based research to investigate culturally located behaviour [support] practices that contribute to Indigenous students' school success (Castagno & Brayboy, 2008; Griffiths, 2011; Perso et al., 2012). In response to this assertion, this literature review seeks to understand what is stated in the published literature on effective behaviour [support] strategies for Australian Indigenous students.

2.4 Literature Review Methodology

2.4.1 Introduction

This introduction has been added to the published article to set the context for discussion of Randolph in the published review. The methodology of the literature review [specifically], was conducted using Randolph's (2009) approach for conducting a systematic review of the literature. This involved a five-step process including: (1) problem formulation; (2) data collection; (3) data evaluation; (4) analysis andinterpretation and, finally, (5) presentation. The following text returns to the published review.

2.4.2 Problem Identification

As detailed in the introductory section to this paper, the aim of this review was to identify in the literature specific teacher actions, or behaviours, that have been effective in supporting Aboriginal and Torres Strait Islander classroom behaviour due to them being overrepresented in negative school indicators related to behaviour.

2.4.3 Data Evaluation

Systematic protocols were used in conducting all stages of the review (Randolph,

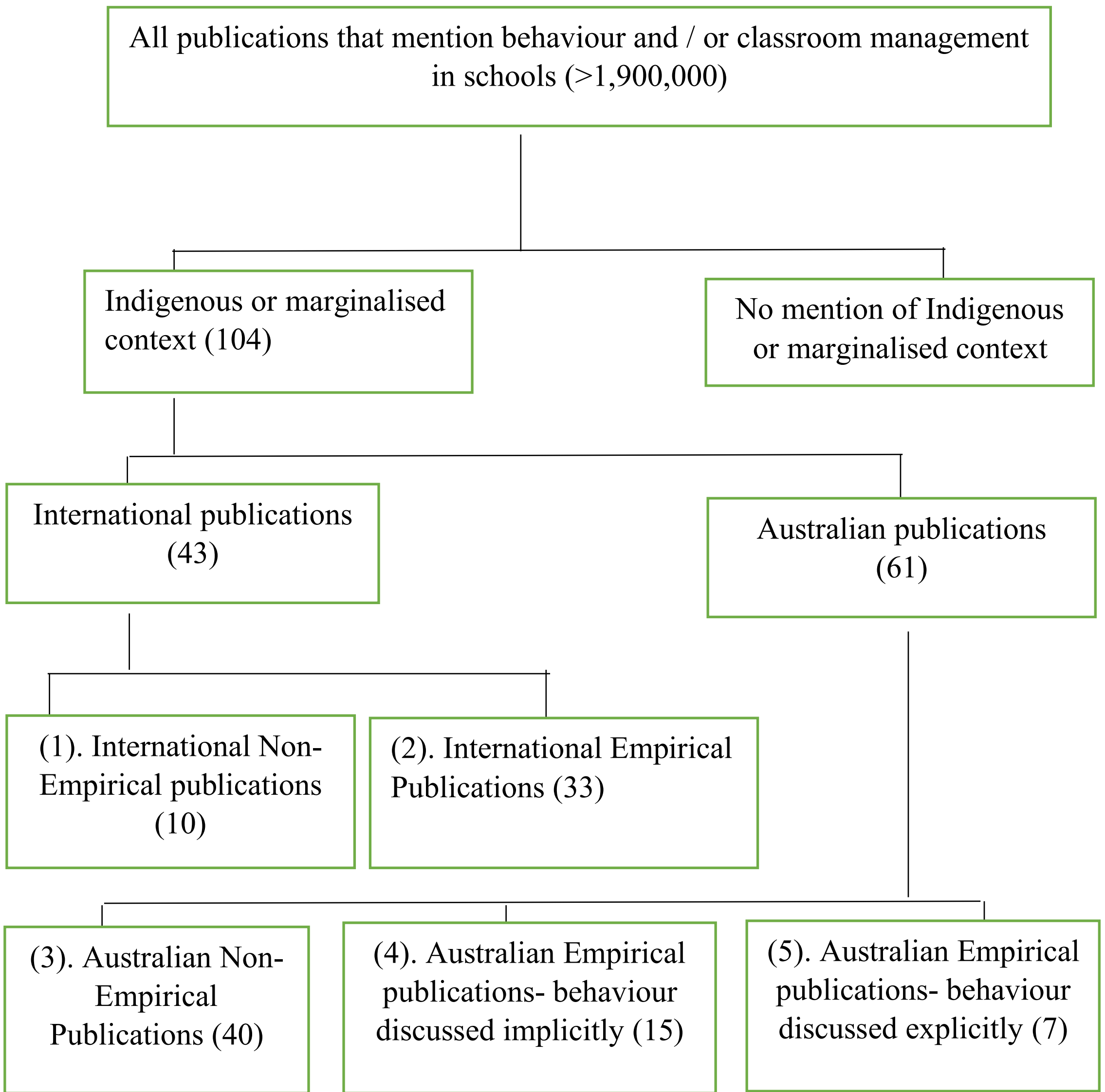
2009). The following data bases were used in the search: One Search, the university library search engine; Informit, the Indigenous database hosted by Informit; ProQuest, the Australasian Education Directory; AiATSIS Indigenous Studies bibliography; Education in video; EdiTLib Digital Library; Educational Research Abstracts online; Educational Resources Information Centre; and, ScienceDirect. In response to the search term behaviour AND/OR classroom management in the Title/Abstract or Keywords, almost two million results were obtained. Filters were added to restrict the search to studies that mentioned Indigenous or marginalised context. The following keyword combinations were used: behavio(u)r support AND /OR Classroom management AND/OR behavio(u)r management AND/OR Indigenous AND/OR marginalised AND school. The terms 'classroom', 'behaviour', 'support' and 'management' were used in the search. For this review 'behaviour management' will be used, which encompasses behaviour support practices, similar to Richmond (Richmond, 2002a, 2002b) and others (Ministerial Advisory Committee for Educational Renewal, 2005; Papatheodorou, 1998). This excludes other classroom factors such as staff, furniture and resources, which may be included by authors using the term 'classroom management' (Emmer et al., 1997; Jackson et al., 2013; Marzano, 2003; Miranda & Eschenbrenner, 2013; Pinto, 2013). Data collection stopped when saturation point was reached; "a point where no new articles come to light" (Randolph, 2009, p. 7).

2.4.4 Data Analysis and Interpretation

The initial search identified 339 publications. Of these, 235 were excluded after reading the abstract on the basis of the criteria detailed above, or due to duplication. The remaining 104 were fully reviewed. Fifteen further publications, mainly books, were identified from internet searches or reference lists in other publications. Three articles or book sections were not available through these searches and were therefore not included. Figure 2.2 below illustrates the exclusion criteria and search process. The literature was classified into (1) international non-empirical publications, (2) international empirical studies, (3) Australian non-empirical publications, (4) Australian empirical studies on curriculum and/or pedagogy, which covered behaviour [support] implicitly and (5) Australian empirical studies explicitly on behaviour [support].

Figure 2.2

Structure of the Literature Review



2.5 International Non-Empirical Publications

Practical suggestions for developing teacher understanding about the needs of Indigenous and marginalised students tended to dominate this category. Attention was directed to broader social and political contexts and teacher beliefs and understanding of these contexts. 'Culturally Responsive Classroom Management' (CRCM) (Weinstein et al., 2003; Weinstein et al., 2004), which has become a standard reference in this area, was widely cited within the literature (Gay, 2006; Milner & Tenore, 2010; Miranda & Eschenbrenner, 2013; Monroe, 2006; Perso et al., 2012; Pinto, 2013; Ullicci, 2009). These articles drew from previous empirically-based work of the authors and others (Bowers & Flinders, 1990; Delpit, 1995; Doyle, 1986; G. Gay, 2000; Ladson-Billings, 1994; Weinstein, 1998). Weinstein and colleagues developed five essential components of CRCM: recognition of one's own ethnocentrism; knowledge of students' cultural backgrounds; an understanding of the broader social, economic and political context;an ability and willingness to use culturally responsive management strategies and a commitment to building caring classrooms (Weinstein et al., 2004). Weinstein et al. also listed classroom management techniques perceived to create a culturally responsive classroom. Laura Pinto's book, *From Discipline to Culturally Responsive Engagement* (Pinto, 2013) emphasised the need for consideration of context in classroom management practices and teacher examination of personal history and biases. She goes beyond these personal and epistemological issues and identifying strategies based on her observations overlong periods of time in culturally diverse classrooms. Although these practices have obvious merit in informing practice, her assertions are not empirically evaluated.

In other non-empirical publications, Miranda and Eschenbrenner (2013) included details of how marginalised students are disproportionally disciplined in American schools. They identify a racial gap where students of colour receive more suspensions and exclusions than white students for similar offences, which is a socially unjust practice. They suggested rethinking classroom management using socially just practices, because the problem is often seen to be the child without looking at the operative agenda and actions of the school.

Drawing from this premise, Brantlinger and Danforth (2006) argued that by their unquestioned actions, teachers implicitly teach students about power and subordination. In the context of the American Native populations, the literature encouraged educators to understand the uniqueness of each native population. Specific practices for creating a

positive learning environment are recommended including extended wait time, providing opportunities for group work and use of humour (Morgan, 2010). Bazron et al. (2005) listed several strategies that increased student cooperation such as group work, increased wait time and detailed social instruction. In brief, this body of literature introduced epistemological ideas of power differences due to cultural and political contexts, cultural differences between teachers and students and teacher ethnocentrism, which may impact on teacher behaviour management choices (Pinto, 2013; Weinstein et al., 2003). Also mentioned was teacher awareness of their shortcomings and willingness to learn (Pinto, 2013). However, research evidence to support these claims was missing, and thus draws into question the efficacy of these claims for preservice and in-service teacher education.

2.6 International Empirical Studies

The identified international empirical literature was largely based in the United States, with research predominantly in urban schools. As well, remote Indigenous (Canadian First Peoples and American Indian) contexts featured occasionally. Some information came from discussions of pedagogy, but most of these studies examined Indigenous or marginalised student behaviour explicitly. Evidence showed that Indigenous and marginalised students are disproportionally represented in discipline events, punished more severely and more likely to be suspended from school (Sheets & Gay, 1996; Skiba et al., 2002).

Recurrent themes identified by the researchers that detailed successful evidence-based behaviour [support] strategies working with Indigenous and marginalised students included:

1. Knowledge of Self and Other and power relations in the socio-historical, political context,
2. Knowledge of students and their cultures without a deficit notion of difference,
3. Qualities of the teacher,
4. Positive relationships,
5. Culturally responsive pedagogy,
6. Proactive behaviour support,
7. Culturally appropriate reactive behaviour support strategies, and
8. Connections with family and community.

2.6.1 *Knowledge of Self and Other and Power Relations*

Evident within the literature was that teachers need to be aware that schools exist in an historical and political climate that may influence the perceptions of student and teacher behaviour (Bondy et al., 2007). Therefore, there is a fundamental need for teachers to have an understanding of the 'Self and Other' and the power relations that either consciously or unconsciously operate in schools. Of particular importance was attention to whether teachers possess a deficit notion of difference; that is, when someone differs from the self, attributing those differences to a lack of understanding (Bishop et al., 2007; Milner, 2008; Milner & Tenore, 2010; Monroe, 2009; Schlosser, 1992; Sheets & Gay, 1996). Successful teachers - whether or not the teachers were from the same culture as the children - understood their own cultural background and similarities and differences from the cultures of the children (Milner, 2008). Some teachers explained race, culture and power in discussion with students to help them understand how the dominant culture can replicate power imbalances in the classroom (Bliss, 2006; Milner, 2011; Ullicci, 2009).

2.6.2 *Knowing Students and Their Cultures*

Successful teachers get to know their students and their backgrounds, which reduces behaviours inappropriate to the context (Schlosser, 1992). There are commonalities and differences among communities and students, and teachers must take the time to know each student and each community. For example, American Indian students in one community preferred to hear a story to the end before stopping to discuss it (Hammond et al., 2004). Inuit and American Indian students were comforted by touch under very different cultural expectations than urban mainstream students (Kleinfeld, 1975). Also, Latino and African American students reacted differently from middle-class 'white' students when in confrontation situations with their teachers (Milner & Tenore, 2010; Sheets & Gay, 1996). In all, authors indicated that a cultural mismatch between the expectations of teachers and students could lead to misunderstanding of student behaviour; a "lack of cultural synchronization" (Monroe & Obidah, 2004, p. 258). Effective teachers understood that cultural context strongly mediates definitions of appropriate behaviour (Monroe & Obidah, 2004) and knew that they could not make one set of rules or strategies and assume everyone knew how to meet them (Milner, 2011). These teachers also understood that students were not 'bad'; they were learning behaviour in the new context (Monroe, 2006), or expressing a need (Milner, 2011).

2.6.3 Qualities of the Teacher

A third theme identified was the personal qualities of the teacher in fostering positive behaviour [support]. The term 'warm demander', used by Kleinfeld (1975), is a "teacher stance that communicates both warmth and a non-negotiable demand for student effort and mutual respect" (Bondy & Ross, 2008, p. 54; see also Lewthwaite & McMillan, 2010). An African American teacher used cultural humour and demonstrations of emotion and affect, with a tough and no-nonsense style (Monroe & Obidah, 2004). Successful teachers combined a sense of humour, with setting boundaries and following through, creating an atmosphere reflective of family, but using firm redirections (Milner, 2008; Ullicci, 2009). Such a teacher is a reflective practitioner, always committed to evaluating and re-evaluating practice (Lewthwaite & McMillan, 2010). Related personal qualities included: not taking student behaviour personally; being agentic, that is, being able to solve problems that come his/ her way (Bishop et al., 2007) or having an internal locus of control (Kennedy, 2011); and regulation of own teacher emotions (Sutton et al., 2009). The personal qualities recommended by these authors required teachers to accept responsibility for their behaviour and recognise the impact their behaviour has on students.

2.6.4 Positive Relationships

The literature indicated that students were more likely to behave well for teachers they liked (Milner, 2011; Sheets & Gay, 1996), so successful teachers possessed an ability to create effective relationships with and among students. Having less distance in relationships contributed to that situation. These teachers shared with students a few personal matters (Kennedy, 2011; Milner, 2008, 2011; Schlosser, 1992; Sheets & Gay, 1996) stressed that the class was their 'family' or 'community' at school, and expected students to respect and value others in a caring classroom (Bondy et al., 2007; Brown, 2003; Milner, 2011; Ullicci, 2009). Bondy et al. (2007) noted:

> Teachers with a naive conception of care may create an ambiguous rather than a supportive psychological environment. That is they may believe they care about students and value a culture of respect but may lack the knowledge necessary to explicitly teach the skills of respectful behavior or to insist on respectful behavior in culturally appropriate ways. (Bondy et al., 2007, p. 346)

Table 2.1 details successful teacher strategies for creating a caring environment for

students from Indigenous cultures identified through international empirical studies.

Table 2.1

Successful Teacher Strategies for Indigenous Students

Strategies to create a caring environment	Sources
Giving culturally appropriate social instruction	(Baydala et al., 2009)
Using clear and consistent expectations	(Bondy & Ross, 2008)
Creating physical environment that welcomes and displays culture	(Brown, 2003; Ullicci, 2009)
Using humour	(Milner, 2008; Ullicci, 2009)
Treating students with respect, not shouting, threatening or demeaning	(Ullicci, 2009)
Not using punishment	(Noguera, 2003)
Using communication process that are understood by the student to communicate respect	(Bondy et al., 2007; Brown, 2003)
Communicating expectations of success	(Bishop et al., 2007; Bondy et al., 2007; Lewthwaite & McMillan, 2010)
Treating students fairly as they see it	(Milner, 2008)
Giving students a sense of control	(Castagno & Brayboy, 2008; Milner,2008)

2.6.5 Culturally Responsive Pedagogy

Culturally informed teaching strategies were commonly identified as means by which inappropriate behaviours were minimised and subsequently contributed to more settled classrooms. These strategies included increased wait time after asking questions or making requests (Lewthwaite & McMillan, 2010; Winterton, 1977); opportunities for group work (Hammond et al., 2004; McCarthy & Benally, 2003); scaffolded learning (Bondy & Ross, 2008); opportunities for movement (Boykin, 2001; Monroe, 2006); flexibility (Monroe, 2006); storytelling (Milner, 2008) and activity-based learning (McCarthy & Benally, 2003).

2.6.6 Proactive Behaviour [Support] Strategies

Proactive behaviour [support] strategies were also identified to decrease disruption

(Sanford & Evertson, 2006). These included, making behaviour expectations clear (Anderson et al., 1980; Bondy & Ross, 2008; Bondy et al., 2007; Kennedy, 2011; Lewthwaite & McMillan, 2010; McCarthy & Benally, 2003) and teaching students how to meet expectations (Anderson et al., 1980).

2.6.7 [Culturally Appropriate] Reactive Behaviour [Support] Strategies

Reactive strategies were suggested to be implemented after inappropriate behaviour has occurred. Importantly, reactive interventions should be chosen and implemented in a way that suits the cultures of the students (Baydala et al., 2009; Bazron et al., 2005; Hammond et al., 2004; Monroe, 2006; Sheets & Gay, 1996). Table 2.2 lists further recommendations for reactive behaviour [support] strategies.

Table 2.2

Reactive Strategies

Reactive strategies	Source
Not make every infraction a serious offence	(Ullicci, 2009)
Calmly deliver consequences	(Bondy et al., 2007)
Look for reasons behind the behaviour and findways to meet student needs	(Kennedy, 2011)
Be consistent	(Milner, 2008)
Do not take student behaviour personally	(Kennedy, 2011)
Refrain from holding grudges	(Milner, 2008)

While policies of zero tolerance may have been seen as a solution, they did not work to change student behaviour (Noguera, 2003; Nolan, 2007). Zero tolerance approaches came from a reaction to extreme violence in schools (Skiba & Peterson, 1999a). Nolan’s findings were consistent with mainstream literature on this issue (Jeffers, 2008; Skiba & Peterson, 1999a, 1999b). Too often schools failed to address the reasons for behaviour and used suspension to address behaviour concerns and this led to the overrepresentation of marginalised and first peoples or American Indian students mentioned earlier (Noguera, 2003; Sheets & Gay, 1996; Skiba et al., 2002).

2.6.8 Connections with Families and Communities

Making connections with families and communities was deemed to be critical because teachers and families may have different standards and expectations about what is

appropriate behaviour in schools (Cary, 2000). In two rural American Indian reservations, the typical classroom management style where teachers micro-managed the behaviour of individual students did not fit with cultural values of encouraging students to self-manage for the benefit of the group. In this case, listening to parents offered insights into more culturally appropriate behaviour management strategies for their students. (Hammond et al., 2004). Different cultures may see the role of parents in schools differently. Monroe (2009) found that all of the effective teachers made attempts to reach out to families and support them. Sometimes teachers felt that racial difference between families and teachers hindered these relationships, but that did not stop them trying.

One international study (Bishop et al., 2007), which used qualitative and quantitative methods, actually measured student outcomes in New Zealand as a result of the enactment of teaching practices, including those associated with behaviour. The practices implemented drew from conversations with Maori students as to what they saw as effective practice. An Effective Teaching Profile was created, guided by the experiences of Maori students, families, their teachers and principals. Quantitative observations that counted teacher frequency of use of the strategies were used and student numeracy and literacy outcomes were measured. The outcomes showed statistical benefits for Maori students. Behaviours demonstrated by teachers who managed behaviour effectively included: caring and high expectations; classroom management that promotes learning; discursive learning; successful learning strategies; and sharing learning outcomes and achievements with students to increase Maori student achievement. Essential to this ETP, was a need to reject deficit paradigms about differences, and a commitment to reflective practice. This study provides an effective framework for investigation, as it uses mixed methods and provides evidence of utility.

2.6.9 Methodologies of International Studies

Methodology sections of the review have been fleshed out and added to the published article to meet requirements for a thesis. The third category illustrated in Figure 2.2 presents the methodology employed in international studies. This fulfils the second focus of the literature review; an assessment of the methodological approaches used to determine the influence of teacher behaviours on student behaviour. The methodology of international studies will be investigated, with particular focus on instruments, methods and analysis that relate to this study. General discussion of methodology will precede discussion of studies that combine methodologies in a way that may provide relevant examples.

In the study of successful strategies used for culturally responsive behaviour support, qualitative research methods featured most prominently. Studies that used qualitative methods alone used various tools: observations of classroom episodes, whether videotaped (Bondy et al., 2007; Brown, 2003); or by field notes (Kennedy, 2011; Monroe, 2009; Monroe & Obidah, 2004; Schlosser, 1992; Ullicci, 2009); recording of teacher behaviours coded using inductive approach (Bondy et al., 2007; Brown, 2003); or another coding system (Ullicci, 2009); an observation instrument "based on the effective practices of teachers of children of colour" (Ullicci, 2009, p. 14); informal (Schlosser, 1992) or formal interviews with students (Bliss, 2006; Bondy et al., 2007; Kennedy, 2011); interviews with teachers (Anderson et al., 1980; Bondy et al., 2007; Brown, 2003; Kennedy, 2011; Monroe, 2009; Monroe & Obidah, 2004; Schlosser, 1992); open ended teacher questionnaire (Schlosser, 1992); observer opinion rating scales at the end of each observation (Anderson et al., 1980); interviews with school leaders and analysis of student records (Kennedy, 2011; Schlosser, 1992); school documents (Kennedy, 2011; Monroe, 2009; Monroe & Obidah, 2004; Schlosser, 1992) and district information (Kennedy, 2011). Several authors included classroom vignettes and stories to convey information in their description of findings (Kennedy, 2011; Monroe & Obidah, 2004; Ullicci, 2009), or excerpts from interviews (Bondy et al., 2007; Brown, 2003; Monroe, 2009; Schlosser, 1992).

Some variations in focus, setting or participants in these qualitative studies are worth noting. Bliss (2006) used extra classroom sites, for example hallways and the cafeteria as interview sites in a school to examine interactions of power between students and disciplinary power. Brown (2003) followed 13 teachers of different racial backgrounds, European American, African American and Asian American teachers, in seven cities to examine successful strategies. Monroe and Obidah (2004), observed and interviewed one African American teacher in a case study, watching her interactions with African American students, then later, Monroe (2009) conducted a case study on four teachers, two African American and two white, detailing successful strategies. Field notes for this study included details such as: physical setting, teachers and students; activities and interactions; conversations; subtle gestures and observer commentary. Ullicci (2009) observed six teachers, all European American elementary school teachers, using objective and subjective field notes and an instrument based on the practices of effective teachers. For two years Schlosser (1992) followed students who were identified as at-risk. Data collection in this study included a student essay about how their lives would look 10 years in the future and what they needed to

be successful. Bondy et al. (2007) observed three effective novice teachers in the first two hours on the first day of school to examine how these teachers used strategies in the first few hours of the school year. Anderson et al. (1980) observed teachers in low socioeconomic schools (SES) to see how they started the year and how that start affected management for the rest of the year.

Measurement of 'success' is an issue for determining the effectiveness of teacher strategies. Kleinfeld (1975) observed 40 teachers in two all-native boarding schools and five integrated urban high schools in Alaska during 1970-71. He followed rural Athabascan Indian and Eskimo students in these settings. He used ethnographic analysis "prior to attempts to develop a measurement system appropriate to hypothesis testing" (Kleinfeld, 1975, p. 306) because it "permitted a holistic analysis of some of the special problems that appeared to arise in cross-cultural instruction" (Kleinfeld, 1975, p. 306). As an indicator of teacher effectiveness he used two informal measures of pupil growth: amount of verbal participation and the cognitive level of their contribution according to Bloom's taxonomy. Anderson et al, (1980) in third grade classrooms used a measure of student engagement every 15 minutes, categorising on and off-task behaviours.

Although Wubbels et al. (2006) did not focus specifically on an Indigenous or marginalised context, their study is included in this section because it uses measurement tools to observe specific teacher behaviours. The authors studied the interpersonal interactions of teachers in the Netherlands, using psychological tools for data collection. They also conducted this study in Australia, Canada, Israel, Slovenia, Turkey, Korea, Taiwan, Singapore and the U.S. The Model for Interpersonal Teacher Behaviour (MITB) shows influence on a continuum from dominance to submission, and proximity on a continuum from opposition to cooperation. On these two dimensions, eight types of teacher behaviour can be plotted. These are: "leadership, helpful/friendliness, understanding, giving students freedom and responsibility, uncertainty, dissatisfaction, admonishing and strictness" (Wubbels et al., 2006, p. 1165). This tool is based on Timothy Leary's model of interpersonal diagnosis of personality (Leary, 1957) and there is some evidence that the Leary model is cross-culturally generalisable (Wubbels et al., 2006). The second tool they developed was the Questionnaire on Teacher Interaction (QTI). This measures student perceptions of teacher behaviour, and teachers also record how they see themselves, and how they would like to be. Using these tools, the authors have labelled eight patterns of interpersonal relationship: "Directive, Authoritative, Tolerant/Authoritative, Tolerant, Uncertain/Tolerant, Uncertain/Aggressive,

Drudging and Repressive" (Wubbels et al., 2006, p. 1169). Their findings state that a teacher may change types with different classes, particularly beginning teachers and that beginning and experienced teachers encounter different problems. Beginning teachers struggle to create positive learning environments and experienced teachers appear to distance themselves from students, which makes the classroom less personal. The MITB and QTI provide examples of observation and self-reflection tools.

The authors mention a study by van Tartwijk (1993) where teacher non-verbal behaviours are used to study relationship. These behaviours are: the use of classroom space; the position and movement of the teacher's body; facial expressions; duration of teacher looking at students; and the non-content aspects of speech. Using videotapes, observers were able to estimate student perceptions on the Proximity and Influence dimensions. The researchers were able to determine which non-verbal behaviours were demonstrated by teacher styles. For example, more eye contact combined with continued speaking loudly was perceived as most dominant. They also rated student achievement, so that teachers with disorderly classrooms showed low student achievement and repressive teachers had the highest student achievement. Generally, Wubbels et al. (2006) found that successful student-teacher relationships show a high amount of influence and proximity and to improve relationship teachers should demonstrate cooperative and dominant behaviours and related attitudes. The specific non-verbal and para-verbal teacher behaviours mentioned provide examples of observable behaviours.

Bishop et al. (2007's) study was the best example of a mixed methods approach located in the literature. It measured teacher development in cultural awareness and student needs. The study focused on a 'Pedagogy of Relations', meaning, learning contexts which: foster shared power; encourage interdependence without power imbalances; value culture; share learning in an interactive, dialogic and spiral way; and in which participants share a common vision for excellence in outcomes. Because the focus of Bishop's study was relational, it was also relevant to student behaviour support. The authors note that the traditional means of communication, from teacher to student delivering predetermined knowledge, created frustration for Maori students. This frustration resulted in resistance, to which teachers intervened with strategies that, in turn, manifested more behaviour problems and disruptions.

An ETP was created, guided by the experiences of Maori students, families, their teachers and principals. Essential to this ETP was a need to reject deficit paradigms about differences, and a commitment to reflective practice, accepting responsibility for the learning of their students; which reflect the first two themes in international literature. Behaviours demonstrated by teachers were: caring and high expectations; classroom management that promotes learning; discursive learning; successful learning strategies; and sharing learning outcomes and achievements with students to increase Maori student achievement. The ETP was implemented in 2004 and 2005 with participating teachers who received initial training, formal observations, feedback, group meetings, and “targeted shadow-coaching” (Bishop et al., 2007). The research measured the impact of the ETP in mainstream secondary classrooms. The narratives were used to construct a profile of a teacher who was supportive, or ‘agentic’, in helping Maori students achieve. The ETP listed two understandings possessed by effective teachers:

(a) They positively and vehemently reject deficit theorising as a means of explaining Maori students’ educational achievement levels, and
(b) Teachers know and understand how to bring about change in Maori students’ educational achievement and are professionally committed to doing so. (Bishop et al., 2007, p. 26)

The ETP also listed observable behaviours that are demonstrated by teachers:

> they care for the students as culturally-located human beings above all else; … they care for the performance of their students; … they are able to create a secure, well-managed learning environment by incorporating routine pedagogical knowledge with pedagogical imagination; … they are able to engage in effective teaching interactions with Maori students as Maori; … they can use a range of strategies that promote effective teaching interactions and relationships with their learners … and they promote, monitor and reflect on outcomes that in turn lead to improvements in educational achievement for Maori students. (Bishop et al., 2007, p. 26)

These observable behaviours suggested by participants and developed into the ETP reflect the themes from international research studies summarised in section 2.6.

A triangulation mixed methods approach was used in Bishop et al.'s study to combine qualitative and quantitative data from a range of instruments to determine the influence of such actions on students' learning outcomes. These included: student interviews; teacher participation survey; observation tool; data from feedback sessions; and co-construction meetings (Bishop et al., 2007, p. 207). This observation tool, similar to a 4 Dimensions observation (Blackley, 2022; McCarty, 2019), recorded the frequency of teacher behaviours. A second observation tool rated caring for the student; and having high expectations for student behaviour and management of the classroom (Bishop et al., 2007, pp. 207-208). The authors used Elmore's (2002) model of demonstrating improvement by measuring the quality of teacher practice and student performance over time. Quantitative results were presented which were supported by analysis of qualitative data from student and teacher interviews. The findings showed increased numeracy and literacy for all Maori students, with a clear relationship between implementation of the ETP and Maori student performance. In summary, Bishop's study focused on conversations with Maori people as to what worked for their children, this included Indigenous perspectives. Based upon this understanding, they created a measurement tool from this information (ETP). This profile was used to support teacher development in culturally supportive relationships with Maori students. The outcomes show benefits for students.

One further example of methodology in the international literature that is relevant to this study is the inclusion of Indigenous perceptions about successful relationships and strategies for student behaviour support. Hammond et al. (2004) questioned parents on two Indian reservations about their ideas on culturally relevant classroom management practices. A group of teachers enrolled in a graduate level Applied Behaviour Analysis class conducted the interviews. Fifty Apache families agreed to participate in the study. Responses were recorded and transcribed. Survey questions were determined previously by authors and teachers. Responses were then analysed by the researchers to find commonalities in the responses. The findings from Hammond's study are included in section 2.6.

Evidence-informed research provided much of the information available about student behaviour support for marginalised or Indigenous students in the international arena. Methodology used was largely qualitative using observations, interviews and documents obtained in the school, and largely based in urban schools in the United States (Bliss, 2006; Bondy et al., 2007; Brown, 2003; Kennedy, 2011; Monroe, 2009; Monroe & Obidah, 2004; Schlosser, 1992; Ullicci, 2009), with useful studies conducted also in remote communities

(Hammond et al., 2004; Kleinfeld, 1975) and in New Zealand (Bishop et al., 2007; Glynn & Berryman, 2005). Focus varied in each study, on different settings (Bliss, 2006), time of school year (Anderson et al., 1980; Bondy et al., 2007), number of participants and racial background of teachers (Brown, 2003; Monroe, 2009; Monroe & Obidah, 2004) and power relations (Bliss, 2006). These studies provide a wealth of information about strategies used by successful teachers as discussed in section 2.6. Wubbels et al. (2006) and van Tartwijk (1993) used observation tools to record specific teacher behaviours and rating scales to measure perception of teacher behaviours.

Teacher growth was measured quantitatively (Bishop et al., 2007; Emmer, 1981) and qualitatively (Johnson, 2002; Kidd et al., 2007). Observation tools were used to record interactions and teacher behaviours (Bishop et al., 2007; Wubbels et al., 2006). Various measures of success were used: frequency and cognitive level of student verbal participation (Kleinfeld, 1975); student on and off-task time (Emmer, 1981); narrative records (Emmer, 1981); teacher interviews (Emmer, 1981); frequency of teacher use of specific strategies (Bishop et al., 2007; Emmer, 1981); teacher surveys (Bishop et al., 2007); student disruptive behaviours (Emmer, 1981) and academic results (Bishop et al., 2007; Emmer, 1981).

In summarising this section focusing on methodological approaches towards behaviour support, the sequence of Bishop and colleagues' (2007) methods provides a good example of how research can be conducted to identify practices best suited to Indigenous students and then determining their influence once enacted. Bishop et al. quantitatively measured themes contained in the interviews with teachers and were thus able to report the frequency of certain discourses in each school. A survey was used with teachers, and this survey was analysed quantitatively using inferential statistics. Bishop also measured teacher development through frequency of specific strategies using the ETP. The methodology of Bishop and colleagues' study was qualitative and quantitative. In all, Indigenous voice was often included in international research methodology, but most international research was limited to the use of qualitative methods. There is very little measurement of teacher behaviour or the influence of teacher behaviour in the classroom and, more importantly, the influence of teacher development on student behaviour. Bishop and his colleagues (2007) in their study provides an example of mixed methods. Further, the measures used by (Emmer, 1981) and the observation and rating scales used by Wubbles (2006) and Van Tartwijk (1993) could provide examples of observation and perception rating scales. The eight

categories summarised in the international empirical studies and methodologies, although valuable, cannot be applied to an Australian context without consideration of Aboriginal and Torres Strait Islander contexts and opinions. The following section returns to the published review.

2.7 Australian Non-Empirical Publications

Before describing the themes that emerged from this body of literature, two points must be made. First, there are two very distinct cultures in Australia. Most of this literature is written for an Aboriginal context and is often assumed to apply to the Torres Strait Islander culture as well. Little is written by Torres Strait Islander people, or from a Torres Strait Islander perspective (Nakata, 1995a, 1995b, 2007b; Osborne, 1996). Also, within these two cultures each cultural or family group has its own practices (Bamblett, 1985), so students come from diverse backgrounds. Indigenous students cannot all be grouped together (Nakata, 2007a); but they may share some common traits (Gollan & Malin, 2012; Harris & Malin, 1995).

Second, historical antecedents must be considered by a reader who negotiates information describing Indigenous cultures in Australia (Osborne, 1996). An attitude of deficit theorising ignores historical antecedents and places the problems with students and families rather than the systems or schools or teachers (Griffiths, 2011). “One must acknowledge also that Aboriginal attitudes, and often Aboriginal living conditions have been determined by two hundred years of white cultural and economic dominance of Aboriginal cultural values, which are alien to non-Aboriginal society” (Bamblett, 1985, p. 35). This has resulted in transgenerational trauma to Australian Indigenous peoples (Aitkinson, 2002b; Hockey, 2008; Ralph et al., 2006), including children (Milroy, 2005). Accurate recounting of history (Bottoms, 2013; Christie, 1987b; Shaw, 2009) helps to situate information about education in communities.

Much of the literature in this section was based on personal experience and in-depth understanding from Indigenous and non-Indigenous authors. Information in this section is consistent with the themes from international authors, so these same categories will be used in presenting the Australian literature.

2.7.1 Knowledge of Self and Other and Power Relations

In this context authors emphasised that teachers did not need to be from the same culture as their students to be culturally competent (Osborne, 1996), with a caveat that a

teacher must get to know the culture, as it may differ from their own and cause cultural misunderstanding (Ionn, 1995; Osborne, 1996), which includes behaviour. Christie (1985) explained some difference between cultures: ‘meaningful’ experiences hold value for the Yolgnu people while ‘purposeful’ experiences hold value for Western culture. The difference is an approach to getting things done. A meaningful experience holds importance and significance for the individual, while a purposeful experience is about setting and achieving goals under an assumption that we are in control of the world (Christie, 1985). When we use our own standards to judge others, Yolgnu can see Westerners as greedy and Westerners can see Yolgnu as lazy (Christie, 1985). School is dependent on purposeful behaviour that comes from a Western view that the world can be controlled.

> Meaningful behaviour is a different sort of activity altogether. It is not a watered down version or a pale imitation of purposeful behaviour. It is behaviour that is directed at developing and maintaining the meaningfulness of one’s life and, in fact, personally controlled goal directed, purposeful activity will interfere with the practise of meaningful behaviour. (Christie, 1985, p. 8)

One way to value Indigenous cultures in Australia has been referred to as ‘two way learning’ (Purdie et al., 2011; K. Rogers, 1994) or ‘both ways education’ (Harrison, 2005). Two-way learning recognises that Indigenous epistemologies must be included in education, whereas, both ways education is about “a two-way exchange or reciprocity between people” (Harrison, 2005, p. 874). For a Western teacher that means learning and accepting that Western ways do not always need to be paramount (K. Rogers, 1994).

2.7.2 Knowing Students and their Cultures

Australian authors strongly emphasised the importance of having knowledge of the students and their cultural background and behaviours that may be different from those expected in classrooms. For example, and most importantly, Aboriginal children are raised with more autonomy than Western children (Bamblett, 1985; Berry & Hudson, 1997; Guider, 1991; Harris, 1987a, 1987b; Harrison, 2008; Howard, 1995; Ionn, 1995; Ngarritjan-Kessaris, 1995) and this behaviour may be misunderstood by teachers. Because value is placed on giving, students may not use ‘please’ or ‘thank you’, but express needs directly. This is not a ‘lack of manners’, but an example of a different values system in operation (Berry & Hudson, 1997; Harrison, 2011; Howard, 1995; Ionn, 1995). Time may be

perceived and used differently (Ngarritjan-Kessaris, 1995). Shared ownership of possessions is valued (Bamblett, 1985; Berry & Hudson, 1997) and cooperation between people is valued more than obedience to a particular person (Bamblett, 1985; Christie, 1987a). Importantly, students may be motivated to engage in school work by relationship and community rather than work ethic or authority (Bamblett, 1985; Berry & Hudson, 1997; Groome, 1995; Harrison, 2008, 2011; Howard, 1995; Linkson, 1999; Nichol & Robinson, 2010; Perso et al., 2012; Shaw, 2009).

2.7.3 Qualities of the Teacher

It was suggested that successful teachers use reflective practice (Guider, 1991; Perso et al., 2012) and do not take student behaviour personally (Berry & Hudson, 1997). They teach about race, culture and power and school culture (Appo, 1994; Christie, 1987a; Groome, 1995; Harris, 1987b; Harrison, 2005; Linkson, 1999; Osborne, 1996; Sarra, 2011b). They are warm demanders (Fanshawe, 1976, 1999; Guider, 1991; Osborne, 1996) with expectations of success (Griffiths, 2011; Hones, 2005; Sarra, 2011b) and have a sense of humour (Gollan & Malin, 2012; Harrison, 2011; Ngarritjan-Kessaris, 1995).

2.7.4 Positive Relationships

Effective teachers understand that relationship comes before work (Christie, 1987a; Howard, 1995; Linkson, 1999), that respect is earned, not based on authority (Bamblett, 1985; Christie, 1987a) and give students a sense of control (West, 1995). They treat students with respect and communicate in culturally appropriate ways (Perso et al., 2012), and tell students a little about themselves (Berry & Hudson, 1997; Byrne & Munns, 2012). Importantly, they avoid ‘spotlighting’ or ‘shaming’ students, allowing them ‘save face’ (Bissett, 2012; Osborne, 1996; West, 1995). They also avoid bossing and sarcasm (Harrison, 2008; Howard, 1995) and confrontation (Harrison, 2008; Osborne, 1996). Effective teachers also recognise and use real-life strengths and skills of their students (Clarke & Dunlap, 2008; Dockett et al., 2006; Howard, 1995; Perso et al., 2012; Sarra, 2011b).

2.7.5 Culturally Responsive Pedagogy

This construct is covered in detail in Australian non-empirical literature. Effective teachers prevent behaviour that is inappropriate to the context by understanding that students need the big picture of the curriculum content (Garvis, 2006; Harrison, 2008; Sarra, 2011a) and that students may not want to learn something new until they are

confident in foundational understandings and skills (Berry & Hudson, 1997; Harrison, 2008, 2011; West, 1995). They employ group work (Garvis, 2006; Harris, 1987b); use persistence, repetition, rote learning and memory (Garvis, 2006; Harris, 1987b); relate tasks to real-life (Harris, 1987b); use concrete learning rather than abstract (Hughes et al., 2004); and use storytelling, observation and imitation rather than verbal instruction (Garvis, 2006; Harris, 1987b; Harrison, 2008; Sarra, 2011a; West, 1995) or exposition (Harrison, 2008). They also use learning support and scaffolding (West, 1995) and avoid over talking (Berry & Hudson, 1997; Christie, 1980; Harris, 1987b) and too many direct questions; particularly 'why' and 'how' questions (Berry & Hudson, 1997; Christie, 1980; Harris, 1987a, 1987b; Harrison, 2008; Ionn, 1995; Linkson, 1999; West, 1995).

2.7.6 Proactive Behaviour Support Strategies

Proactive behaviour support strategies are preventative measures that are put in place before behaviour inappropriate to the context happens. These include encouraging a strong sense of self in students (Appo, 1994; Garvis, 2006; Groome, 1995; Hones, 2005; Milgate & Giles-Brown, 2013; Sarra, 2011b; West, 1995) and giving clear expectations and how to achieve them (Harrison, 2011; Sarra, 2011b). Teachers must meet student needs in health (Dockett et al., 2006), belonging and attention (Harrison, 2011). Classrooms should cater for movement, noise and flexibility (Nichol & Robinson, 2010). Indigenous role models also help (Dockett et al., 2006; Hones, 2005).

2.7.7 Culturally Appropriate Reactive Behaviour Support Strategies.

Reactive strategies are measures taken after behaviour inappropriate for the context happens. There are many reactive strategies documented as valuable in working with Australian Indigenous students. These include using restrained power, not an 'I'm the boss' approach (Christie, 1987a; Groome, 1995; Harrison, 2008), and also avoiding the Western way of gaining justice and punishing to vindicate the wronged (Christie, 1987a; Groome, 1995; Harrison, 2008). He suggested that teachers give rewards for appropriate behaviour rather than punishing hard (Christie, 1987a; Harrison, 2011). The rewards should be consistent and short-lived (Christie, 1987a) and group rewards rather than individual (Harrison, 2008, 2011). Defuse quickly and calmly and when calm, talk about responsibility to the group (Christie, 1987a). Above all, avoid escalating the conflict (Christie, 1987a; Groome, 1995; Nichol & Robinson, 2010). Harrison (2008) suggests avoiding suspensions because students may be seeking this.

2.7.8 Connections with Families and Communities

In this group of publications, links with family and community are emphasised to connect with families and create a team approach to teaching students behaviour appropriate for the context (Bamblett, 1985; Budby, 1994; M. Clarke, 2000; Dockett et al., 2006; Guider, 1991; Milgate & Giles-Brown, 2013; Osborne, 1996; Perso, 2012; Shipp, 2013; Sims et al., 2003). Suggestions include making an environment where parents feel comfortable or meet away from school (Sims et al., 2003) and taking the long way around when talking with parents to make a connection first (Harrison, 2008). Also, while it may not always be possible, Sims et al. (2003) advise staff to learn culturally appropriate communication and some language features of the community.

The suggestions that emerged from these Australian publications were grouped in the same themes as those used in international empirical literature. Many useful suggestions were made for teacher practice. Since these suggestions are not based in empirical evidence however, their capacity to inform teacher education is questionable.

2.8 Australian Empirical Literature - Behaviour Discussed Implicitly

The literature in this category comprised empirical studies from the Australian context. These studies contained implicit discussions about: behaviour while examining pedagogy (Munns et al., 2013; Rahman, 2010; Yunkaporta & McGinty, 2009); disadvantage (Keddie et al., 2013); curriculum (Munns et al., 2013; Simpson & Clancy, 2012); the hidden curriculum (Rahman, 2010); Indigenous voice (Bond, 2010; Colman-Dimon, 2000); teacher characteristics (Fanshawe, 1989); classroom discourse (Thwaite, 2007); student mobility (Nelson & Hay, 2010); and humour (Hudspith, 1995). As these studies investigated other pedagogical topics, conclusions were made that relate specifically to behaviour [support]. These findings, again, correspond to the themes that have been identified in the previous sections.

2.8.1 Understanding of Self and Other and Power Relations

Keddie et al. (2013) observed curricular and non-curricular activities and interviewed administration, teaching and ancillary staff in one school that catered well for the needs of Indigenous students. They highlighted the need for teachers to have an understanding of the Self and Other, and power relations without a deficit notion of difference. This means that cultural differences between the teacher and student should not be taken as a lack on the part of the student. This comes with a warning against treating all

Indigenous cultures as a homogeneous group against a dominant white norm (Keddie et al., 2013). Keddie called this ‘cultural reductionism’ and warned that cultural homogeneity can lead to “further ‘othering’ of non-dominant cultures” (Keddie et al., 2013, p. 94). What works at one time in one context may not work in another context or another time (Keddie et al., 2013). Hughes et al. (2004)) recommend that teachers focus on individuals and learning strengths, rather than making generalisations based upon students’ cultural backgrounds. Rahman (2010) discussed the ‘hidden curriculum’ and how students who are comfortable negotiating the different context of schooling perform better than those who have not learned to play the ‘game’ of schooling.

2.8.2 Knowing Students and Their Culture

To avoid behaviours arising from cultural mismatch, authors identified that effective teachers get to know their students and their cultures (Yunkaporta & McGinty, 2009). Hughes et al. (2004) observed and interviewed effective teachers in four schools teaching prepared units and observed the students. They identified particular learning strengths of Indigenous students and compared Indigenous and Western cultures in their discussion (Hughes et al., 2004), some of these comparisons have been supported by others (Hudsmith, 1992; Malin, 1990a, 1990b; Simpson & Clancy, 2012; Yunkaporta & McGinty, 2009). Indigenous students may respond better to indirect questioning rather than direct questions (Hughes et al., 2004; Thwaite, 2007), which may be seen as rude (Simpson & Clancy, 2012). Students may make little eye contact; it is impolite (Hughes et al., 2004, p. 234) and they can be attentive without making eye contact (Thwaite, 2007). Kinship is important, children may be shared between homes (Hughes et al., 2004). They may engage in holistic thinking rather than empirical thinking and they may use symbolic language rather than literal (Hughes et al., 2004). ‘Being’ is more important than ‘doing’ and children may focus on immediate gratification rather than deferred gratification (Hughes et al., 2004). Time is circular and without boundaries rather than linear and quantified and students may have a spontaneous lifestyle rather than a structured lifestyle. Students may be group oriented rather than individualistic with ownership (Hughes et al., 2004). Pathways through school may be complex and multifaceted. Nelson and Hay (2010) recommended engaging and re-engaging with students in open flexible ways rather than making moral judgements about their reasons for diverse pathways (Nelson & Hay, 2010). Some schools did this better than others (Nelson & Hay, 2010).

Another cultural difference commonly identified is that Aboriginal children are self-

reliant, self-regulated, observant, and practical (Malin, 1990b; Rahman, 2010). Malin (1990b) observed children in several Aboriginal and Western families at school and reported that Aboriginal children seek help from peers as much as from adults, approach new tasks cautiously to avoid making mistakes and are emotionally and physically resilient. Aboriginal students are raised with more autonomy in the home (Malin, 1990a). In the classroom this autonomy may be mistaken by the teacher as slowness or disobedience (Malin, 1990b). When the teacher asks them to come, students think they have time to finish what they are currently doing and may exercise their autonomy to do so (Malin, 1990b). Malin (1990b) observed that students felt shame at their wrong being made public and reported that students perceived racist discrimination. Students would like time to reflect and think and see the whole before engaging in it (Malin, 1990b).

2.8.3 Qualities of the Teacher.

Teacher qualities that reduced conflict in the classroom included expressions of caring, through the words and body language of the teacher, which are noticed, no matter how small (Hughes et al., 2004). Another characteristic that was noted through research that looked at teacher effectiveness was personal warmth rather than professional distance (Fanshawe, 1989). Teachers had to set aside their deficit notion of difference to embrace Aboriginal ways of knowing (Yunkaporta & McGinty, 2009). Effective teachers were willing to learn from cultural groups of the children in the class (Simpson & Clancy, 2012) and they had interest in the wider lives of the children (Bond, 2010).

Hudspith (1995) researched the use of humour in classes with predominantly Aboriginal students. It was found that unsuccessful or ‘discordant’ teachers used humour to “reinforc[e] social and political distance” (Hudspith, 1995, p. 21) from groups. Effective or ‘positive’ teachers had a positive ‘tone’ in the room (Hudspith, 1995). In one lesson, 71% of the humour was directed towards the whole class, not towards individual students (Hudspith, 1995), which is considered to be an effective teaching strategy with Aboriginal students who avoid being shamed. Effective teachers also directed humour towards themselves; relating stories of personal failings with humour (Hudspith, 1995). This delighted Aboriginal students (Hudspith, 1995). Aboriginal students liked teachers who were funny, had a good sense of humour and were easy to talk to (Hudspith, 1995). These teachers explained humour and did not use sarcasm (Hudspith, 1995).

2.8.4 Positive Teacher Relationships

Relationships with individual teachers were significant in student perceptions of schools and schooling (Nelson & Hay, 2010; Rahman, 2010), which impacts on student behaviour. Munns et al. (2013) researched sociological and psychological understanding of student motivation and engagement in eight exemplary schools in terms of Indigenous student performance, attendance and behavioural data, and observations. Students with high self-concept were identified through quantitative data and interviewed, as were administrators, liaison staff and teachers identified as having high empathy, association, and success with Indigenous students. Interview data showed that relationships between teachers and students were paramount in schools that have success with Indigenous students (Munns et al., 2013). In these schools teachers saw students as important, responsible and able to achieve (Munns et al., 2013).

2.8.5 Culturally Responsive Pedagogy

Student behaviour and engagement were improved when staff worked in Indigenous ways (Rahman, 2010; Yunkaporta & McGinty, 2009). Teachers did this by linking curriculum to local Indigenous pedagogies, lore, language and landscape, and ways of thinking and problem solving in design and technology (Yunkaporta & McGinty, 2009). Students worked well in Indigenous learning circles, but also when working anonymously and creatively (Yunkaporta & McGinty, 2009). Other suggestions include detailed scaffolding, so students like to participate, even in direct questioning (Thwaite, 2007).

2.8.6 Proactive Behaviour Support

Recommendations for proactive behaviour support have emanated from research that used qualitative observation or action research methods. They include, that teachers avoid spotlighting students (Thwaite, 2007) and provide social support as the key pedagogy to shifting to self-direction (Yunkaporta & McGinty, 2009). Teachers should learn how to frame requests in a way that will engage students (Simpson & Clancy, 2012). One example cited was an Aboriginal teacher aide who used cultural knowledge and student strengths to frame a request in a way that was successful. A teacher had requested that students sit in a particular place, but they refused. The teacher aide created a meaningful context for children by describing the seat as a car, and framed the request as an invitation to join her (Simpson & Clancy, 2012).

2.8.7 Culturally Appropriate Reactive Behaviour Support Strategies

Reactive behaviour support (measures taken after inappropriate behaviour happens) was not mentioned in this category of literature.

2.8.8 Connections with Families and Communities

Munns et al. (2013) examined 52 schools, and using quantitative records, selected four that were successful in enhancing social and academic outcomes for Aboriginal students. Using case studies of these schools they identified that schools that were successful with Indigenous students had close links with communities. Bond (2004) listened to elders on Mornington Island. Her thesis titled *We're the mob you should be listening to* related information from elders in the community. The elders expressed that school gave them no voice in curriculum and they wanted to have input (Bond, 2004). According to Colman-Dimon (2000), who used qualitative methods students enjoyed their schooling and felt optimistic about their futures when parents and community members played an active and decision-making role in the school. "It is vital that education be improved through a process of attentive listening rather than an imposition of inappropriate pedagogy, curriculum and lack of meaningful personal relationships with the community" (Colman-Dimon, 2000, p. 43).

2.9 Australian Empirical Literature - Behaviour Discussed Explicitly

Only seven studies specifically focused on behaviour [support] for Indigenous students (Edwards-Groves & Murray, 2008; Gillan, 2008; Malin, 1990a; Partington et al., 2001; Stehbens et al., 1999).

2.9.1 Merridy Malin

Malin (1990a) observed the children of two Aboriginal families and two 'Anglo' families at home and at school in a five-year ethnographic study in Adelaide. As a starting point for investigation into inequalities in the classroom, her work has been widely referenced by others (Howard, 1995; Ionn, 1995; Rahman, 2010). She observed that socialisation at home for Aboriginal children was very different from that of the Anglo children (Malin, 1990a), which is consistent with the second theme of this study Knowledge of Students and Their Culture Without a Deficit Notion of Difference. Aboriginal families monitored children indirectly, selectively attending to some behaviour without the "direct and overt verbal monitoring, directing and persuading" (Malin, 1990a,

p. 314), which characterised the Anglo style of parenting. Aboriginal parents used less than half the number of controlling statements than Anglos and they did not expect compliance immediately (Malin, 1990a). When observing the children at school Malin identified the ideology of the teacher as a source of concern. The teacher harboured lower expectations for Aboriginal students and when stressed, she also used disparaging descriptions of them. Malin also warned that "'treating all students the same' is a dangerous creed because it is not easy to carry out nor is it appropriate. Even when students are from the same cultural group, their different personalities, skills and life experiences demand different responses" (Malin, 1990a, p. 327). Reflecting findings mentioned previously (Hughes et al., 2004; Keddie et al., 2013), Malin recommended that teachers become aware of their own cultural orientations and uncover and challenge their unconscious ideology to be "sensitive to the students' respective personalities and propensities and respond accordingly" (Malin, 1990a, p. 327).

2.9.2 Sandra Hudsmith

Sandra Hudsmith observed two teachers, known to be successful in their classroom interactions with Aboriginal students, using field notes, audio and video recordings and interviews. Previously there was a wide range of behaviour problems with these children, but with these teachers, misbehaviours in the class were rare. These teachers incorporated an Aboriginal learning style in their teaching and pedagogy and had extensive knowledge of their students (Hudsmith, 1992). They highlighted and valued students' experiences and autonomy and used these in curriculum with an Aboriginal socio-linguistic etiquette, such as circle talking, where everyone sat on the floor to discuss an issue. Both teachers attempted to expose the hidden aspects of school culture that generate misunderstanding between teachers and students. They trained students to use mainstream language conventions and behaviours for other classrooms. Students were affirmed in their Aboriginality, and their individual needs were taken into account. Students could go to the library when they chose, which supported their autonomy. They just had to let the teacher know, not ask for permission. Older children were encouraged to tutor younger ones, which made use of the cultural value of helping others and reflected home norms. The teachers developed positive affirming relationships and through their personal qualities extended the boundaries of their role. Each class had visited the teacher's home as an excursion and the teachers regularly stepped out of their official role to share some aspect of themselves or used humour. These teachers exemplified "sensitivity, respect and allegiance to common

goals…[by] catering for Aboriginal student differences and needs, while focusing student creativity and energy towards self-enhancing goals" (Hudsmith, 1992, p. 11). Parents were involved in their classrooms and teachers took an interest in the lives of students outside of school. Her work offers detailed, evidence-based insights into the personal characteristics, classroom pedagogies and routines of two effective teachers. Unfortunately, it did not focus on reactive strategies.

2.9.3 Stehbens, Anderson and Herbert

Stehbens et al. (1999) examined factors that may contribute to high rates of suspension for Indigenous students in New South Wales by examining suspension data and speaking with Aboriginal students, staff, parents and non-Indigenous teachers. Echoing other authors (e.g.Keddie et al., 2013; Nelson & Hay, 2010) they were critical of schooling as a way to replicate the "dominant mainstream" (Stehbens et al., 1999, p. 11) where children who did not assimilate are treated to address the "personal deficit within the child or his or her family" (Stehbens et al., 1999, p. 11) and if children did not change, they were suspended or excluded from education. Stehbens et al., argued that behaviour management policies and programs helped to achieve this assimilation or exclusion process. We need to consider cultural differences in what is 'unacceptable' behaviour. They identified factors that contributed to the problem, but offered little in the way of solutions. A parent suggested that while some behaviour is extreme, staff should try to be more tolerant and accepting (Stehbens et al., 1999) and one staff member saw inflexibility as a problem (Stehbens et al., 1999).

2.9.4 Partington, Waugh and Forrest

Partington et al. (2001) investigated the reasons for higher representation of Indigenous students in suspensions and exclusions in one Western Australian school. They examined policy and student and staff perceptions, highlighting student resistance to alienation (Partington et al., 2001). Their study uncovered reasons for inequalities in student referrals and suggested some ways to combat the inequality. School rules were few and not taught (Partington et al., 2001). Among the teachers, there was not a consistent approach to discipline. Some teachers ignored the underlying causes of behaviour and used the system to escalate students out of the classroom. Partington et al. (2001) suggested two explanations for Indigenous student misbehaviour from the literature. The first explanation was cultural misunderstanding, where teachers misinterpreted behaviour that was culturally

acceptable. Cultural conflict occurred when Indigenous students, steeped in their home culture, were unfamiliar with the school culture (Partington et al., 2001). Partington et al. (2001) identified the historical relations of power and racism. Students had a perception of racist discrimination. A teacher who was not aware of history could exercise power in the belief that they expected obedience, and if they did not get this they took punitive action (Partington et al., 2001). Partington et al. offered some solutions based on getting to know students and relationship:

> Culturally appropriate strategies for classroom management are not a bag of tricks that can be produced as needed. Rather, the relationships among the various components of culture must be understood and applied in appropriate contexts so they are seen by students to be relevant and meaningful. (Partington et al., 2001, pp. 74-75)

Each student must be considered in terms of his or her learning strengths, preferences and needs (Partington et al., 2001). Qualities of effective teachers in creating positive learning environments included: effective communication; creating good rapport with students; and demonstrating willingness to negotiate. They also suggested a “framework of collaboration and more egalitarian teacher-student relationships” (Partington et al., 2001, p. 78). They recommended using fewer worksheets. In the use of reactive strategies, they found that effective teachers examined the motivations of students, contexts and interactions when responding to an incident. Effective teachers also dealt with an incident in isolation from previous student incidents. They used defusing strategies, looking for the antecedents of behaviour, rather than blaming students. They also employed restrained use of power where procedures were set by the school. They did not follow those procedures blindly (Partington et al., 2001).

2.9.5 Edwards-Groves and Murray

Edwards-Groves and Murray (2008) in a small study, interviewed boys who had previous negative school experiences and were situated in a short term residential centre. They used novel data collection methods that included informal discussions, participant observation, photo interviews, creating together and writing poetry. These methods allowed for connection between the boys and the researcher in culturally appropriate ways. The students perceived that teachers and other class members in mainstream schools lacked “cultural, social and political knowledge and understanding about Aboriginality”

(Edwards-Groves & Murray, 2008, p. 175)). In the alternative setting, student needs were met in a culturally appropriate way and the boys expressed their satisfaction (Edwards-Groves & Murray, 2008). The authors suggested "renewed scrutiny on classroom interactions and more importantly still offers teachers impetus for changing the perspectives of the 'racialized marginalised other'[.S]o that the ways of being an Aboriginal student in Australian classrooms can be perceived as relevant, just and balanced" (Edwards-Groves & Murray, 2008, p. 175).

2.9.6 Kevin Gillan

Gillan (2008) examined the language and practice of behaviour management policy in a Western Australian primary school and discussed how it excluded Noongar students and families. Following interviews with Indigenous staff, students and families he recommended changes to school practice and policy development that reflect the themes used previously. After thorough investigation, he recommended that teachers get to know Noongar child-rearing practices and culture (Gillan, 2008). Students preferred flexible teachers with a sense of humour who sought harmonious relationships with students (Gillan, 2008). He recommended group work, active learning, and repetition as teaching strategies to make a more supportive learning environment (Gillan, 2008). He suggested allowing for movement (Gillan, 2008). Moreover, he suggested talking to a student one-on-one away from the class and listening to the point of view of the Noongar student (Gillan, 2008). Further, he recommended early contact with families when students are in trouble and case by case negotiating with parents over suspension matters to seek a culturally appropriate solution (Gillan, 2008). He suggested seeking positive communication early on to create relationship with families (Gillan, 2008). These suggestions were not accompanied by evidence of their utility when implemented.

2.9.7 John Lester

As Lester's work follows the publication date of the literature review, it has been added to update the article. The final study focused on attendance and engagement, touching on behaviour. Lester (2016) objected to discussion about Aboriginal education that focused on negative indicators and those who blamed Aboriginal children for their failures in education. He strove to discover the reasons for disengagement Indigenous students across New South Wales. "Why do Aboriginal kids switch off school?" became the question for his study. Following a review into Indigenous education, his work grew to encompass how policy

impacted the situation and how to stop Aboriginal children disengaging. He interviewed children in years 5-8 in a longitudinal study across a single rural district, targeting four secondary and six feeder schools. Later added were two additional secondary school and a central school. Parents, guardians and grandparents were interviewed. School staff were involved in individual and group interviews then some private interviews. A survey was developed by the researcher to determine where the school was up to with implementing policy. He observed snapshots of classroom lessons, coding classroom practice. He also had access to school reports, newsletters and student records. At the systemic level, he interviewed leadership and examined policies and reports.

He categorised children into three stages of engagement. Systems need to understand the positions of engagement and the different approaches needed to address specific needs in each group. The first group, 'Unengaged' children were locked in a cycle of disadvantage that had become synonymous with Indigenous education. A lack of literacy and numeracy skills led to disciplinary problems and constant non-attendance and continuous behaviour troubles. These students required case management from various systems inside and outside of education, such as social welfare agencies. The second group, the 'Disengaged,' were the bulk of students who slowly drowned in the education system and over a five-year period became less engaged in school. At 9-10 years old a lack of literacy started to 'bite'. They remained silent and slowly sank out of sight. Intervention is needed before that time. This group hold the key to reversing current outcomes and Lester suggested that the solution is to maintain engagement by improving teacher inclusive pedagogical practice, regardless of race, gender of socio-economic status (Lester, 2016). The third group, the 'Engaged' adapted well to schooling, they had supports at home and stumbled across the right teacher at the right time to gain the support they needed.

Lester identified themes carried throughout his study, that are relevant to the current study (Lester, 2016). The first, there is racism in schools. "Schools have been the instruments of colonial policy from the time of those first established by the invaders and more" (Lester, 2016, p. 50) and "[s]chools and education are primary tools to separate, assimilate, integrate or generally carry out the predetermined will of non-Indigenous community expectations" (Lester, 2016, p. 51). The racism may have been sublimated, but children and families were aware. Racism and stereotypes existed and affected perceptions of attendance and behaviour and impact on children with a set of 'mish' [mission] expectations. Also, Aboriginal children were treated differently after behaviour incidents. Several examples were cited where white

children received different consequences, and Aboriginal children were not asked to tell their story. Many Indigenous people saw education as the answer to countering racism (Lester, 2016) and they expressed their views about the current situation.

Attendance and behaviour took a negative turn around 14-15 years old and schools that succeeded had made efforts to connect with families. He identified a problem as teachers who keep teaching when students do not understand. Ineffective teachers, "hold onto negative stereotypical beliefs and limited effective engagement with Indigenous student due to their ignorance and lack of willingness to find out about indigenous children's lives" (Lester, 2016, p. 172). A school principal said, "there's a level of ignorance on the part of some of our teachers who do not understand what's happening in some of these kids' lives and are not prepared to make changes to accommodate what those kids' needs might be" (Lester, 2016, p. 172).

He discussed what made a good teacher, using the words of Harslett (1999).

> Effective teachers have an understanding of Aboriginal cultures and histories and of their students' home and family backgrounds and circumstances and have an ability to develop good relationship with Aboriginal students and their families. Such relationships are typically built on consistency and fairness with all students while at the same time there is an understanding and appreciate of student differences and needs. (Lester, 2016, p. 45)

He listed several teacher qualities such as earning respect by treating students with respect, demonstrating close personal understanding and reciprocity and being helpful and nice. Of primary importance was, "developing a close and trusted relationship between teacher and student especially when it comes to laying down the platform for effective classroom management, is a most critical educational relationship" (Lester, 2016, pp. p. 45-46. c.f. Bishop 2008; Partington & Gray, 2003). Lester made recommendations aimed at systems, schools, student and parents; how each could assist Indigenous engagement in each of the three categories of students. I return now to the published review.

While the research in this section detailed a number of issues and suggested some specific strategies to positively influence Aboriginal and/ or Torres Strait Islander student behaviour, there was little evidence of the utility of the strategies in classrooms. It is evident that more research needs to be conducted to explore the effectiveness of these strategies in supporting Indigenous students and, in turn, for them to be incorporated into

teacher training programs and professional development for classroom teachers.

2.9.8 Methodology of Australian Research Literature

This section was added to the published article to highlight methodologies used in Australian studies. The seventh category in Figure 2.2 covers the research methods used in the Australian literature. So far, Bishop's study provides the best example of method. Australian research will be discussed, highlighting methodologies and methods that may also be useful and identifying gaps. Qualitative data collection methods included: teacher interviews (Hudsmith, 1992; Keddie et al., 2013; Nelson & Hay, 2010; Partington et al., 2001; Stehbens et al., 1999; Yunkaporta & McGinty, 2009); interviews with school leaders (Keddie et al., 2013; Nelson & Hay, 2010; Stehbens et al., 1999); interviews with ancillary staff (Keddie et al., 2013); student interviews (Nelson & Hay, 2010; Partington et al., 2001); informal conversations with students and staff (Nelson & Hay, 2010); and unstructured interviewing of community members (Bond, 2004; Colman-Dimon, 2000; Stehbens et al., 1999).

Other qualitative data collection methods included field notes (Hudsmith, 1992; Hudspith, 1995), video (Hudsmith, 1992; Hudspith, 1995) and audio recordings (Edwards-Groves & Murray, 2008; Hudsmith, 1992; Hudspith, 1995), and observations (Hudsmith, 1992; Hudspith, 1995; Malin, 1990a; Nelson et al., 2002). Hudspith's (1995) investigation into effective teaching practices focused on data gathering associated with observable behaviours such as humour, praise, positive kinetic behaviours and touch. She observed classrooms and recorded teacher and student behaviour. Yunkaporta and McGinty (2009) used photos of students to record and explain body language and Edwards-Groves and Murray (Edwards-Groves & Murray, 2008) used photographs of students creating their works. Discourse analysis has also been used to investigate language used in the classroom (Hudsmith, 1992; Nelson & Hay, 2010; Stehbens et al., 1999; Thwaite, 2007). Suspension and exclusion data (Partington et al., 2001; Stehbens et al., 1999) and school and/or system behaviour management policies were examined (Stehbens et al., 1999).

Quantitative measurement and observation tools were used by Hughes et al. (2004). These were, an Inventory of Learning and an Inventory of Teaching strategies to measure student strengths in several areas and use of teacher pedagogical strategies. His methods included recording pedagogy, not behaviour (Hughes et al., 2004). He used a continuum for teachers to rate student level of ability. Hudspith (1995) counted frequency of behaviours and

did not use descriptive statistics. Munns et al.'s (2013) case study and the quantitative study (Munns et al., 2008) are part of a mixed methods longitudinal study that used psychometric tools and to measure wellbeing and academic tools to measure progress. This study focused on the systemic factors that support student self-concept and wellbeing. Inclusive practices, such as celebration of special events, community partnerships, school leadership and quality teaching were also measured. Descriptive statistics were applied to the quantitative data in order for "the research to tease out the specific factors that have significant impact on educational outcomes after controlling for the effects of other variables and any measurement error" (O'Rourke et al., 2008, p. 5). Results suggested "that enhancing academic self-concept may be a useful strategy for addressing patterns of school disengagement that have repeatedly been noted for Indigenous Australian students" (Bodkin-Andrews et al., 2012, p. 179).

In these Australian studies, student success was measured by several means such as decrease in truancy and behaviour difficulties, increase in academic competence (Hudsmith, 1992; Keddie et al., 2013) and evidence of the consistent support of parents (Hudsmith, 1992). Fanshawe (1989) measured teacher effectiveness by students rating their liking for school subjects, perceptions of how hard they worked, perception of their ability in the subjects, preferred teachers and perceived degree of learning in their subjects.

Yunkaporta and McGinty's (2009) research included measurement of teacher attitudinal change, which was presented through interview data. One teacher "described her journey in the project as 'a letting-go of my set ways'" (Yunkaporta & McGinty, 2009, p. 65). Another teacher had complained early in the project that the Indigenous way had 'no logic', and during the study came to understand the "non-linear thinking patterns" (Yunkaporta & McGinty, 2009, p. 65). Hughes et al. (2004) also measured teacher change by the use of a self-report and observation tool that recorded teacher teaching strengths related to student learning strengths. Teacher comments supported that participation in the training and subsequent teaching of particular units had improved teacher understanding of Indigenous students' learning strengths (Hughes et al., 2004). Both studies focused on teacher change in pedagogy, not in behaviour support.

Inclusion of Indigenous voice was evident in several of the studies surveyed in this review (Bond, 2004; Colman-Dimon, 2000; Edwards-Groves & Murray, 2008; Fanshawe, 1989; Hudsmith, 1992; Hudspith, 1995; Hughes et al., 2004; Keddie et al., 2013; Malin, 1990a; Nelson & Hay, 2010; Partington et al., 2001; Stehbens et al., 1999). Aboriginal people

must speak for themselves because non-Aboriginal people can only talk about their perceptions of Aboriginality and student needs (Colman-Dimon, 2000; Nakata, 2007a). Non-Aboriginal people construct an understanding of Aboriginal people from their own perspectives and other people's pictures of them (Colman-Dimon, 2000; Nakata, 2007a).

Also illustrated in the review of literature is the emphasis placed on culturally appropriate ways to conduct research. Conducting respectful research requires an understanding of culture and operation within local customs and protocols. When interviewing young Indigenous men who had disengaged from mainstream schooling, Edwards-Groves and Murray (2008) realised that a Western interview style with repeated questioning was not culturally appropriate. The authors led informal discussions with groups rather than singling out boys (Edwards-Groves & Murray, 2008). They took time to work with students on artworks and jointly constructed poetry and work samples because it was more culturally appropriate to be working on something together rather than direct questioning (Edwards-Groves & Murray, 2008). Working on something together provided a

> practical way for the researcher to firstly support participants through the interview process in a way that balanced power, created a sense of ownership, fostered trust, built capacity and respond to cultural difference; and secondly to provoke focused discussions with participants. (Edwards-Groves & Murray, 2008, p. 167)

The youth wanted photos of these sessions to be included in the project (Edwards-Groves & Murray, 2008).

Colman-Dimon's (2000) research in a Northern Territory community using culturally appropriate protocols determined that Aboriginal participants preferred more flexibility of time and place in interview settings and will communicate freestyle and recall events in a relaxed and informal way in an unstructured interview (Colman-Dimon, 2000). Informants needed time to listen and to finish what they were saying (Colman-Dimon, 2000). She used unstructured interviewing because she could spend greater time with the participant; control the flow of information; draw from the participant's perspective; use language that is natural; and ensure the participant has equal status with the researcher in the dialogue (Colman-Dimon, 2000).

Bond (2004), working on Mornington Island, started recording open ended interviews, but at the request of the lawmen and senior elders, changed to hand written notes of the interviews (Bond, 2004). These notes were then checked with the elders (Bond, 2004). As the

notes were checked, this became the stimulus for further discussion (Bond, 2004). The elders were "Aboriginal senior men who see themselves as the repositories and teachers of tribal Aboriginal Law that has been handed down from their Creation Ancestors for thousands of years and is still being handed down" (Bond, 2004, p. 1). The elders "construct the present and accounts of what should be, on the basis of eternal spiritual Law and the secular past" (Bond, 2004, p. ix). Bond sought to "embody explicitly the relationships of respect, equality and appreciation of their views that the Elders also expect in a school-community relationship" (Bond, 2004, p. 1). Bond's words and actions demonstrated her understanding and respect for the elders.

Yunkatporta and McGinty's (2009) research was framed within Indigenous knowledge and visual imagery, communicating respect for traditional ways of working. The theoretical model for their study came from local culture (Yunkaporta & McGinty, 2009). An image of the rivers converging symbolised the meeting place of cultures and also the coming together of the school and the community (Yunkaporta & McGinty, 2009). It became a metaphor for "working synergistically in the overlap between multiple social realities and ways of knowing" (Yunkaporta & McGinty, 2009, p. 56). The image of spirals within a spiral became central to the action research nature of the project "This conforms to aspects of Aboriginal cosmologies in which increasing circles of knowledge about the universe continue to repeat the patterns of the local centre and ultimately return to it" (Yunkaporta & McGinty, 2009, p. 59). A theoretical model was constructed using the geography as metaphor, built on local knowledge and culture (Yunkaporta & McGinty, 2009). The non-Indigenous researcher had to operate within layers of consent and waiting for permissions from the elders took time (Yunkaporta & McGinty, 2009). This was the appropriate way to continue before becoming involved in "cultural activities and learnings, adhering to cultural and relationship protocols" (Yunkaporta & McGinty, 2009, p. 61). The Indigenous researcher had ties to two of the three cultural groups, so he moved from being 'insider' to 'outsider' through the project (Yunkaporta & McGinty, 2009). Yunkaporta and McGinty adapted their research to respect local cultures.

In summary, little methodology from the Australian research appears to provide a model that could be followed for the proposed study. Bishop et al.'s (2007) study remains the most relevant. Studies explicitly focusing on behaviour support are few, and empirical evidence from mixed methods studies in Australia is lacking. Most Australian research is qualitative, where observations and interviews were used to investigate what causes problems

for Indigenous students and to identify some successful strategies, although these have not been tested. The methodology of Bishop et al.'s (2007) study remains the most relevant to this study. The most important contribution from Australian research methodology was discussion of culturally appropriate methodologies. The following section returns to the published review.

2.10 Discussion and Summary

This review systematically summarised the published literature on behaviour [support] for Indigenous students. In so doing the literature was divided into empirical studies and others emanating from Australia and elsewhere. Specific teacher strategies that positively influence the behaviour of Indigenous students resulted in eight themes that emerged initially from international research but were reflected across all publications. These were: (a) knowledge of self and other, and power relations in the socio-historical political context without a deficit notion of difference, (b) knowing students and their culture, (c) particular teacher qualities, (d) positive relationships, (e) culturally responsive pedagogy, (f) proactive behaviour [support], (g) culturally appropriate reactive behaviour [support] and (h) connections with family and community.

At the start of this review emphasis was placed on the resources currently used in preservice teacher education and schools in North Queensland, where this study is situated. Although there is widespread use of these resources and they are considered professionally to be of sound effect, they pale in comparison to what the international literature is saying about effective behaviour [support] practices for Indigenous students because they lack any consideration of students' cultural context. Evidence-based research into culturally appropriate behaviour [support] practices would enhance the efficacy of these claims and augment the worthiness of these current resources.

Further to this, most of the national and international studies were grounded in qualitative research methods. Of the international studies, three (Baydala et al., 2009; Bishop et al., 2007; Boykin, 2001) used quantitative methods which included the use of psychological tests (Baydala et al., 2009). Boykin (2001) used several survey instruments to measure the impact of movement on student achievement. Of all the studies identified, only [seven] examined behaviour [support] explicitly in the context of Australian Indigenous students. While their findings reflected the propositions and themes endorsed in the non-empirical publications and the empirical studies from overseas, they provided little evidence of the efficacy of their strategies within the socio-cultural context. Empirical

studies conducted in Australia have not been generalised because they have not been validated quantitatively in the way that Bishop et al. (2007) determined the effectiveness of their Aotearoa New Zealand Effective Teaching Profile for Maori students.

Overall, the limited number of studies in this area supports the claim that

> There is a need to empirically validate the generalisability of [Hattie's (2003)] findings to Aboriginal students to tease out facets of quality teaching that are salient to Aboriginal students, elucidate their perspectives of teacher quality and test the influence of specific facets of quality teaching on academic outcomes [for Aboriginal students] and the consequences of the findings for developing interventions for Aboriginal primary school students. (Craven et al., 2007, p. 4)

2.11 Conclusion

Behaviour support strategies suggested for Aboriginal students in Australia, and those commonly practiced in North Queensland where this study is centred, lack empirical evidence that validates what works and for whom (Craven et al., 2007; Griffiths, 2011). They also lack the inclusion of the voice of Torres Strait Islanders (Nakata, 2007a; Osborne, 1996). Empirically-based evidence is needed to inform policy and practice (Craven et al., 2007; Griffiths, 2011). In addition, there is no empirical data about how teacher beliefs and strategies support the behaviour of Aboriginal and Torres Strait Islander students. This is an important gap in the literature that needs to be addressed to provide teacher education in the most appropriate pedagogy for Indigenous students (Bishop et al., 2007).

This review suggests important ways to direct a multiphase study to (1) identify from Aboriginal and Torres Strait Islander students and their families' behaviour [support] practices that positively influence classroom interactions, (2) develop a statistically validated instrument that can be used to evaluate and inform teacher's practice and (3) test the enactment of such strategies on students' behaviour and learning outcomes. In doing so, the study will provide empirical evidence for informing preservice teachers as to what works for creating a positive learning environment for our region's Indigenous students.

2.12 The Article Abstract

Abstract: This paper reports findings from a systematic literature review conducted to identify effective behaviour management strategies which create a positive learning environment for Aboriginaland Torres Strait Islander students. The search criteria

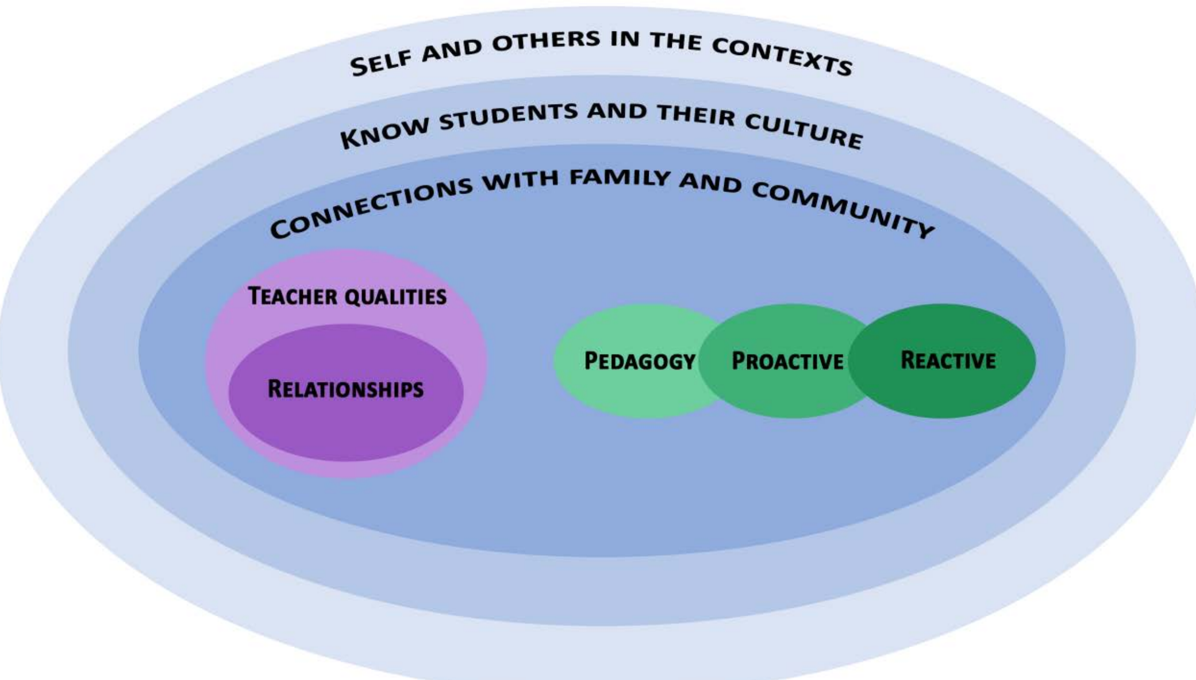
employed resulted in 103 documents which were analysed in response to this focus. Results identified eight themes underpinning strategies for effective behaviour management. Despite the suggested actions, the review highlights that little empirical research has been conducted to validate effective classroom behaviour management strategies; strategies which may also be used to inform teacher education.

Considering the high representation of Indigenous students in statistics related to behaviour infringements and other negative schooloutcomes, this review affirms the urgent need for research to investigate and establish empirically what constitutes effective behaviour management for Indigenous students.

2.13 The TASSAIS Themes

Figure 2.3

The TASSAIS themes in a visual format (Teacher Attitudes and Strategies to Support Australian Indigenous Students)



Note: The visual format of the TASSAIS themes places the bigger picture themes arising from the literature canvassed (Self and other in the contexts, knowing students and Connections with family and community) covering the whole area. Those related to teachers are centre left, with relationship as a teacher quality, but important enough to warrant a separate theme. The strategies a teacher may use are in the centre right - overlapping because the strategies overlap.

2.14 Summary Table

Table 2.3 was not included in the published review. It summarises the literature in the a priori themes. A more detailed table is in Appendix B.

Table 2.3

Brief Summary of Common Themes with Relevant Literature in Sections

Theme	International Advice	International Research	Australian Advice	Australian Research
1. Knowledge of self and other and power relations in the socio-historical political context.	Pinto, 2013 Weinstein et al., 2003, 2004	Bishop et al., 2007 (M) Milner, 2008 (Q) Milner & Tenore, 2010 (Q) Monroe, 2009 (Q) Schlosser, 1992 (Q) Sheets & Gay, 1996 (Q) Weinstein et al., 2003 Weinstein et al., 2004		Keddie, 2013 (Q) Simpson & Clancy, 2012 (Q)
2. Knowledge of the students and their cultural backgrounds without a deficit notion of difference.		Bishop, et al., 2007 (Q) Milner, 2008 (Q) Milner & Tenore, 2010 (Q) Monroe, 2009 (Q) Schlosser, 1992 (Q) Sheets & Gay, 1996 (Q)	Bamblett, 1985 Christie, 1985 Clarke, 2000 Groome, 1995 Harris, 1987b Harrison, 2008	Hughes et al., 2004 (Q) Yunkaporta & McGinty, 2009 (Q)

		Weinstein et al., 2003 Weinstein et al., 2004	Hones, 2005 Howard, 1995 Ionn, 1995 Ngarritjaran-Kessaris, 1995 Perso, 2012	
3. Qualities of the teacher.	Brantlinger & Danforth, 2006 Michie, 2014 Miranda & Eschenbrenner, 2013 Morgan, 2010 Pinto, 2013	Bishop et al., 2007 (M) Bliss, 2006 (Q) Bondy & Ross, 2008 Bondy, et al., 2007 (Q) Brown, 2003 (Q) Glynn & Berryman, 2005 (Q) Kennedy, 2011 (Q) Lewthwaite & McMillan, 2010 (Q) Monroe, 2009 (Q) Monroe & Obidah, 2004 (Q) Milner, 2008 (Q), 2011 (Q) Sutton et al., 2009 (Q) Ullicci, 2009 (Q) Weinstein et al., 2003	Appo, 1994 Berry & Hudson, 1997 Christie, 1987a Fanshawe, 1976, 1999 Gollan & Malin, 2012 Griffiths, 2011 Groome, 1995 Guider, 1991 Harris, 1987b Harrison, 2005, 2011 Hones, 2005 Linkson, 1999 Ngarritjan-Kessaris, 1995 Osborne, 1996 Perso, 2012	Hudsmith, 1992 (Q) Hudspith, 1995 (Q) Hughes et al., 2004 (Q) Keddie, 2013 (Q) Partington et al. 2001 (Q) Simpson & Clancy, 2012 (Q)

			Sarra, 2011b	
4. Positive relationships.	Bazron et al., 2005.	Baydala et al., 2009 (qP) Bishop et al., 2007 (M) Bondy et al., 2007 (Q) Brown, 2003 (Q) Castagno & Brayboy, 2008 Kennedy, 2011 (Q) Lewthwaite & McMillan, 2010 (Q) Milner, 2008 (Q), 2011 (Q) Noguera, 2003 (Q) Schlosser, 1992 (Q) Sheets & Gay, 1996 (Q) Ullicci, 2009 (Q) Weinstein et al., 2003	Bamblett, 1985 Berry & Hudson, 1997 Bissett, 2012 Byrne & Munns, 2012 Christie, 1987a Clarke & Dunlap, 2008 Dockett, Mason, & Perry, 2006 Harrison, 2008; 2011 Howard, 1995 Linkson, 1999 Michie, 2014 Nichol & Robinson, 2008 Osborne, 1996 Perso, 2012 Sarra, 2011b West, 1995	Bond, 2010 (Q) Fanshawe, 1989 (Q) Hudspith, 1995 (Q) Hudsmith, 1992 (Q) Hughes et al., 2004 (Q) Malin, 1990b (Q) Partington et al. 2001 (Q) Thwaite, 2007 (Q) Yunkaporta & McGinty, 2009 (Q)
5. Culturally responsive pedagogy; strategies that	Bazron et al., 2005 Morgan, 2010 Weinstein et al., 2004	Bondy & Ross, 2008 Hammond, et al., 2004 (Q)	Berry & Hudson, 1997 Christie, 1987a Garvis 2006	Hudsmith, 1992 (Q) Hughes et al., 2004 (Q) Malin, 1990b (Q)

prevent inappropriate behaviour.		McCarthy & Benally, 2003 (Q) Milner, 2008 (Q) Lewthwaite & McMillan, 2010 (Q) Winterton, 1977 (Q)	Harris, 1987a, 1987b Harrison, 2008, 2011 Ionn, 1995 Linkson, 1999 Osborne, 1996 Sarra 2011a West, 1995	Partington et al. 2001 (Q) Thwaite, 2007 (Q) Yunkaporta & McGinty 2009 (Q)
6. Proactive behaviour support strategies.	Weinstein et al., 2004 Monroe 2006	Bondy & Ross, 2008 Bondy et al., 2007 (Q) Boykin, 2001 (qP) Brown, 2003 (Q) Kennedy, 2011 (Q) Lewthwaite & McMillan, 2010 (Q) McCarthy & Benally, 2003 (Q) Ullicci, 2009 (Q) Weinstein et al., 2003	Appo,1994 Dockett et al., 2006 Garvis, 2006 Groome, 1995 Harrison, 2011 Hones, 2005; Milgate & Giles-Brown, 2013 Nichol & Robinson, 2010 Sarra, 2011b West, 1995	Hudsmith, 1992 (Q) Keddie et al., 2013 (Q)
7. Culturally appropriate reactive behaviour	Weinstein et al., 2004 Monroe, 2006	Baydala et al., 2009 (qP) Bondy et al., 2007 (Q)	Christie, 1987a Groome, 1995	Partington et al. 2001 (Q)

support strategies.		Hammond et al., 2004 (Q)	Guider, 1991	
		Kennedy, 2011)Q)	Harrison, 2008, 2011	
		Milner 2008 (Q)	Nichol & Robinson, 2010	
		Sheets & Gay, 1996 (Q)		
		Ullicci, 2009 (Q)		
		Weinstein et al.,2003		
		Weinstein et al., 2004		
8. Connections with families and community.	Michie, 2014	Glynn & Berryman, 2005 (Q)	Bamblett, 1985	Bond, 2004 (Q)
	Weinstein et al., 2004	Hammond 2004 (Q)	Budby, 1994	Keddie et al., 2013 (Q)
		Monroe 2009 (Q)	Clarke, 2000	Munns et al., 2013 (Q)
		Weinstein et al., 2003	Dockett et al., 2006	
			Guider, 1991	
			Milgate & Giles-Brown, 2013	
			Rogers, 1994	
			Shaw, 2009	
			Sims et al., 2003	

Note. Q denotes qualitative research; q denotes quantitative research; M denotes mixed methods research; qP denotes quantitative research using psychological measurement tools.

Chapter 3 Methodology

3.1 Introduction

Based upon the themes emerging from the review of the literature, this study sought to identify evidence-based practices in behaviour support that enhance the establishment of positive learning environments for Indigenous students. This chapter describes the methods used in the study. In section 3.2 the research questions are stated. This is followed in section 3.3 by a general overview of the progression and phases of the study. Section 3.4 covers the methodological approach. I then present a theoretical framework in section 3.5 and explain the context of the study in section 3.6, and participants in 3.7. In section 3.8 the phases of the research are explained in detail, then in section 3.9 the methods for data analysis and triangulation are explained. Section 3.10 covers issues of reliability, and section 3.11 covers ethical and cultural considerations. In section 3.12, the benefits of the study are restated. The chapter concludes with a summary in section 3.13.

3.2 Research Questions

The research questions, presented in Chapter 1, are:

1. According to Indigenous students, family members and staff working with Indigenous students, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved positive learning outcomes?

Informed by these results, the research then sought:

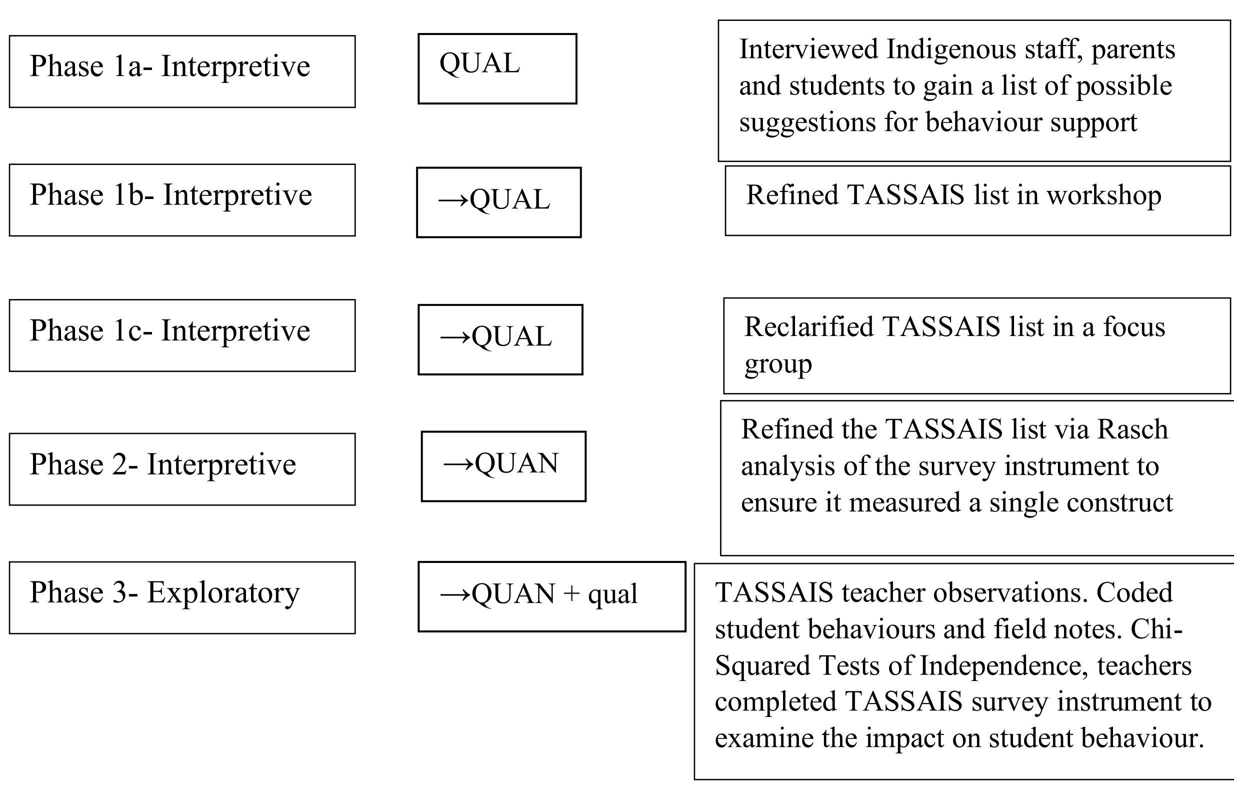
2. To investigate the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate).

3.3 Overview of the Phases

The study described in this chapter is a multiphase mixed methods study. The chronology of the research is illustrated in Figure 3.1 below. The symbols used in the second column of Figure 3.1 are those recommended by Creswell (2014).

Figure 3.1

The Phases of the Study



Note. Capitalisation e.g.: QUAL denotes more emphasis on qualitative method, lower case e.g.: qual denotes less emphasis on qualitative method, → denotes sequential method informed by the previous phase, + denotes convergent methods.

The phases will be discussed further in section 3.8.

3.4 Methodological Approach

A research or methodological framework clarifies the questions and subquestions that arise from an examination of the problem (Anderson & Arsenault, 1998). It includes decisions about the level of precision needed for each question and the nature of what is being described (Hammersley, 1992). Following Brannen (1992, p. 11). “[R]esearchers ought to be flexible and therefore ought to select a range of methods that are appropriate to the research problem under investigation”.

This study used a pragmatic (Hammersley, 2012), or Problem Based Methodology ([PBM]Robinson, 1998), which is a mixed method approach to investigate the research questions proposed. What distinguished this methodology from others was the way the nature of a problem informed the choice of data collection, analysis, and evaluation methods (Robinson, 1998). Here, the word ‘problem’ refers to the provision of education for Indigenous students, not the students themselves. PBM defines a problem as a goal that can

be achieved and it examines the constraints around the problem that impact on the success of implementation (Robinson, 1998). When there are more constraints around a problem, more structure is needed around the problem and a smaller range of freedom is available in how it might be solved (Robinson, 1998).

Pragmatic approaches commonly draw upon a mixed methods approach which is “a procedure for collecting, analysing, and ‘mixing’ both quantitative and qualitative research and methods in a single study to understand a research problem” (Creswell, 2008, p. 52). A researcher collects, analyses and mixes quantitative and qualitative data in a series of stages or in a single study in order to gain a better understanding of the research problem than one approach can give (Creswell & Plano Clark, 2007). “Results from one method type are intended to enhance, illustrate, or clarify results from the other” (Caracelli & Greene, 2008b, p. 233). Good mixed methods research allows for the investigation of a complex phenomenon (Truscott et al., 2010) by “demonstrat[ing] a symbiosis between the two methods resulting in support for each distinct yet complementary data source and analysis strategy” (Truscott et al., 2010, p. 324). “It is a purposeful and powerful blend intended to increase the *yield* of empirical research” (Truscott et al., 2010, p. 327). In this study, qualitative and quantitative methods were combined in a complementary way (Hammersley, 1992; Kervin et al., 2006) to produce multiple data sets and more in-depth understanding of the phenomenon under consideration, that being behaviour support strategies for Indigenous children (Brannen, 1992). In line with a pragmatic methodological approach, different approaches were used for different phases of this research topic (Brannen, 1992). The outline of the phases in this study, detailed in section 3.8, explains how each approach is used. By using qualitative interpretivist and quantitative positivist approaches, “[c]arefully designed mixed methods studies can be used to examine a collection of questions in ways that capitalize on their inter-relatedness” (Truscott et al., 2010, p. 325) and were recommended by Purdie and Buckley (2010). It is not simply the application of different data collection tools that makes a study mixed method. The quality of a mixed methods study is in the treatment of data and the use of it in interpreting and reporting findings (Truscott et al., 2010).

This research aspires to lead, ultimately, to a transformational methodological approach in the future. The list of attitudes and strategies identified in this study could be implemented in training with teachers to lead teachers to question and adjust their practice when teaching Indigenous students. Constraints and possibilities of PBM (Robinson, 1998) will be particularly relevant at that stage. Processes such as reflexivity (Bolton & Delderfield,

2018) could be identified that contribute to transformative teacher change. A PBM researcher seeks to map the relationships between the practices to be explained, the intended and unintended consequences of those practices, and the constraints that those practices satisfy (Robinson, 1998). In the process of problem formation, PBM researchers adjust their understandings of the constraints, their respective weightings, and their proposed solution strategies until they are satisfied with the degree to which they have been integrated (Robinson, 1998). The result is a theory of practice rather than a list of influences (Robinson, 1998). The key question to be considered for each study would be how much its methodology "engaged rather than bypassed the implicit theories of those who control the targeted practices" (Robinson, 1998, p. 25).

Phase 1 of the study was largely qualitative. This phase was the focus of Research Question One: According to Indigenous students, family members and staff working with Indigenous students, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved positive learning outcomes? Phase 1 focused on interviews to draw from teachers and students the classroom practices that provided behaviour support in a responsive way for Aboriginal and Torres Strait Islander students. Qualitative research seeks to make sense of social encounters as they occur in the classroom (Kervin et al., 2006). It examines holistic concerns rather than particular variables (Kervin et al., 2006), using a wide lens, searching for patterns of inter relationships (Brannen, 1992). It "provides insight into the subtle nuances of educational contexts and allows for the exploration of the unexpected that cannot be accommodated in quantitative approaches". (Kervin et al., 2006, p. 37). Qualitative data collection tools used in this study included semistructured interviews and focus groups. Semistructured interviewing makes the "private interpretations of reality public" (Burns, 2000, p. 424). It gives greater flexibility than closed ended interview questions (Burns, 2000) and greater time with the participant which increases the quality of the relationship (Burns, 2000). Importantly for Indigenous people, it uses language natural to the participant (Burns, 2000) and gives the participant equal status to the researcher (Burns, 2000). The interviewer must know the topic, and be in a "position to grasp new information and use it to pursue new directions" (Anderson & Arsenault, 1998, p. 191).

In focus groups "[a]n interviewer or moderator convenes a homogenous group of respondents to discuss a particular topic" (Jarrett, 1993, p. 186). A small group of people can share understanding where it is the interactions that yield meaningful information (Creswell,

2008). Focus groups can be used to inform the development of instruments if the researcher is willing to accept criticism and rewrite the questions (Barbour, 2007). A skilled moderator pays attention to group dynamics and activities in which the group engage (Barbour, 2007). Participants usually participate in qualitative research because they have a relationship with the researcher (Jarrett, 1993). In this study, relationships, time and effort were a key component of the interviews, focus groups and observations, similar to Jarrett (1993).

The interpretive qualitative Phase 1, which answered the first question was then followed by Phase 2, a quantitative evaluation of data from Phase 2. The quantitative phase began by refining and validating the list of attitudes and strategies, through Rasch analysis to support investigation of the second research question. A quantitative method "seeks to determine the relationship between variables and, particularly, cause and effect relationships" (Kervin et al., 2006, p. 36). Quantitative methods give greater "precision and control that give confidence over the results" (Kervin et al., 2006, p. 36) and can generalise results, which qualitative methods cannot. The researcher isolates and defines variables, using a narrow lens (Brannen, 1992). Quantitative research may be "too mechanistic to adequately capture the complexity of human behaviour" (Kervin et al., 2006), but combined with the qualitative methods in this study, may ameliorate that problem.

Phase 3 combined qualitative and numerical observations, and the quantitative survey (Appendix C). In Phase 3, the focus shifted to Research Question Two: To investigate the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate), and the development of the numerical tools in this study, mainly the TASSAIS observation tool (Appendix D), which recorded teacher frequency of use of the recommended attitudes and strategies, and time-based, coded observations of student behaviour as a behavioural checklist (Creswell, 2008). Participant observation is sometimes quantified (Bryman, 1992). In this way quantitative research can be descriptive, "seek[ing] to describe an outcome of interest and its patterns" (Kervin et al., 2006, p. 59). The advantage of using behavioural observations is that they record student and teacher actual behaviour (Creswell, 2008). These were coded observations of student behaviour every 20 seconds. Because the researcher should determine the reliability and validity of the observation tool (Anderson & Arsenault, 1998), the coded behaviour sheets are similar to those designed for functional behaviour assessment observations (O'Neill et al., 1997) which were used frequently in my daily work. Teacher use of Strategies and Student Time on-task were compared using Chi-Squared analyses. Each individual teacher and their

Use of Strategies in Themes were also compared using Chi-Squared analyses. In this phase, field notes taken when conducting observations helped to provide context for the data recorded. Field notes are "[t]ext (words) recorded by the researcher during an observation in a qualitative study" (Creswell, 2008) as well as notes from conversations. The reliability of the TASSAIS instrument is still being determined. An observer needs good attention to visual detail and listening skills, and to be able to build rapport with participants (Creswell, 2008). Ongoing relationships with the participants were key to observations of staff and students in Phase 3. The participating teachers were asked to answer the TASSAIS survey when observations were completed.

3.5 Theoretical Framework

As evidenced in the literature review, few, if any, of the behaviour support practices currently used in Queensland schools are viewed from a critical lens, especially in terms of questioning its appropriateness for Indigenous students. Using critical theory, and Bourdieu's thinking tools of 'habitus', 'field', and 'capital' (Houtson, 2002) as a theoretical framework, this study questioned assumptions about commonly endorsed and unquestioned approaches to Indigenous student behaviour support in Chapter 2. Pedagogy gives us a framework to link what we do in classrooms to wider social, political and economic forces (Giroux, 2006). "Critical pedagogy challenges the social, environmental, and economic structures and social relations that shape the conditions in which people live, and in which schools operate" (Kirylo et al., 2010, p. 332) and is the practical application of critical theory to education. It is based on the work of Freire (1970), (Giroux, 2006; Kirylo et al., 2010) and it engages with subjugated groups (Kirylo et al., 2010). It asks people to question how their actions support the dominant culture or create social change (Kirylo et al., 2010).

> Critical pedagogy attempts to understand how power works through the production, distribution and consumption of knowledge within particular institutional contexts and seeks to constitute students as particular subjects and social agents, It is also invested in the practice of self-criticism about the values that inform our teaching and a critical self-consciousness regarding what it means to equip students with analytical skills to be self-reflective about the knowledge and values they confront in classrooms. (Giroux, 2006, p. 31)

More importantly, for this study, which focuses on the needs of Indigenous students, the study sought a "[r]evolutionary critical pedagogy that recognises the importance of indigenous ways of knowing, as well as neoliberalism's threat to annihilate indigenous rights and oppositional narratives. Thus, it becomes a decolonizing pedagogy, seeking to revitalize and develop indigenous epistemologies" (Kirylo et al., 2010). In traditional 'banking models' of education, the teacher is the holder of knowledge which is distributed in a one way exchange with students (Kirylo et al., 2010). The authoritarian teacher assumes they know what students need without asking them or knowing their situations (Kirylo et al., 2010). Critical pedagogy recommends that teachers create conditions in which they learn with students (Kirylo et al., 2010). "All involved become active agents in writing their own histories, in reinventing themselves from what social conditions have made of them" (Kirylo et al., 2010, p. 333).

Bourdieu's theories around how human 'capital' is shaped across a variety of 'fields' aligns with the impetus for critical pedagogies and underpins this research. Bourdieu saw education as an agent of the dominant society - replicating social structure that would propagate class domination and social structures (Houtson, 2002). He describes three tools for thinking, or conceptual devices that help to explain his ideas (Dalal, 2016; Houtson, 2002). The first of these thinking tools is 'habitus' (Houtson, 2002). Habitus is the internalised social structure which is often unconscious (Houtson, 2002). It is a 'set of loose guidelines though which we interpret the world, strategise and adapt to situations' (Houtson, 2002). It is produced by the social world and helps to reproduce it (Houtson, 2002). Bourdieu suggests that we enhance our reflexive capacity, to better understand the impact of culture on ourselves and others (Houtson, 2002). This could be equated with developing cultural sensitivity, which is a version of empathy, which requires us to remain open to different experiences, and resist closure of that openness due to defensiveness (Houtson, 2002).

The second thinking tool is 'field', which was the way Bourdieu described the social world in which we function (Houtson, 2002). Like a fish in water, teachers may not know they have a culture as they are immersed in it (Dalal, 2016). Schools are the field in which children operate, learning to succeed in the dominant culture. Particularly relevant to teachers is the tendency to devalue that which is different from our own culture (Houtson, 2002).

The third thinking tool is 'capital', which has three components, economic, cultural, social, and a fourth 'symbolic' added later by Bourdieu (1984). A person's ability to succeed in a particular field is determined by the amount of capital they bring. The dominant cultures in a society possess a large amount of capital, and this allows them to succeed within the field of that culture (Houtson, 2002). Children coming to school possess varying amounts of the capital needed to succeed in the social context, or field, of school. As school is not a neutral field, it will advantage students from the dominant culture (Dalal, 2016). Students from a non-dominant culture lack the resources to stand equally with their peers (Houtson, 2002). They can internalise their own failure, blaming themselves for it. A heartbreaking visual example of this was when Dujuan fell asleep on his report card from school in a dejected state in the documentary *In My Blood It Runs* (Newell, 2020). Dalal (2016) critiqued the examination as a moment when differences in capital are evident. Students from lower classes are likely to 'eliminate themselves' from schooling rather than continually experience failure (Dalal, 2016). Schooling uses examinations as an educational norm, concealing the replication of the class system (Dalal, 2016).

For some Indigenous children entering schools, there may be subtle imposition of systems of meaning (Dalal, 2016) that the newcomer may not grasp. They must learn a set of hidden rules to succeed in this context, which puts them at a disadvantage (MacGill, 2016). As they are forming their 'place' in the schooling system, they may not see themselves reflected and valued which can lead to alienation (Rahman, 2012). Often, the problems that a child may experience due to lack of capital in the field of schools is seen as a failing on the part of the child or the home (Dalal, 2016).

This research is also relevant to Indigenous standpoint theory (Nakata, 2007b); that is, that "the social position of the knower is epistemically significant" (Nakata, 2007b). The goal is to search for objective knowledge though a 'critical examination' of the 'social order' in which the knowledge is produced (Nakata, 2007b), that is, the viewpoint of Indigenous people is paramount. Drawing on lived experience, this study asked Indigenous students, families and staff what works for Indigenous students, created a list of teacher strategies and began to investigate the effectiveness of those practices. Research for the study sought to make teachers aware of cultural differences and identified strategies that may assist teachers to support Indigenous student behaviour in ways that are culturally relevant to students. My position is at the cultural interface, from the standpoint of a non-Indigenous ally (Tatum, 1994).

3.6 Context of the Study

The research was conducted in Queensland, Australia. One school in the Queensland Catholic Education system and one school in the Queensland independent system were the sites of interviews with students, staff and parents and focus groups. The Catholic school is a primary school with Indigenous students as a minority of the school population. The independent school is a boarding school with 100% Indigenous student population in secondary. The list of teacher behaviours was compiled by a group of expert volunteer educators in Phase 1b in a room on the university campus and the focus group took place in the Catholic primary school (Phase 1c in Figure 3.1). The reduced list of teacher behaviours was evaluated by teachers in an online or face to face survey in Phase 2. Phase 3 observations took place in the same 100% Indigenous school from Phase 1.

3.7 Participants

As illustrated in Figure 3.1, the qualitative phase of the research, Phase 1a, included interviews with 20 Indigenous staff, 12 students and nine parents. The workshop group in Phase 1b included eight educators from mixed cultures. There were six women and two men. Four were Indigenous, both Aboriginal and Torres Strait Islander, and four were non-Indigenous, two of whom had extensive experience working with Aboriginal and Torres Strait Islander students in schools. The other two had some experience teaching Indigenous children in schools. Two were university lecturers. Other participants were staff from an Indigenous school included a head of primary, a counsellor, a teacher and a liaison officer. One was a tutor for Indigenous teacher education and one was an Indigenous Education Adviser for Catholic Education. The participants were divided into three groups of mixed culture, gender and experiences. The focus group in Phase 1c comprised two participants from one of the schools; a liaison officer and a teacher aide.

Phase 2 asked for online participation from 125 teachers contacted via social media and personal networking. Participants were grouped into three groups. Group A (64) consisted of those who answered the questions online (via Survey Monkey). These were mostly my professional acquaintances and their acquaintances, contacted via social media. Group B (21) comprised a group of teachers from a rural Indigenous 7-12 boarding school who completed the survey as a hard copy (as internet connections did not allow for multiple users). Group C (40) comprised a group of near completion Postgraduate Education students who also completed a hard copy of the survey.

Phase 3 focused on four volunteer teachers of years 4,/5, and 6 in the participating school who were approached, all of whom agreed to participate. Two were Indigenous classroom teachers; Teacher 1 (T1) teaching year 6 and teacher 2 (T2) year 4/5. Teacher 3 (T3) was a non-Indigenous Science, Physical Education (PE) and Digital Technology teacher and teacher 4 (T4), a non-Indigenous Art specialist teacher. Then, nine Indigenous children in year 4/5 and 6, who were taught by the participating teachers were chosen at pseudo random[3] from the class lists (see section 3.8.5). In year 6, there were three girls and two boys, in years 4/5 there were four boys and one girl chosen. These children were observed individually while being taught by each of the participating teachers. The students and the teachers did know who was being observed during each session. After the observations, teachers were asked to fill in the TASSAIS survey instrument. Phase 3 data was examined by a group of Indigenous and non-Indigenous peers to ensure that multiple viewpoints were included in the interpretation of the data.

3.8 Sequence of the Study

Further discussion of each phase will now include the question to which each phase refers, the participants, aims, tools for collection nature of data, and how data relates to theory (Brannen, 1992).

3.8.1 Phase 1a: Exploring What Works for Indigenous Students: Interviews

The aim of the first phase was to answer the question: according to Indigenous students, family members and staff working with Indigenous students, which behaviour support strategies contribute to a supportive learning environment and improved learning outcomes? This phase adopted an interpretivist approach to understand Indigenous peoples' voices in regard to their experiences and recommendations for teachers when supporting and managing Indigenous student behaviour. This phase of the study took place in two schools described in section 3.6. These sources included data from individual or paired face to face or telephone interviews with 20 staff, 12 students and nine parents or family members. Interviews were conducted by me, with coordination support from schools. As I was known to staff and students, a co-researcher was not needed. One school kindly liaised with parents, pre-empting a call from myself. The goal was to collect opinions from Indigenous

[3] The selection of students will be referred to as 'random' for the reminder of the thesis.

participants about what successful teachers do when supporting and managing student behaviour. Questions were planned to allow participants to reflect on:

(a) their prior informal (home) and formal (school) experiences learning behaviours,
(b) differences between expectations and behaviour learning experiences at home and school,
(c) what they would suggest teachers do to encourage behaviour they would like to see,
(d) what teachers are doing when student behaviour does not go well in their classrooms and,
(e) their advice for new teachers about how to support and succeed with Indigenous students.

Each participant was asked the questions and conversation was guided by the participant.

Interview data was recorded and transcribed, then coded using NVivo in the a priori themes (Ryan & Bernard, 2003) which emerged from the workshop process and the investigator's interpretation of the literature (Llewellyn et al., 2018) , with my prior understanding of the phenomenon under study (Ryan & Bernard, 2003). Interviews were discontinued when the data reached saturation (Creswell, 2012).

3.8.2 Phase 1b: Creating a List of Teacher Behaviours

In Phase 1b, suggestions made by the interview participants were recorded in a list and duplications removed. The resultant 150 items were copied, printed and cut into separate items to be condensed. Workshop participants were divided into three teams of mixed gender, culture and workplace, arranged into three groups labelled by colour. Participants reduced the number of strategies.

In the first two-hour session, the teams were asked to group the 150 items into their own themes. See Table 3.1. The teams came up with very similar themes to those that had emerged from the literature review. The whole group discussed the similarity of the themes and helped me to determine which ones were similar. I decided to keep the separate theme of relationship given the emphasis it had in the literature and the interviews. With suggestions from the workshop participants, the a priori themes that emerged from the literature review were slightly modified.

Table 3.1

A priori Themes Emerging from the Workshop

Theme	Blue	Black	Green	A priori
1	Teacher's awareness of self	Teacher reflection of own practice	Teacher self-reflection and monitoring and professional learning	Teacher's awareness of self and other in the context
		Cultural behaviour context		
2	Understanding the skills students need as they walk in two worlds	Cultural understanding	Cultural understanding	Know students and their cultures without a deficit notion of difference
3	Ethic of care/ values	Ethic of student care	Ethic of care	Teacher qualities
4	Ethic of care/ values	Ethic of care/ values	Ethic of care/ values	Relationship
5	Pedagogy	Classroom teaching strategies	Pedagogy	Pedagogy
6	Proactive behaviour management	Whole class prevention strategies/ behaviour management	Behaviour management	Proactive behaviour Support
	External supports			
	Social teaching	Student self-regulation support		
7	Reactive behaviour management	Management strategies	Behaviour management	Reactive behaviour management
	Crisis behaviour management			
8	Home and family	Family and home connections	101 Ethic of care and parent	Connections with family and community

In the second two-hour session, the teams were asked to cull the items from 150 to 80. With approval from my advisers, I had flipped a few statements to the negative in an effort to get survey participants to think, but that confused the team members, so they were flipped back again for this task. Similar items were stapled together or reworded so that they encompassed the same ideas. The teams also reworded items from 'the teacher should not', to 'the teacher should' to remain positive. Two participants were unable to meet at the same time as the others, so we met the next day.

The three groups of 80 items were collated by hand and combined into a final list of 80. With my supervisors, I made some decisions about sorting the items, for example, leftovers for each group. The green group had a theme 'teaching 101'- things that should be basic teacher practice. I distributed these to the other themes because if they were 'givens' that every teacher should have or know, the interview participants would not have felt that they should be mentioned. I also split the green group's general behaviour management theme into proactive and reactive to match the other groups and distinguish between the two kinds of strategies. My supervisors and I then worked on the list, tweaking the wording and reducing the items further to 71. Seven demographic questions were added at the end of the survey items, bringing the final number to 78. See Appendix C for the first pages of the TASSAIS survey instrument.

3.8.3 Phase 1c: Re-clarifying the List of Teacher Attitudes and Strategies

Phase 1c was a qualitative phase of the study. The refined list of teacher attitudes and strategies were taken to a focus group of two participant Indigenous staff in one of the target schools from Phase 1a to be checked. They discussed each item in-depth asking for additional words on four items, expressing a need for clarification. They suggested minor changes to wording for four items for example: from 'save face' to 'avoid shame'. Another suggestion was to clarify a statement about 'punishment' to join two items together to make the meaning clearer. Their concern was that avoiding punishment or consequences for Indigenous children may be interpreted as a lack of follow through. They requested an additional item about mutual respect, that teachers must respect students if they want to expect respect from students. When offered the opportunity to contact the research later if they had more to say, one liaison person commented, "You've covered everything. I'm more of a person who will read it and go, 'Nuh!'. When I read it now, it won't sit right [if it is wrong]" (staff member).

3.8.4 Phase 2: Validating the List of Teacher Attitudes and Strategies

The second and quantitative phase of this study sought to determine the reliability and validity of the list of strategies by analysis of the responses of 125 participants, using Rasch analysis. The questions derived from the findings of interviews with participants in Phase 1 were constructed into a survey instrument using Likert-type response options. Items 1-56 required a frequency of use answer, ranging from 'Almost never' (< 20% of the time), through 'Once in a while' (20-39% of the time),' Sometimes' (40-59% of the time),' Frequently' (60-79% of the time), to 'Almost always' (≥ 80% of the time). Items 57 to 71 related to personal development in understanding of Australian Indigenous cultures. These were answered using the five ordered response options from 'Strongly disagree' to 'Strongly agree'. Items 72 to 78 were demographic questions covering whether the respondent identified as Aboriginal or Torres Strait Islander or both, gender, initial teacher training (Early Childhood, Primary, Secondary), years of teaching experience, what years they are currently teaching, percentage of students in their classes who were Indigenous, and percentage of those Indigenous students in their classes who display behaviour they considered to be inappropriate for the school setting. In this phase, 125 respondents described in section 3.7 answered the 71 items. It was estimated that the survey took 30 minutes to complete.

Data were downloaded from Survey Monkey into a spreadsheet and I entered paper responses manually. Item groups were coded with a single letter to indicate to which theme they referred to, for example, P23 is item #23, a pedagogy strategy related to theme five, as demonstrated in Table 3.2.

Table 3.2

Coding of TASSAIS Items in Themes

Code	Theme Number	Theme Title
S	1	Knowledge of self and other and power relations in the socio-political context
K	2	Knowledge of students and their culture without a deficit notion of difference
T	3	Qualities of the teacher
R	4	Positive relationships
P	5	Culturally responsive pedagogy
O	6	Proactive behaviour support strategies
E	7	Culturally appropriate reactive behaviour support strategies
F	8	Connections with family and community

Two of the items (18 and 24) assessed the construct in the opposite direction and were reversed coded before being entered. Rasch analysis was chosen as it evaluates the capacity of the survey itself as a data capturing instrument to measure what you want it to, that is, the accuracy of the survey in its work of capturing intended data. I sourced an expert in Rasch analysis, Professor Trevor Bond, to assist. In this endeavour, I provided the raw data, understanding of the contexts, the participants, and the phenomenon under investigation. Professor Bond ran the analysis and provided guidance. Winsteps Rasch analysis software (Linacre, 2018) was used for the analysis. Together we interpreted the results.

3.8.5 Phase 3: Exploration of the Impact of Teacher Behaviours

The third phase of the study aimed to answer the second research question. That is, it explored the influence of these enacted behaviour support practices on student behaviours, specifically focusing on student on-task, off-task and student reactions to interactions with the teacher.

Two schools were approached to participate in Phase 3 of this study, one P-6 Indigenous school agreed to participate. The school principal and head of primary of a P-12 Catholic School agreed to participate and wrote emails of support for the application, but no response was received from the Catholic Diocese Office, despite attempts to follow up.

Before looking at the class lists, the principal of the primary school worked with me to choose numbers at random (for example, number 3, number 11 etc.), then used those numbers in the class lists of the two classes selected for the study to choose five students in each class to participate (for example, student number 3 and 11 were chosen before we saw the class lists). The principal arranged for a liaison officer to accompany me to the homes of students on two separate days. Nine families were visited, and all agreed that their child could be observed. A liaison officer sent an email to the mother of tenth child who was working during school hours. She did not reply. Once parent permission was obtained for the nine participating students, a liaison officer read the student information form and informed consent to students and all nine agreed to participate. The teachers did not know which students were being observed so the teachers were not influenced by that knowledge. Towards the last few observations T3 was aware of the one student whose observations were not complete because the observation depended on her presence in the class. The students did not know who was being observed at any given time.

A teacher observation tool was created (Appendix D) using the items from the TASSAIS survey instrument (Appendix C). The items were shortened to a code and arranged in themes so they could easily be identified. Tally marks recorded how many times a teacher used each item. I conducted a pilot phase with a doctoral student colleague to test the teacher observation form with a teacher who was not a participant in the study. In the second 15 minute observation, the volunteer observer and I both counted 83 strategies in 30 minutes, which gave me confidence that the observation tool could be used successfully, and strategies could be easily identified. In hindsight, I would have examined the recording of each theme more closely, as the themes became more important as data was processed. With further training, as is the case in a 4 Dimensions Observation (Blackley, 2022) or a Classroom Profile (Davidson, 2005), more rigorous definition of strategies can be achieved. At that time, I also decided to not include observations during playground duty, as conversations were less frequent and could not be heard. Also, because one of the teachers did not perform playground duty. During observations I decided not to use Physical Education lessons in the sports hall for similar reasons; it was not possible to hear interactions without being intrusive.

As primary researcher, I observed T1, T3 and T4 with year 6 in 30 minute observations for three hours total. I also observed T2, T3 and T4 with year 4/5 in 30 minute observations for three hours. Sometimes two or three observations were done on the same

day at different times of day. Each teacher was observed on three or more days to remove the chance of the data being skewed by the teacher having a bad day.

When the teacher observations were complete, I observed each student with the three teachers for three twenty-minute sessions, each one on a different day. The student observation tool recorded, in twenty-second intervals, on-task/ off-task behaviour, with a positive or negative outcome for students following interactions with adults (Appendix E). The positive or negative aspect of the interaction with an adult was judged by the student facial affect, body language and verbal responses. Whether a student was on-task or off-task was determined by whether the student was cooperating with teacher requests and focusing on the task. Occasionally a student was working on a task, but not watching the teacher as requested. These intervals were judged to be off-task if the teacher had specifically requested attention on the board. These intervals were judged to be on-task if the student was finishing his or her work and the teacher was paying minimal attention to the fact that the student was not yet watching the board as directed. Field notes were fleshed out and added to a journal within 24 hours to record events as detailed vignettes.

The school day contained five timetabled lessons. The timing of the lessons is shown in Table 3.3.

Table 3.3

School Timetable for Phase 3

Lesson	Start and Finish Times
1	8:40- 9:50
2	9:50- 10:45
3	11:45- 12:45
4	12:45- 1:45
5	2:05- 3:05

The student observations were carried out mostly in lessons 3 and 4 to gain some comparability while operating within the school timetable, though a few observations were in lesson 2. Lessons 1 and 5 were not observed. I was usually able to conduct three observations in each one hour lesson. The total count of observations for each student was 180.

Differences in task were not constrained. It depended on the lesson the teacher had planned, including, working on the computer, reading, writing, maths, drawing and painting.

When observation data was completed, the four participating teachers were asked to fill in the TASSAIS survey instrument (Appendix C. See Appendix F for a full list of items), which measured teacher self-reported perception of the frequency of their use of the behaviours on a rating scale (Creswell, 2008). Their responses were labelled T1, T2, T3 and T4 in the data and added to the Rasch analysis from Phase 2.

3.9 Data Analysis

Data analysis for each phase was separate; integrating through narrative (Fetters et al., 2013), with some integration during interpretation (Creswell, 2014; Fetters et al., 2013). Phase 1a interview data was transcribed and coded using NVivo in the a priori themes (Ryan & Bernard, 2003) which emerged from my interpretation of the literature (Llewellyn et al., 2018), and my prior understanding of the phenomenon under study (Ryan & Bernard, 2003). This data produced a list of teacher attitudes and strategies that support Indigenous student behaviour, which were supplemented by suggestions in the literature review. The list was condensed into a smaller list of observable teacher behaviours with my supervisory team.

Phase 1b data analysis was described in section 3.8.1. Themes decided by each group were recorded in Table 3.1, along with the a priori themes from Chapter 2. A priori themes come from: the characteristics of the phenomenon being studied; from already agreed on professional definitions found in literature reviews; from local, commonsense constructs; and from researcher's values, theoretical orientations and personal experiences (Bulmer 1979; Maxwell, 1996, Strauss 1987). In this case they emerged from: the literature data; the investigator's prior theoretical understanding of the phenomenon under study; colleague consensus (an a priori approach) (Ryan & Bernard, 2003); and the interview data (an inductive approach) collated in the workshop by separate groups then agreed upon. This is a form of member checking, increasing validity of those themes (Creswell, 2012). The fact that participant data was able to be grouped in the themes supported their validity.

As related in section 3.8.3, in Phase 1c, the trustworthiness of the interview data, and the list of behaviours was checked by a focus group (Thomas, 2006), which was useful for clarifying data and the development of the instrument (Barbour, 2007). Focus group data was also analysed using conventional content analysis (Hsieh & Shannon, 2005). Possible disagreement or strategies missing from the list were noted during this discussion so that

Indigenous voice was central to the study and validity was increased (Creswell & Plano Clark, 2007).

In Phase 2, the list of teacher behaviours was tested for verification (Brannen, 1992). Quantitative data was analysed by Rasch analysis, and the instrument refined through that process (further details in Chapter 5). Chapter 5 describes the removal of four items and resultant evaluation that the TASSAIS survey instrument measured a single construct.

In Phase 3, the enacted teacher behaviours were observed in the classrooms to examine their effect on student behaviour. The frequency of the teacher use of the strategies were collated in an excel spreadsheet forming the teacher data. This gave a total number, but also a breakdown into teacher use of strategies in the themes as described in Chapter 2. Student data was compiled in two excel spreadsheets, one for each class, with totals of on-task, off-task, and positive-negative reactions from students after engagement with each teacher. Teacher use of TASSAIS strategies observation data and student observation data were processed through Chi-Squared analyses and supported by statistical counts of teacher-student contact and field note observations, including vignettes. How each teacher used the strategies grouped in the a priori themes was also examined through Chi-Squared analyses.

The TASSAIS survey data from the four teachers was added to the Rasch analysis of the survey data from Chapter 5 and their position on the Wright Map, and fit statistics recorded. This acted as a self-perception rating tool, with an ordinal scale, using an expressed rank order indicating teacher frequency of use (Creswell, 2008). This made possible comparisons between teacher self-assessment opinion, observations of frequency of use of the strategies recorded by the researcher and field note evidence in the relating of behaviour incidents (Bryman, 1992).

I hypothesised that there would be a relationship between teacher use of the strategies and student time on-task. After collecting the data, I sensed that teachers had a style; that is, they preferred certain themes. This realisation prompted deeper investigation into teacher style (Brannen, 1992).

Data triangulation is the use of multiple data sources in the study of some aspect of human behaviour (Burns, 2000). It is an attempt to explain the complexity of human behaviour by looking at it from multiple points of view (Burns, 2000). It adds verification and validation of data by examining the consistency of findings generated by different methods (Anderson & Arsenault, 1998; Burns, 2000; Kervin et al., 2006).

Four data sources were combined through narrative and visual representations in Phase 3. These sources were:

(1) numerical data from observations of teacher use of the behaviours in themes,

(2) numerical data from observations of the count of student on-task behaviour and student contact with staff,

(3) field notes and vignettes about particular incidents and conversations and,

(4) teacher self-report of frequency of use of the strategies in themes.

Data from the Phase 3 Chi-Squared analyses includes graphs of actual and expected counts, searching for differences which would indicate some association between the groups of data.

3.10 Issues of Reliability and Validity

Validity, reliability and generalisability are issues of concern in qualitative research because usually a small number of participants are involved (Kervin et al., 2006). These issues were reduced by including a quantitative phase and several sources of data, as evidenced in Phases 2 and 3. Internal validity comes from meticulous record keeping of all sources of data (Anderson & Arsenault, 1998). Phase 1 data was processed through NVivo, coded using the a priori themes. Data sets in Phases 2 and 3 were recorded and interpreted with my supervisors. Phase 2, through Rasch analysis (Bond & Fox, 2015), helped to address issues of validity and reliability by combining quantitative data with qualitative understanding to refine the list of suggestions made in Phase 1. In this way, Rasch analysis can measure construct validity and whether the items contribute to a single construct. Phase 3 data combined multiple sources. Validity is much improved through the use of multiple sources of data for each question because "[w]ith proper triangulation it will be difficult to refute conclusions which follow logically from multiple data sources" (Anderson & Arsenault, 1998, p. 150). Investigator triangulation was satisfied when Phase 3 data was shared with five critical friends who work in Indigenous education, four of whom are Indigenous.

Seeing the data from different collection methods allows evaluation of the consistency of findings (Burns, 2000) and a coherent analysis (Kervin et al., 2006) which comes closer to reflecting the multiple realities of social relationships (Burns, 2000) as an attempt at validity (Anderson & Arsenault, 1998). This kind of triangulation also helps prevent the investigator relying too much on internal impressions (Burns, 2000). By collecting data over time, not

reliant on a single incident or day, the data accessed a variety of times. Using multiple data sources and times allowed sensitivity to the lives of people who might be affected by the results (Anderson & Arsenault, 1998). It also gave more depth to the data (Anderson & Arsenault, 1998) and reduced limitations. Mixed methods research allows checking and "prevents the investigator from accepting too readily the validity of initial impressions" (Burns, 2000, p. 419). This was certainly useful with the accuracy of the Chi-Squared analyses.

Reliability refers to the consistency of measure to produce similar results in subsequent measurements and generalisability is the ability of the findings to apply to other contexts (Kervin et al., 2006). In Phase 2, using quantitative methods does provide validity and reliability to the outcomes for the survey. As this study is small in scale, restricted to two schools in one rural town, and had one observer for Phase 3, overall reliability and generalisability is not demonstrated in this study.

3.11 Ethical and Cultural Considerations

This project was conducted with ethics approval from the Human Research Ethics Committee at James Cook University (JCU). The James Cook University Human Research Ethics Committee gave approvals at each phase. The approval numbers were: Phase 1: H6487; Phase 2: H6776; and Phase 3: H7420. As this study was conducted in schools from the Independent Schools Queensland and the Catholic Education systems, ethics procedures were obtained and followed with the two systems. The main ethical consideration was informed consent, ensuring the welfare of participants, and confidentiality and anonymity.

Research protocols for working with and for Aboriginal and Torres Strait Islander peoples was a major consideration for this project. To ensure preparation for this research, I attended both the cultural awareness workshop and the 'Research Protocols for People Conducting Research with or for Aboriginal and/or Torres Strait Islanders Peoples' offered by JCU. Also, the Diocese of Townsville Indigenous Education Committee, the steering committee for the larger Australian Research Council project, initially guided the research interpretations and decisions. One of the education advisers remained in touch throughout the project. I had worked in the field for 15 years and 'broken bread' with colleagues and friends for that amount of time prior to the commencement of the study. I also aimed to be sensitive to the cultural inappropriateness of asking a series of questions, particularly outside of a close relationship. Cultural sensitivity and adjustments to protocols were adjusted as needed; these

included flexibility of location and timing and friendly banter to create a relaxed, informal connection. My prior contact with both schools helped to provide familiarity with the staff and students. I remain humbled and grateful for the input from elders, students and colleagues who shared their time and stories with me.

Drawing upon Indigenous methodologies outlined by Smith (2012), this study could be described as 'reframing', which is related to defining the issue and deciding how best to proceed, in contrast to the usual blaming and paternalistic manner. Later phases of the study also covered 'creating' and 'sharing', to use collective creativity to produce solutions to problems to be shared for collective benefit (Smith, 2012).

3.12 Benefits of the Research

The intent of this study is to provide the necessary foundation to open discussion into behaviour support strategies that work for, or at least better support, Indigenous students. I am also trusting that:

1. The research will encourage increased teacher awareness of their place in the socio, historical, political context of education in their local area.
2. The research will encourage teacher understanding of the cultures of Indigenous children and proactive connection with their families.
3. The research will encourage increased teacher awareness of their interaction behaviours with Australian Indigenous students.
4. The research will provide an evidence-based list of teacher behaviours to support Australian Indigenous students and add to the literature used to support practice in schools.
5. Further research will be conducted, leading to a more robust quantitative measure of the effectiveness of the tool.

3.13 Conclusion

This chapter has outlined the mixed method research framework used for the project and has discussed the various methodologies used to collect data. The chapter detailed the phases of the research, participants and contexts. Chapter 1 introduced the study, Chapter 2 provided the literature review and Chapter 3 detailed the methodology used in the study. Chapter 4 will present qualitative results. Chapter 5 will present the quantitative results.

Chapter 6 presents the results of Phase 3 and Chapter 7 presents discussion, limitations and recommendations for further research.

Chapter 4 Behaviour Support Strategies Perceived to be Contributors to a Supportive Learning Environment and Improved Learning Outcomes

4.1 Introduction

This chapter presents data from the first phase of the research that examined participants' views of the attitudes and actions perceived to support Indigenous student behaviour in the classroom. The data presented answers the first research question: according to Indigenous students, family members and Indigenous staff, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved learning outcomes? The findings from this chapter were then used in the development of a list, initially for a survey instrument, which was refined and recorded in Chapter 5. Then the list was formatted as an observation tool to record teacher behaviour support practices, described in Chapter 6. Chapter 7 presents the discussion of findings.

As described in Chapter 3, once the parent, student and teacher/education worker/school leader interviews were transcribed, thematic analysis was conducted taking into account the a priori categories (Ryan & Bernard, 2003) that were identified through the literature as presented in Chapter 2. Although these categories informed the analysis, I was not confined by these categories, and was open to other themes that might surface through the interviews and subsequent analysis.

In Section 4.2, the qualitative findings from the interviews with students, staff and parents are presented. Unless otherwise stated, scholarly reference will draw from Australian research pertaining only to the Aboriginal and Torres Strait Islander context. Section 4.3 contains discussion of the qualitative results.

4.2 Qualitative Findings from the Interviews With Students, Staff and Parents.

This section presents the eight themes generated from interview data specific to behaviour support.

4.2.1 Theme 1 Knowledge of Self and Other and Power Relations in the Socio-historical Political Context

The first theme evidenced in the data reflects the socio-political context, often from a historical perspective, and its influence on Aboriginal and Torres Strait Islander student behaviour. This theme was discussed in detail in Chapter 2. International research suggested that teachers need to be aware that schools exist within an historical and political climate

(Bondy et al., 2007). Teachers need to understand their place in this context, their awareness of the resultant power relationships and the effects of a deficit notion of difference (Bishop et al., 2007; Milner, 2008; Milner & Tenore, 2010; Monroe, 2009; Schlosser, 1992; Sheets & Gay, 1996) or an educational apartheid (Rose, 2012). Australian and international literature supported the notion that this historical and political climate may influence student behaviour and the perceptions of staff, parents and students (Bondy et al., 2007; Monroe, 2009; Osborne, 1996). In the Australian context at the whole school level, culturally responsive schooling requires knowledge of the historical and political context. This includes Keddie et al. (2013) who warned against cultural reductionism when treating other cultures as different against a white norm, Hughes et al. (2004) who recommend focusing on individual strengths rather than making generalisations based on cultural background, and Rahman (2010) who discussed the 'hidden curriculum' of schooling.

There is a long history of discriminatory policy and practice for Australian Indigenous students and it is necessary that behaviour is dealt with equitably (Lester, 2016). As members of the dominant culture, teachers need to bear the responsibility of meeting the needs of Australian Aboriginal learners in their care (Simpson & Clancy, 2012). For individual teachers, awareness of self and other within the Australian context was highlighted in the research literature (Malin, 1990a; Partington et al., 2001). When teachers understand the history and power relationships, they are more likely to approach students with understanding (Perso, 2012; Pinto, 2013). Most teachers are non-Indigenous middle-class people, and many have no previous exposure to Indigenous cultures (Craven et al., 2007; Lowe, 2017).

As shown in Table 4.1, this knowledge of the self and other in the context of historical, societal and political influences was not often referred to by students and parents, but, in contrast, staff, particularly staff members who had experienced recent family histories of tragedy as a result of colonialism referred to this issue frequently.

Table 4.1

Knowledge of Self and Other and Power Relations in the Socio-Political Context

Students	Parents	Staff
The place of schooling in their lives	History of colonisation	Historical hurts are current
	Social context and change	Social political context
		Breakdown of cultural values and impact on children
		Awareness of the microscope
		Impact of selected teacher loyalties

4.2.1.1 Students' Comments.

With reference to the importance of education to the social context, one student participant stated,

> Sometimes the kids don't realise. They don't realise nothing like, they realise they at school and they're doing work, but they don't realise what the work will take them. They don't realise that the school will take them to another level… They don't realise that... so it's best to make them realise you know you can be this person, you can be anything you want, but at the moment they're not looking very good so they just seem, there's no[t] anybody here like exemplar. An exemplar for them. (Senior girl)

Like the adults interviewed, this girl could see the value of education for Indigenous children in the current social and political context. Education can be a way for Indigenous children to achieve their goals and she mourned a lack of Indigenous role models. She identified an apparent lack of students' awareness of the importance of education and the opportunities it provides. The lack of similar comments from other students supports her claim that within their immediate social context of their current school, students were not valuing the opportunity of education.

4.2.1.2 Parents' Comments.

The socio-political context was referred to in several ways by parents. One parent directly connected student behaviour to the historical context by explaining that students' response to their educational experience may be influenced by the larger context of the history of colonisation. As the parent stated,

> Well of course, with any Indigenous kids; you raise your voice, they're going to raise it back. A lot of Indigenous kids react better to other Indigenous people. As in teacher. When it's non-Indigenous, and they raise their voice, of course they're going to get a negative reaction. (Mother)

When I questioned her further, she agreed that this was due to history. Another parent reminisced about her schooling experiences, detailing physical punishment meted out by the nuns at the school she attended and stressed that it was not a "good way" to do behaviour "management".

A third parent reflected on changes in society, a growing lack of respect for elders as a result, and resultant changes in student behaviour at home and at school. When she was a child, if she was spoken to by an adult, she related,

> I instantly felt ashamed and stopped doing what I was doing but nowadays the kids are like, 'oh, get F'd'… You couldn't spank your kids and now I think a lot of parents gave up and just didn't keep up with discipline of kids and then that along the way our kids have lost respect.

This parent also suggested that teaching in the school may be a culture shock for new teachers unless they have taught in a remote Aboriginal community because "The kids may be born here but they still suffer the same social issues as they kids at home, as they kids do in Aboriginal communities and it's sort of like a different lifestyle isn't it?" (mother). She highlighted that teachers need to be aware of the social context in which students were situated.

4.2.1.3 Staff Comments.

Staff made reference to the social/political/historical context in several ways. Most commonly, staff mentioned the socio-political context, stressing that teachers need to be aware of the history of colonisation and protocols in their local area:

> Well, at least understand our history. At least understand - have some sort of knowledge, don't just walk in not knowing a thing and expecting miracles. Yeah, they need to be brought up to speed, maybe put through like a cultural awareness thing. (Liaison officer)

> Definitely need to learn a bit about history. 'Cause there are people that know stuff but actually really have no idea; and yeah, they like to think they do but… not accept, but acknowledge Indigenous people. In meetings, 'I would like to acknowledge the traditional owners'. I think Indigenous people want to be recognised and accepted and just the recognition that they were here. (Different liaison officer)

Two staff members thought that Indigenous children may be unfairly targeted and stopped by police in the local community. For the children she observed, their social context meant different treatment from non-Indigenous children when they were out riding their bicycles in a group.

One staff member related a tragic personal family history and emphasised that for Indigenous families, past historical hurts are current. This may influence parent and student perceptions of schools,

> [Historical hurts] are very real and very recent. They [stolen generations] are alive today and these are in a lot these children's homes. They were taken from homes and made to be educat[ed], made to do this and made to learn and it probably was against their will. So, for them they probably wouldn't be able to sit and tell their child, 'yeah, go to school because it's good and do this' because they've had bad experiences… People just think. For some reason people seem to think it happened so long ago and like I said they always say, 'Oh! get over it, get over it, move on'. I give it [gave] up my last job, one of the managers who was Indigenous she was saying you know, 'It's time to move on and forget about the 'L-O-R-E' and bring in the 'L-A-W', you know, like that 'L-O-R-E' that's the past and that's gone and I'm like, 'No, that's in here', I said, 'that's with us all the way' and she's like, 'no'. I'm thinking 'Oh my God you're obviously very mainstream'… Like it's hard 'cause my family was from [an island]. You don't see any Indigenous people on there anymore. It's just all tourists and when I went there and I

> stayed in the [Island's] Hotel. They had a tour thing that I went on. And in the whole tour guide, they didn't talk one thing about Indigenous people, it's just like 'this is the island', 'this is here and this is there'. And I'm thinking, they don't talk anything about it probably because the history is so gruesome, you know they just massacred so many of them you know. Like thousands of them, pushed them out to sea and let them drown. You know, as I said I have a great uncle, like I said, he was old when he told the story. (Liaison officer)

Her great uncle and his sister hid in a tree trunk as children and were the only surviving members of their people. For this staff member, historical acts of colonialisation resulting in tragedy are both real and recent. Teachers need to know the history of their locality and students and understand the impact this history may have on the behaviour of their students and reactions of families.

Several staff mentioned the impact that colonisation has on children's cultural values. One teacher stated,

> I think part of that is, if there's, you know, there has been a breakdown in the traditional knowledge system, where there's been no elders involved in their upbringing or key people that are showing them the correct way to behave in the cultural Lore, you know? And they stay disconnected and they struggle between who they are and where they stand. [Some example behaviours are] defiance; defying authority figures; not wanting to be told. [These come from a] breakdown of culture. (Teacher)

Another teacher also identified that school employees should know that past research into Indigenous cultures has not been appropriate. As a result, staff must be aware of being respectful and concerned for the student, rather than curious from a colonialist perspective. This teacher stressed that students should not be *"*put under the microscope*"*, meaning that curiosity from non-Indigenous staff about culture is inappropriate.

> Now kids tend to be put under the microscope in terms of when non-Indigenous want to find out about Indigenous issues, too much under the microscope. Where they are over questioned. And I know that a couple of teachers here, they tend to do that, and the kids wanna just back off and they shut down. They don't want to say any more and that's understandable because they're just put under the microscope. (Teacher)

As well as non-Indigenous staff viewing students and their culture with superiority, this teacher also inferred that it was inappropriate for staff to hold an attitude of curiosity. Instead, teachers should demonstrate a respectful willingness to learn and understand in order to support children.

Several staff drew attention to how a teacher saw themselves in, or attached themselves to, the culture in their community. While non-Indigenous staff were appreciated for learning about the culture, evidenced by praise from teacher aides and liaison staff for those who have done that, it can however, be challenging for a teacher to immerse themselves in the culture while negotiating the inherent difficulties in that process. For example, one liaison officer raised a topic that did not come to light in the literature review. He warned that teachers need to be aware of where they place their loyalties at the cost of all students feeling welcomed in their classroom, "Being adopted by an Aboriginal person doesn't mean you know every Aboriginal person. They [non-Indigenous staff] come from privilege but because they got adopted into this [culture] and they sort of [think they know]". This liaison officer said that non-Indigenous staff need to be aware of whose country it is, and he implied that teachers should understand their limitations. He went on to explain how such cultural adoptions could create difficulties for students in this school context, which has a mixture of cultures:

> I feel that the teachers need to drop this – they've got to get away from this adoption stuff because it's causing favourites. The thing is, all the other kids can see it and it's so terrible... you've got to be transparent here. You can't have favourites. (Liaison officer)

This liaison officer discussed how Indigenous staff who are not immersed in their culture may be able to help. "There is a difference [between] being black [and] looking black but you don't know anything, so you haven't got much to offer bar you just being there" (liaison officer). The implication was that non-Indigenous staff and Indigenous staff who were not connected to their culture should seek advice from local leaders.

4.2.1.4 Discussion.

While the first theme was not mentioned by all participants, it was of paramount importance for those who did refer to it. Parent and staff comments that were supported by literature included that student responses to corrections by staff may be influenced by the history of colonisation and teachers need to be aware of this (MacGill, 2016; Partington et al.,

2001). Staff said that teachers should be aware of how colonisation caused historic tragedy and breakdown of traditional cultures has impacted Indigenous children and the impact that the context may have on the perceptions of the teacher, the behaviour of the students and student perceptions of teacher behaviour (MacGill, 2016; Partington et al., 2001). They also said that respect and awareness should be shown by acknowledging traditional owners in meetings. Further, inappropriate curiosity from staff can put students under inappropriate scrutiny as happened in the past (Nakata, 2007a). This theme is foundational, in that it is where non-Indigenous teachers have the opportunity to grow their understanding of the historical context and appreciation for our Australian Indigenous cultures. One student related educational opportunities to student participation in mainstream society, commenting on the value of schooling and her disappointment in other students not realising this while they were being given an opportunity. While most conversations from participants had been alluded to in other literature, one was not. A liaison officer stated that staff should be aware of adoption protocols on other peoples' lands and any resultant feelings of exclusion for some students. If non-Indigenous teachers are unaware of historical and socio-political influences, they may make unwitting errors.

4.2.2 Theme 2 Knowledge of Students and Their Culture Without a Deficit Notion of Difference

Having knowledge of students and cultures without holding a deficit notion of difference, that is, deficit thinking, dominated discussion with all participants. Having knowledge of students and backgrounds was commonly stated as a first recommendation for a new teacher coming into the school. All categories of participants suggested that new staff access cultural awareness training and get to know students. This knowledge was seen as important so that teachers could understand differences between home and school; with attention to family socialisation processes and the ways that behaviour was taught at home. Participants listed ways successful teachers used to get to know students and their cultures and identified particular cultural differences that teachers needed to understand.

Table 4.2

Knowledge of Students and Their Culture Without a Deficit Notion of Difference

Students	Parents	Staff
Need for cultural awareness	Need for cultural awareness	Need for cultural awareness
Knowledge of students	Knowledge of students	Knowledge of students and various cultures
Differences between expectations school and home	Differences between expectations school and home	Differences between expectations school and home
Previous experiences	Knowledge of what is happening at home	
Traditional ways to teach behaviour	Traditional ways to teach behaviour	Traditional ways to teach behaviour
Cultural differences	Cultural differences	Cultural differences
	Touch	Autonomy
	Cultural responsibilities	Cultural responsibilities
Shame	Lore	Lore
	Shame	Shame
		Code-switch language
		Gender roles- Torres Strait Islanders
	Body language	Body language non-verbals
	Respect for elders	Respect for elders
Misunderstanding		Misunderstanding
		Deficit thinking/biases

4.2.2.1 Students' Comments.

All students said teachers should get to know students individually and learn about their culture. One senior girl advised, "From my understanding, he or she has to get used to the kids first. Well, like where they are; where they come from, what kind of culture they have and [some] of their personality". This student also recommended that a new teacher get to know the unofficial student leader in each community group. This is a strategy which might help teachers to understand how cultural practices might assist them to support students. An unofficial group leader might be able to advise or help teachers. A primary student advised that a new teacher should get to know students and their culture by talking

about the songs they sing. A new teacher, "needs to know what we do and what we sing and talk about and what kind of songs we sing. Because our culture is about the animals that we want in our arms and all that". Another primary student recommended that teachers know a student's background. "She would need to talk to them and need to see what they've gone through, stuff like that…like gone through at home. They need to know that they've a hard – that they get hard times and stuff". All students saw this theme as a priority.

In regard to the importance of socialisation processes, some students gave examples of how expectations at school may be different from home, which drew attention to how Indigenous students may need to code-switch for behaviour because of differing behaviour expectations between home and school,

> Like for some of the boys you know, like they get pulled out of the community and come up here. They're used to hunting and spearing you know, and they're not used to education you know. You gotta think about it you know? They're bored, them mob are bored 'cause you know… (Senior boy)

This boy recommended that teachers become aware of these differences. Some students also talked about how they are taught behaviour at home, having behaviour explained to them and then consequences put in place like losing time on technology. Others, particularly Torres Strait Islander students spoke about respect for elders.

> We are not allowed to talk back to our mother and fathers, or our aunties or our uncle. We are not allowed to, and we are not allowed to - so if our grandmother or our grandfather tell us something to do we have to do it. 'Cause that's our grand, you know, we have to respect that. (Senior girl)

One primary student spoke about how a teacher with cultural understanding would ask a question differently from an unaware teacher to avoid shaming a student, "So, if a kid didn't bring their lunch the teacher would say, 'Hey, that's no problem. We'll do an emergency lunch'. Yeah, like most teachers will ask, 'Why didn't you bring lunch?', or stuff like that". Discussion of teacher awareness of students and their culture was common in student conversations. An unaware staff member might embarrass students with such a comment and tone, which would decrease the likelihood of them attending school. Removing a barrier to education, such as not having lunch, without 'shame' demonstrated cultural understanding.

4.2.2.2 Parents' Comments.

Many parents advised that a new teacher should know, "the culture and the behaviour of the children", and one parent stressed that teachers consider the individuality of students.

> [I]t's finding a strategy that works in that particular situation. There's no right way and no wrong way. It's actually knowing how to handle that kid, you know, suited to their needs and you know if you know them. The teacher should already know what works and how to talk to them by then so it's easier for them to deal with them. …. because just like any other culture, everybody's got different upbringings no matter where they come from and saying that they could come from the same community and still have different upbringings.

Participants inferred that if a teacher knew each student, they would know how best to manage that student. When asked how children are taught at home, parents gave a variety of responses. They spoke about setting expectations, giving boundaries, being consistent, enforcing limits and giving responsibility to the child.

Parents also indicated that sometimes home can have different expectations which led to difficulties for children in adapting to behaviour expectations at school,

> … and it's really hard when… to expect a child to come into the classroom and behave a particular way, when outside of the classroom they're free to do whatever they want. And we as schools are expecting kids to come in and behave in… Sometimes I think it's unfair that you know there's no structure, no discipline in the child's life at home or even out in society and then we expect them to be different; act a different way in schools. it's not fair to the child because they ... I mean as a parent; consistency is the best way of disciplining your children. Being consistent. No, you cannot do that. Yes, you can do that, if you do this.

Parents listed some cultural differences in the way students behave, "Well that's just common knowledge... the protocol that the older sibling looks after the younger ones. If there is a conflict the older one will always be involved, because in our family they have to protect the younger ones". Such cultural protocols may be useful to teachers when supporting student behaviour. They may also be misunderstood if older students intervene. Another difference in the way children learn behaviour that was mentioned by parents is the use of touch,

> A lot of children, they're really touchy. So, they like, you know, the closeness of holding hands, you know, maybe touching their hair. They get a little bit clingy sort of thing, but that's just their way of building a relationship.

Parents mentioned cultural responsibilities, about which teachers might be unaware,

> When it's like our family business time, which is like a grief in the family, a loss. They'll be absent for sure because we take our funerals very seriously. And regardless that they're children, they are still expected to be at funerals, especially if they're really close. Sorry business time is real important. It's a matter of a teacher working around them, you know, with loss of lessons and stuff.

Parents recommended that teachers know the culture and use that knowledge to meet the needs of children who are undergoing cultural sorry business.

Communication using body language may be new to teachers. One parent stated that teachers would benefit from learning to read some of the symbolic body language that students use, and that it may differ from community to community.

> Unless you're aware of the body language, the facial expressions, it can be hard to... yeah. I mean I've walked out and probably because I've grown up in an Aboriginal community you know I've walked outside and I've noticed straight away that there's two boys giving each other the eye... The body language, um that may be hard to learn though unless you're actually with um say our kids quite a lot. I would hope that say our boarding staff would be able to pick up on it a lot better because they're you know right in there with the kids.

Critically, parents discussed the cultural difference of 'shame' through being singled out,

> and this is probably something that's more um that affects Indigenous kids more than non-Indigenous kids is singling out. If you single out someone because they're - they've done something that they shouldn't have; in front of a crowd. Even if they were in the wrong. Um, just the act of singling them out seems to just put them off forever. They'll never trust that person again. They'll never connect with that person. I don't know why? It's the shame

> thing. It is something that just affects Indigenous kids a lot more than say a non-Indigenous student.

Another parent expressed the same idea, "some of the kids are big shame job. Working with them, not make shame and things like that?" All parents recommended that teachers gain cultural understanding to help them interpret and support student behaviour. The cultural difference of shame or being singled out was commonly mentioned.

4.2.2.3 Staff comments.

When questioned about what staff need to know, all staff spoke in detail about the need to know students and their cultures, for example,

> Like cultural awareness class, or some items, just to break it down to them, so they will understand how black kids think… They have to know how they think, and how they act, and what they like and what they don't like. Like… some kids, when they get their mind overload, they are not interested anymore. Too many information…. If you keep on repeating, they don't like that. If you keep on repeating the same thing. (Liaison officer)

Many leadership members, teachers, liaison officers and teacher aides stressed that teachers need to know that there are various cultures in Australia. They also stressed that cohorts may be different from the one before,

> They maybe all be Aboriginal, but they come from different communities, they come from different areas. They have their own rules, they have their own values, traditional system and you name it. So trying not to generalise or what's the word. You know what I mean. Yeah, just because they're all Aboriginal or all Torres Strait, they're still very different. They [teachers] need to understand that, 'cause that's part of cultural awareness. (Teacher)

Staff stressed that it is important for staff to not generalise, or stereotype students when supporting behaviour.

Staff described ways that behaviour is taught in a cultural setting; through modelling and "telling them what you want them to do", and through stories. Learning happens on country and with elders.

> The stories about how you behave, the stories about, you know why things might go wrong, and stories around seasons. So even that. I guess like, when they're little they learn things which are a bit like nursery rhymes, which tell you about the way things are, you know. Oh, and sharing and looking after things and then it comes about stories that you know when this is right when you go, you look for the, emu constellation, you can go to, you know, collect emu eggs and things like that. So it's different, different things around that. Uhmm it's kinda like daily skills for living… it's a bit like taking the English fable and then explaining what that might mean. (School leader)

Teacher understanding of this cultural difference may help teachers to teach behaviour in a similar way.

One teacher discussed letting children learn by experience. In talking about her toddler granddaughter, she said, 'let her touch and feel what it's like, so just let her put then she'll know then'. So, the way students learn at home may be different from the way they are required to learn at school.

Staff discussed home expectations that are different from those at school and how students must adjust or code-switch for behaviour, as they do for language. One teacher aide related that an island school at home was stricter than a school on the mainland. Others said that home may be more lenient than a school. For example, home might not mind a child answering back, but school does. Expectations at school may differ from home by requiring students to sit down for lengths of time and listen without talking, have movement restrictions, learn abbreviations related to schooling in English and have different expectations around time, like getting up for school and eating at particular times. In addition, "coming to class… by yourself, rather than having your older siblings or cousins by your side" (teacher), whereas at home they may have done everything with their cousins.

One Aboriginal liaison officer from a different community explained that her role was to teach students how to navigate school. "They [students] learn our ways and then they come into here they have to learn white ways… school ways". She went on to explain that at school students will need to respect staff they do not know, whereas at home they are asked to respect people they do know. She taught the students to use 'thank you' when food was served because that was a different cultural expectation. At school students needed to ask to go to the toilet. She also explained how she taught the teachers the [school] way, that is about

the cultures, because school may be different from their previous experiences in other schools and teachers also needed to know and understand some Lore. For example, some family members may not be allowed to be in the room with others. There are also differences between home and school with speaking in public and "no eye contact", meaning that eye contact is not necessary at home when talking to children as opposed to teachers using eye contact as a signal that a child is listening and learning. Non-Indigenous staff need to understand cultural differences and how Lore may affect student behaviour. She and another staff member went on to explain some of the Lore. Teachers need to know, "how we are related to each other" and "moieties and totems and clans ... especially some of that boy-girls stuff" (liaison officer). This can also affect behaviour through combinations in the classroom.

> Like, if you have a teacher who comes in and they have… this boy is sitting next to this girl and back at home you're not allowed... you're not supposed to have the girls and boys in one room… But once you have the back story, like the story … makes the learning easier afterwards I reckon. (Liaison officer)

This liaison officer also suggested that when staff understand family relationships, "[y]ou can go and tell the kids from [related community] can you go and talk to that kid?" Inside knowledge can help staff support students using family connections.

An Aboriginal liaison staff member related students' words about why students use inappropriate behaviour.

> Yeah, using bad behaviours and knowing that, 'teacher doesn't listen or understand us'. Then the teacher will probably flip and doesn't know what's going on and all these kids sent to the principal; not knowing the back story because like I said, you can't have a certain person sitting next to a certain person. You've got to know the community. (Liaison officer)

If teachers get to know the students and their cultures, they would be less likely to misunderstand behaviour or make mistakes that would cause or escalate behaviour.

One teacher aide related how she had to learn to code-switch for language just as students do now,

> [b]ecause it's easy to talk to the person next to you because you know that they can speak language as well. Because English is pretty much like a second language and then we can just break it down if you don't know how to

speak the language. And it's very hard for me if I keep moving from home to city life, you know? It's pretty hard because I don't know that much English it was very hard for me to talk to other kids in the classroom and understanding the work is way different from back home. (Teacher aide)

A liaison officer also described how children must learn to code-switch for behaviour,

I think a lot of kids too and even myself like, they don't like the whole sitting in the classroom and textbook learning thing because culturally it's all about song and dance and hands on being out and learning that way and then I don't know. Even though people say oh, 'It's the new age and you need to get on with it and just be like everybody else', but I think sometimes. That culture even if it's not taught to you, it still burns inside. (Liaison officer)

She could identify with the students who were having to learn to code-switch for behaviour for the school setting. Importantly, she raised the idea that culture can be inside a student even though it has not been directly taught to that child.

A secondary teacher related the experiences her children had learning to code-switch for language and behaviour.

It [was a problem], because it's where all my children are very proud of their heritage. Very much proud and for them to go to an all-white school, Catholic School like that is very daunting for them so having to code-switch is a problem in many ways. So, I guess the colour of their skin and the way they interpret things which they are pretty good at now. Before it was a big eye-opener. (Teacher)

These staff understood how children learn to code-switch for language and behaviour and they recommended that teachers understand this.

Teachers, teacher aides and liaison officers mentioned other cultural differences in expectations for behaviour. Some said speaking in public was something new for their children. The way time is experienced may also be different. "Yes, time is different… Uhm, well school time is school time. Everything have to be on time. But I don't know like, it's like I'll do it, but you'll wait maybe five minutes, but you still do it" (liaison officer). The routine of school and running by clock time may be different from home:

Umm, well they don't have to get up to go to school. They don't have a routine when they are eating. You know they just eat when they are hungry. So, that gotta be hard. Umm, set times when you can eat and when you can't eat. (Liaison officer)

These staff understood how children might be learning cultural differences in behaviour expectations (code-switching for behaviour). They recommended that teachers understand this.

When discussing differences between the cultures, staff also related that adults may not have been pressured into going to school when they were children themselves. This past experience may be similar for their children and influence how families respond to school and the formal protocols of school. Teacher recognition of this socio-historical context may help to understand student behaviour. Non-Indigenous staff also learned about differences including autonomy over bedtimes and having flexibility and choice if called by an adult to do something. Responsibility was also discussed as a difference; current students, and some of the staff as children, had the responsibility of caring for younger siblings and being tired the next day at school, thus influencing attendance, their engagement in learning and behaviour.

A liaison officer stated that schools needed to understand cultural responsibilities and priorities, like students being away for sorry business and that "tombstone openings is a priority for their [Islander] culture, no matter what" (liaison officer). She suggested to understand this, a teacher could try "to get as much information first, beforehand [and] be compassionate". Also, that families may feel that, "education may just be one of the things that you have to do…It's not the be all and end all of our lives" (teacher) for some families, while it is a high priority for others.

Staff also stressed that cultural shame was an important difference between Indigenous cultures and mainstream. Singling students out for positive or negative reasons was not helpful:

> Well it's an intimidating way. If someone's pointing at you, talking in tone, in a demeaning tone... and there's other people around, you don't want to be shamed… So in that sort of situation the shame is important and they won't back down because of the shame as well. (Liaison officer)

It is important for teachers to know that causing shame to a student can lead directly to behaviour escalation.

> Another teacher up here in [another class]. When he was targeting a student, they would walk out and slammed doors because that was the shame factor

> then you know. 'Cause I don't want to be put on the spot like that. Other kids will tease me later on in the playground. (Teacher)

A Torres Strait Islander liaison officer explained this further, "Because some kids don't want to be in front of the whole class; that's shame and it's not a good image for our Indigenous families. Shame is a big thing, you know? Like, we're shy. Most are".

Aboriginal and Torres Strait Islander staff mentioned respect for elders. "Respect for elders is pretty much so strong in my culture. It's very much still strong in my family" (teacher). Islander staff mentioned strong gender roles. One Aboriginal and Torres Strait Islander teacher told of gender-based responsibilities in her family. Another Torres Strait Islander teacher warned that clan groups may stick together "and even though it is school, there's still a certain amount of cultural Lore that they carry around".

School leaders, teachers and liaison officers highlighted some of the misunderstanding that could happen due to cultural differences,

> Some of the behaviours that they're seeing may be culturally appropriate or culturally inappropriate, that what they're [teachers] seeing might not actually, it may not be it, may not be as clear as just seeing as behaviour but understanding culturally, why those behaviours are happening. Kids not looking at you when they get in trouble. Not being confrontational, not being wanting to be shamed in front of other people. Being closed off at times… Also, personal space issues and non-verbal, where teachers think they're rude, signs or gestures or even words that they use when they're not. (School leader)

All of these are situations where student behaviour might be misinterpreted through a teacher's cultural lens. Non-Indigenous staff awareness of cultural differences would help teachers to interpret and support behaviour of students.

Staff repeatedly mentioned cultural differences in how families support each other with learning and supporting behaviour.

> Older siblings help teach younger ones which helps them learn how to parent when they have their own kids. In large families there is always someone to play with, there's always someone to talk to … there's always somebody there for them. (School leader)

A teacher mentioned that family usually pitch in to discipline each other's children, "Like my niece has got younger children. We all help discipline them" (teacher), and from a school leader:

> I've had nephews, I've had cousins [live with me] that are younger generation because it's whoever is the next person that is capable or able to do, can look after them. So we do that…When their parents haven't been able to or when somethings been happening that they haven't connected like the parents might be able and willing and all the rest of it, but that kids not listening so it's finding the right person that they gonna link to. (School leader)

One staff member related how, in an Islander culture, the maternal uncle disciplined older children when needed. A school leader said that,

> [an] older sister is expected to make sure my brother's kids are alright... With the boys, when there's been need to have a chat, their uncles have taken them, They'll take them fishing and go and do something. And there's different ways, really, I guess I think. When you're disciplining boys and girls… with boys, they not really keen on the talk. (School leader)

Awareness of cultural ways of learning behaviour might help teachers to structure learning in the classroom. Teachers and school leaders gave examples of how families supported each other to raise children. Disciplining and teaching lessons may be done by relations other than parents.

An Islander woman described how children learn where they fit in to the kinship system.

> The elders and grandparents play a big part in that… And the teaching of Lore, and the teaching of correct behaviour, how one should walk in accordance with the Lore, L-O-R-E, cultural Lore… And how you treat others. Those are basics, but basics are very important. (Teacher)

An Islander staff member reinforced that idea, even for older people:

> And sometimes like, when I say something wrong the elders will correct me and say the right thing. Yes I respect the elders. They're older than me. [the

> elders hold the wisdom or the rules?] yes always Hmm! [and teach the younger generation, even grandfathers?] yup. Hmm. (Liaison officer)

When this liaison officer was questioned he admitted that he was still learning from the elders.

When a Torres Strait Islander staff member was asked how respect for elders was taught, she said. “This is how you treat your elders, shown through demonstration, being made to get them a chair or a drink”. A Torres Strait Islander teacher aide stressed that listening to elders was important in his culture,

> Listening’s one of the biggest ones because they show you the rights and the wrong way as well. Yeah. Because they’ve been down that track and they know how the routes go…. most of the way they teach is pretty much like a story but they tell a story about, ‘This is what’s the bad side of the story.’ If you go down this track, then… and hear the other side of the story as well. (Teacher aide)

One Islander teacher told about her parents’ shift from cultural discipline methods to more Western methods,

> ‘Cause I find that successful, too, like taking away bikes, or taking away colouring in books, and uhmm, I remember my father grounded me once, we didn’t know what grounding was, ‘cause he was a teacher, he said, ‘You’re grounded’, and I said, ‘What’s that?’ So I had no idea what being grounded was, and then my mother said, ‘Why’re you grounding the children? That’s what white people do!’ and he goes, ‘Yeah well, we’re doing it now. They’re grounded’. (Teacher)

Staff also related that there may be a student who did not know much about their culture and one with light skin who knew a lot about their culture and was happy to share, so teachers should not stereotype students. Staff explained cultural differences in behaviour expectations and why teachers might misinterpret student behaviour. They also gave examples of how behaviour was taught in their culture. If non-Indigenous staff increased their cultural awareness and willingness to see students as individuals, they would be better placed to interpret and support student behaviour.

4.2.2.4 Discussion.

This theme was the one mentioned most frequently by participants in all categories. Their feelings are summarised by Hudspith (1996, p. 313), who cited Bernstein's failure of reciprocal understanding "[i]f the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher". Failure of teachers to know students and their cultures could result in increased conflict (MacGill, 2016; Malin, 1990a) as students experience tension, having to code-switch cultural values to meet the dominant school culture (Gillan, 2008; MacGill, 2016), which may not be understood by teachers (Gillan, 2008; MacGill, 2016; Malin, 1990a).

Participants suggested that a lack of understanding could lead to escalated behaviour incidents because behaviours expected at home may be different from those expected at school (Partington et al., 2001; Stehbens et al., 1999). Teachers need to adjust their perceptions of behaviour accordingly (Gillan, 2008; MacGill, 2016). Students and staff asked teachers to be aware of the possibility of misunderstanding behaviour (Gillan, 2008; MacGill, 2016)

Most participants in the interviews suggested that teachers increase 'cultural awareness' and that staff receive this training as a minimum. Staff also discussed preconceptions or biases, influencing the way Indigenous people are perceived (the deficit notion of difference). Staff identified that teachers need to be aware of their own deficit or biased views and not judge families on superficial or external differences (Yunkaporta & McGinty, 2009). These judgements "can also be so far off the mark that there's actually no real understanding of what's happening in their family" (school leader).

All participants agreed that staff must take the time to know each student and some explained that individuals and communities differ (Hughes et al., 2004; Keddie et al., 2013; Malin, 1990a). Detailed explanations of cultural differences received coverage in advice literature (Bamblett, 1985; Christie, 1987a; Groome, 1995; Harrison, 2008, 2011; Linkson, 1999), but received less in research literature. Participants mentioned some ways that students may differ from those in teachers' previous experience, with staff offering the most suggestions: autonomy or responsibilities at home (Malin, 1990b); differences in perception and reliance on linear time (Hughes et al., 2004); and that students do not need to use eye contact to listen (Hughes et al., 2004). The most significant cultural difference that was highlighted by most participants was 'cultural shame' when students are singled out in front

of the group and might lose the security and anonymity of the group (Gillan, 2008; Harkins, 1990; Malin, 1990a). Parents and staff recommended that teachers have an understanding of student needs (Gillan, 2008) and cultural protocols. One leadership member spoke of strengths-based approaches (Clarke & Dunlap, 2008; Hudsmith, 1992; Partington et al., 2001). While the Australian research literature supported most of the suggestions made by participants, the discussion was in various sources and not directly related to behaviour.

Possible cultural differences mentioned in interviews that have not been supported by previous Australian research describing behaviour included: cultural differences in touch; older siblings stepping in to support younger ones; communicating through body language; cultural responsibilities; their place in kinship systems; family responsibilities; and respect for elders.

4.2.3 Theme 3 Qualities of the Teacher

Participants all agreed that students behave differently for different teachers. All participants saw teacher qualities as an important factor influencing teacher success at supporting student behaviour. For classification of participant discussion for this study, teacher qualities are those that are innate, or require deep work to change, as opposed to strategies that can be implemented without deep change. Because positive relationships emerged as a separate and important factor in the literature review, it was covered in a separate theme.

Table 4.3

Qualities of the Teacher

Students	Parents	Staff
Sensitivity/confidentiality	Confidentiality	Confidentiality
Calmness	Calmness	Calmness
Warm demander	Boundaries	Boundaries
Manner	Manner	Manner
Smiling, happy	Smiling	Open minded
Fun	Fun	Fun
Motivating/active		Active teaching
Respect culture		Passionate
Keep your word		Take responsibility
		Caring/compassionate
		Consistency and reliability
		Not get sucked into a game
		Students can be themselves
Interest in language		Interest in language
		Flexibility/ negotiation
	Perseverance	
Communication	Communicate	Communication
Not being the ‘boss’		Not being the ‘boss’
	Not necessarily Indigenous	Not necessarily Indigenous

4.2.3.1 Students’ comments.

Some students discussed the need for teachers to keep student information confidential, “if the kid wants it private, kept private” (primary girl). Students spoke at length about a teacher being calm. They differentiated between teachers who stayed calm on the inside, “angry on the outside” (primary boy), “she just calm right through you know” (senior girl), “You won’t get negative vibes or anything like that from her; it’s so calm” (senior girl), and those teachers who were angry all the way through. Students did not like it when teachers ‘yell’, “a cranky voice .. and it’s like … all crunchy up voice” (primary girl). Students equate

teacher use of negative tone to one that has a dislike for them and a culturally domineering attitude. “Because if she growls real loud; that means she hates them and she doesn’t like them” (primary girl).

Students spoke about teachers being able to show warmth at the same time as implementing boundaries which is described as a warm demander, “So be angry at them if you have to be. Just make a point or something” (primary girl). Further, “But I think the voice, it needs to be - you need to really get it through to the kid’s mind…if you need to step it up, just step it up” (primary girl). About one teacher, “She cares and puts her foot down all the time” (primary boy). Students appreciated teachers who implemented boundaries. A senior boy said about a non-Indigenous teacher,

> He doesn’t get angry, He just, sometimes he has his days, but everyone has their days when they’re a little bit annoyed, but he doesn’t tell us to do 100%, he goes, we’ll give you a go at doing 85% or 75% you know. You don’t have to be 100% but at least achieve one of your goals, you know. He likes talking about goals and Lore and stuff like that. About our Lore and stuff like that you know. (Senior boy)

Students talked about the persona and approach of teachers. “He’s a lovely person… He says, ‘Come to class’, you know” (senior boy). They mentioned teachers smiling and being happy. “He’s always happy every day and he makes me smile. Because when you walk into the class you see his smiley face and when you go up and talk to him he makes you smile” (primary boy). A happy, smiling teacher was appreciated.

One senior female student stated, “If I was a teacher I would be so respectful for them you know and be so calm and be active ‘cause every kids are active in the Indigenous kids”. For her, being respectful included knowing student circumstances, the way they talk, where they come from and their culture. This student suggested that teachers act quickly to involve students, and keep their word to gain student trust:

> They don’t have time to wait. If you want to do things you do it there. If you don’t do it on the time, you just slack and you just wanna you slacken their emotions. They don’t want to do it now. It was that time, you told them to do it on that time on the spot. ‘Cause you don’t do it on that time on the spot, you letting them down. They’re gonna be disrespecting you ‘cause you did

> that… you do it, like if I say 'ok, I see you at the library or shoot hoops'. They'll be there. They standing there and they don't [have] any patience.

She went on to say that if teachers did let students down, "they should apologise and find a way to do it immediately there as you are speaking to them" (senior girl).

Respect included getting to know some of the language of students:

> But if you get to know the language, like, say 'Hi' or 'Bye' or 'where you going?'. Or you say something so awesome. Everyone will turn and say, 'he did that!!' and everybody be like, 'Oh my God you say that!!' and the teacher will be like so crowded with kids … if you're interested in the language you are interested in them as well. So, you know, it better to know that ok, this teacher interested in my language and interested in my culture. (Senior girl)

Students appreciated teachers getting to know their language. Students also mentioned teachers sitting with students and helping students one-on-one because they may not ask for help. They did not like bossy teachers either:

> We don't focus for [relief teacher] you know 'cause [he or she is] bossing us around. We don't like [him/her] … And that's what I see in some of the classrooms, you know. They don't like getting bossed around, so they'll sit there and do their own thing ... they be smart arse as well, just joke around and don't really do the work. (Senior student)

The attitude of needing to 'be the boss' appears to students as evidence of colonialism and is not well received by students. This also suggested that students may need to relate to the teacher before they would be induced to work for him/ her.

4.2.3.2 Parents' comments.

When listing qualities of effective teachers, a family member mentioned confidentiality and respect, talking about a teacher from her past who did not show that respect, "She wants to know everything like, even if it's personal she would want to know about it" (mother). This was not well received.

When parents spoke about teacher manner, they recommended being "calm and kind" (mother), a good teacher "just had a very firm voice" (mother), and smiled, "I think always smiling… kids will pick up if a teacher is genuinely happy or not" (mother). One parent said

teachers should, “[h]ave a lot of patience … you gotta have that… and I guess just stick it out with them, you know” (father), referring to perseverance. Self-control is respected; a less effective teacher “would be emotional ‘cause they would wanna chuck stuff at her” (mother). Parents recommended that teachers use language the students can understand when communicating with students. Staff should also speak in a respectful way, or “[t]hen the kids are gonna say, ‘Well we’ll talk back the same way to them’” (mother). They also suggested that students enjoy some fun in the classroom, “When they’re all tensed up and working on art they could let a kid tell a joke so everybody and laugh at everybody’s [joke]” (mother).

Parents wanted teachers to teach clear boundaries in the classroom, “and that thing where the teacher’s got more control in the classroom than what the kid’s got” (mother). Also, that they should “get on the situation before it happens” (mother). This describes a prompt response to solve problems while they were still small and the teacher needing to implement the boundaries.

Being Indigenous was not a prerequisite to be a successful teacher. Parents explained that teachers did not need to be Indigenous to be good for students, but Indigenous students would be more likely to “look up to Indigenous teachers and they would respect them more” (mother).

4.2.3.3 Staff comments.

When describing the qualities of effective teachers, school leaders, teachers, teacher aides and liaison staff spoke at length about the manner of the teacher. Self-control was commonly mentioned; teacher ability to, “project or use a firm speaking voice” (teacher) rather than yelling. “She says it in a calming way... her voice is really calm you know” (teacher aide). Not getting into battles with students; dealing with students, “rationally, calmly, uhmm focus, a sense of fairness, and respect for both parties”, and reacting consistently and predictably to crises in consideration for students who had experienced trauma. “Yelling does not work in class… they don’t want to go back to class” (liaison officer). If a teacher tells the kids, “‘Go out!’ It hurts the kids” (liaison officer). Also, consistency, fairness and confidentiality were mentioned., “kids don’t like it if you’ve been talking about their business... and kids pick up on that really quickly I think” (school leader). Staff praised others who were flexible and able to negotiate, one example was, “when you’ve finished [your work] you can mix your music” (teacher).

Staff stressed that clear and strong boundaries were important. Students knew which teachers they could ‘play up’ for. “A teacher who struggles is one who can’t get above the situation” (teacher aide). Staff recommended being “strict” and a “warm demander”. A teacher aide described a male non-Indigenous teacher, “He will not hesitate to ask them to leave if they’ve been disrespectful or misbehaving ... he’s very much about praising them as well when they are doing good” (teacher aide). That teacher said to students, “If you want my help and respect, then you need to show me help and respect” (teacher aide). One teacher aide said of her PE teacher from school, “We were really good for him and he’d be really strict”. Another teacher aide described it as, “being aware of what the students are doing” and “not playing the game” (teacher aide). Students and staff respected staff who implemented boundaries.

One liaison officer described boundaries and stressed not trying to be students’ friend. Speaking about an inexperienced teacher he said, “getting too personal with the kids… wanting to be their friend. [You should] not [be] trying to connect with them by coming down to their level rather than bringing them up to his level”. When he spoke about a more experienced teacher, “You will never see [experienced teacher] carry on. You’ve never seen [her] coming down to their level. She always expects that students will rise to her level”. This was expressed by an insightful teacher aide as, “Borderline is that we can be friends, but I’m the teacher, you can’t cross the borderline there. Be friends but don’t just…if they cross [the line] they’re controlling you afterwards”. Several staff advised maintaining professionalism and implementing boundaries rather than aiming for friendship with students.

One experienced teacher suggested in the interview to remind teachers to be respectful and not curious, “Teachers that have lived in the communities, and they think that they know all this stuff about culture, and they’re putting it back on the kids, and the kids you know, they go oh, hold on!”. Staff who had experience in one community may think they know all there is to know. That is an inappropriate approach and this teacher had observed that students were not impressed.

Part of the teacher’s persona and approach is the way he or she communicates:

> You gotta be careful how you speak ‘cause a lot of our people, they can read body language, and they can read people’s tone of voice. Change the way you talk too. You gotta talk nice ... I can be harsh if I want, if someone’s acting up. But that’s not all the time. Harsh all the time don’t work. Yelling – that don’t work. (Teacher)

A recommendation came from a liaison officer to "respect the kids ... [successful teachers] speak to them quiet way. Like, quiet way and kids can listen to them" (liaison officer).

Also, to speak to students, "[i]n a way that isn't so hierarchy all the time, to come down ... to talk to them as a family would or to have that understanding of their culture, but cultural language also" (liaison officer). This refers to an attitude of superiority. A teacher aide said, "They faceoff with the child and challenge. You know, and the child ain't gonna back down, especially to a teacher". I asked if that was linked to history and the teacher aide agreed. He suggested,

> don't stand up and faceoff like a challenge and make a compromise because they won't. It's one thing with black kids, they won't. But if you bring it across another way, instead of as a challenge or a, 'You must do this!'. There's other ways of approaching it.

He continued with his advice, "I know they have to challenge them, I know they have to, but it's more the body language than anything. You can challenge them in a good way, but don't do it in a bad way; in that tone. They'll hear it and they'll react" (teacher aide). Speaking nicely, and on their level, was recommended. A liaison officer suggested,

> you can challenge them in a good way but don't do it in a bad way, in that tone ... not angrily because they'll sense it and then they will get defensive, then their shield will come up and 'Fuck you!' and all that. (Liaison officer)

I suggested that when students sense an attitude of superiority, they might connect it to colonialism and they may object to it. Two liaison officers agreed. One experienced school leader recommended using 'I' messages and talking about the future rather than blaming, so students do not feel blamed or attacked,

> I think sometimes you can see, some teachers, they go back to, you know, some of those 'I' messages. I felt … and then some you can see with the other kids that isn't gonna work. So, they actually talk forward, rather than going back to [the problem]. So it's interesting because not the same strategy work for everybody either, so, and I think that's, about them knowing the young person as well. (School leader)

Like parents, they suggested that communication should also be at the comprehension level of the student. "You can't go using big words and stuff that they don't understand" (liaison

officer). Further, from a different liaison officer, "it's like they change the way of talking and yeah, come down [in terms of language register]" (liaison officer).

Teachers, teacher aides and school leaders also talked about teachers who students could trust, "[he trusted her] enough to be able to tell her [what was happening at home]. If students don't trust teachers, they won't tell them what is happening and why they are 'carrying on'" (school leader). If staff can build trust with students, they may find reasons for behaviour.

Staff also mentioned to be open minded, to be culturally aware, have heart and be passionate. "If you are not passionate and you are only doing it for the money, then you are in the wrong field" (teacher). One example was a liaison officer who described an early years teacher, "She's got empathy ... she's got a heart for them and feels for them and she's really compassionate". When asked about a particular teacher aide who could be short with the children, gruff on the outside, a liaison officer said, "She doesn't rough talk the kids". The liaison staff went on, "Yeah, she's got a good heart. And she really cares about the kids yeah, yeah… when she's rousing at the kids her heart's crying, her heart's crying, she goes back and see the kid and always say, I'm sorry". This teacher aide was gruff on the outside but in her heart, she cared for students. The liaison staff appreciated this. A school leader spoke about teachers who are willing to apologise and accept responsibility for their own behaviour, "students really respect that" (school leader).

One male non-Indigenous teacher had,

> taken the time to inject himself into their culture. He can speak their language. He's spent time in those communities. I think it takes more than just a cultural awareness PD. I think you have to actually inject yourself into those communities. Like some teachers here that come just for the pay. Like they don't have an understanding and they don't want to have that understanding either. (Teacher)

This staff member was spoken about by several Indigenous staff as someone who was willing to learn about the cultures of students and create trusting relationships.

A teacher quality that gained respect from students was the willingness to learn some of their language. Learning some language was mentioned by a teacher aide and liaison officer. The act of learning from students was described by one teacher,

> the best thing about it is that, when you do develop that rapport, that line between which is teacher, and which is student, becomes a bit hazy, a bit fun, fuzzy, that you're learning so much from your own students. And you need to take that on board and learn from them. (Female teacher)

Two-way learning, where the teacher is learning from the students was seen as a strength.

Successful staff create an environment where students feel welcome:

> I think the kids they come in and they feel comfortable. And they know there's no put downs with her or [female Indigenous teacher]. If you're struggling, that's fine. [Teacher aide] or [female Indigenous teacher] will all step in to teacher's aide and help. And there's no put downs, you know. And every time you make a step, you gain a step and you're recognised for that step. And I sat in her class yesterday for half an hour…Supportive…. Yeah. Very firm. [She will say] 'But this is you know, we're moving on and this is how we'll do it'. (Teacher aide)

This teacher was also fun. "The kids behave well for her because she plays jokes and she laughs and you know have fun… They're having fun and they're learning". Students in this teacher's class could joke around in a good way, but in another class "if they were relaxed and were themselves" they would get in trouble and instead of being themselves, "they sit there very quiet the majority of the time". The implication was that teachers who create a safe and fun learning environment would experience more success than those who do not. A teacher aide spoke about a supply teacher whose attitude was, "I'm the boss, you're doing as you're told. And that's why the majority of them don't like [supply teacher]. Because [he/she] goes in and this is what's got to be done and that's it. [He/she] does by the books whereas none of them want to listen" (Teacher aide).

Four staff recommended that staff not use an 'I'm the boss' approach. This could be interpreted by Indigenous students as a domineering attitude that is resented, "And not to have a superiority complex. When you're around Indigenous people! Please! Those times were out, that was 30, 40 years ago, not 2015. From the first meeting they can read it" (teacher). A liaison officer suggested to, "talk to them in a way that isn't so hierarchy all the time… to have that more relaxed feeling, to have that connection with the teacher".

A teacher quality that was recommended was teacher self-regulation. Teachers should not express their own emotions in front of the children, “a real angry way and an angry voice, angry words” (teacher aide). The same teacher aide said that an effective teacher is “chilled and relaxed”.

Staff spoke about whether teachers are Indigenous or non-Indigenous. Staff who were identified as being successful with students were not necessarily Indigenous, though Indigenous staff may find supporting behaviour of Indigenous students easier. “Culturally that helps. It does, it helps” (school leader). But further,

> just because you’re Indigenous in an Indigenous school or whether it’s a workplace, doesn’t mean you fill the seat well… you’ve got to come with the ... knowledge, everything that goes with it… Not everyone can do the job properly… whether you’re black or white, not Indigenous or Indigenous, you have to come with the right mind and in terms of mind, a good heart. (Experienced teacher who had taught primary and secondary)

Staff rated highly some non-Indigenous teachers and were critical of one Indigenous staff member, so cultural background was not necessarily a determinant for success.

Staff expressed a need to believe in the potential of students. One teacher suggested how a class ‘community’ could come together by supporting someone who was struggling. She described how she led students to help each other so one girl could experience success:

> They’re like my children, you know. Even they are at school, they’re like my children and I’m like the big mommy in their eyes or the auntie. Uhm, and we’ve got a special bond now our little class. One of the things is that they were hesitant about [Joanna] coming in and I say, ‘Look, we need to work on her and I said we need to show her our way in the classroom. And hopefully she follows’ and they’ve been so patient with that girl. (Secondary teacher).

Using students to help each other, creating a family feeling the classroom and using student strengths were teacher qualities that create an effective environment for supporting student behaviour.

4.2.3.4 Discussion.

All participants noted that behaviour of Indigenous students can vary for different teachers and listed particular qualities of successful teachers. Particular teacher qualities have

been associated with Indigenous students experiencing success in their classrooms (Fanshawe, 1989, 1999; Hudsmith, 1992). Participants across all categories also discussed points that are reflected in Australian literature. In the research literature, successful teachers are fun (Gillan, 2008; Gollan & Malin, 2012; Hudspith, 1995); they use successful ways of communicating with students (Partington et al., 2001) and avoid an 'I'm the boss' approach or attitude of superiority, as suggested by advice literature (Harrison, 2008; Howard, 1995) 'equitable social relations' (Hudsmith, 1992) or exercising power expecting obedience (Partington et al., 2001) and equal relationship (Lester, 2016) in research . All categories of participants also discussed teacher body language and attitudes that could increase resistant behaviours from students (Gillan, 2008). Further discussion supported by literature included: creating an atmosphere that allows students to be themselves (Hudsmith, 1992); being willing to learn from students (Simpson & Clancy, 2012); needing to believe in students (Hudsmith, 1992); and flexibility (Gillan, 2008; Partington et al., 2001).

Parents and staff stressed the need to set boundaries (Fanshawe, 1976, 1999) while students spoke kindly of teachers who demonstrated warmth as well as implementing boundaries (Fanshawe, 1976, 1999; Guider, 1991; Osborne, 1996).

Importantly, parents and staff highlighted the notion that a successful teacher did not necessarily have to be Indigenous themselves (Osborne, 1996). While it might be easier for an Indigenous teacher to fill the role, it was having the 'heart' and the skills that made a teacher successful, not simply culture.

Successful teacher qualities relayed by participants that have not been previously mentioned in Australian research literature included: respecting student privacy; smiling; motivating; being respectful; trustworthy; managing and taking responsibility for their own behaviour; needing to 'have the heart for it' and being passionate. That teachers need to be calm was popular in advice literature (Christie, 1987a; Harrison, 2008), but not research.

4.2.4 Theme 4 Positive Relationships

The theme of fostering and prioritising successful relationships with teachers has been separated from other teacher qualities due its importance, noted both in the literature and in the interviews. It was mentioned that relationship may be needed before students would work for the teacher. All participants stressed the need for connection with students. Parents and staff spoke about how to create effective relationships. The attitudes and strategies reported in

the interviews that are used by effective teachers to create and maintain relationships have been detailed.

Table 4.4

Positive Relationships

Students	Parents	Staff
Connection with students	Connection with students How to connect	Connection with students How to connect
Respect	Respect	Respect
		Listening
	Teacher sharing a little of him/herself	Teacher sharing a little of him/herself
		Length of relationship
		Family-like close bond
		Outside school time
		Believe students

4.2.4.1 Students' comments.

Students discussed the need for teachers to create positive connections with students. One said, "Talk to the students and get along with them" and "just try and be nice and kind to them" (primary student). On a whole school level, one senior student noticed that, "from day one everybody said hello to me. I don't even know them from a bar of soap. Every teacher! I'm like, I don't even know you. This is my first day!" (Secondary student). This student was impressed by staff actions that made connections with students.

Students also respected teachers who were able to connect with students. One male student discussed a teacher who he respected for enforcing boundaries. This teacher also created positive relationships:

> [He]'s like a jokeable person you know, he's a good teacher. He don't act like a teacher, he act like friend in the classroom and that's what we would like, you know. Teach us in your own, how you leave from work, how you act like, you know? You just talking to us like a friend you know. So, we bond to each [other] not just the teacher, you know? (Senior boy)

Furthermore, he said about other teachers who did not create a connection, “I have seen him try and help people. He has helped me twice, but I just don’t have that connection with him ... I bond with a lot of other teachers but just not with them two”. Students also spoke of expecting that staff respect them, “because he sits there and teaches and just be respecting us; what we are like, you know”. Students noted teacher demonstrations of respect and efforts to make positive relationships. The comments of these students about particular teachers were consistent with the opinions of the teacher aides and liaison officers.

4.2.4.2 Parents’ Comments.

Parents frequently spoke of connecting with the students and gave suggestions about how to create positive relationships,

> If he or she is a new [teacher] they could probably introduce themselves to the kids and say, ‘I’m new, so please’, you know like... the teachers need to connect with the kids as well, you know, like talking to them and telling the this and that. (Mother)

Another parent suggested,

> I think it’s best to sit with the children, tell them a story, like what you done, like what happened in the past, you know, and I think the children will change and they’ll see, I know. ‘He’s nice and he’s caring for us’, the children will say. (mother)

Parents spoke of respect and how to achieve it. As mentioned previously, a stranger automatically demanding respect is a colonial attitude and one that may not be familiar to the students. It would not work:

> Well, if the teacher has that respect when they go into that class, that respect will start flowing into that classroom. Like, say that teacher might say oh, what sort of day did you have or can you better yourself to show me that … I didn’t mean to do what I done to you but you need to stop what you’re doing and listen to what I’m saying so that you know what you’re doing. (Mother)

Parents advised teachers to share some of themselves with the students.

> Taking an interest in the child as a person… listening at least. They don’t have to react, but listen, they’ll build a bond… There’s some teachers who

> just have knack I suppose with kids. That kids just instantly um, I don't know, read their character, you know …there's some adults in education field that kids just feel safe with and that they can talk to. (Mother)

When giving examples of how teachers could build trust and respect, many parents used language such as, 'quiet' and 'gentle' talking, not 'talking rough'. One father said, "just being there for 'em mate. Just being there and talking to them every day".

4.2.4.3 Staff Comments.

Staff were clear that students behaved appropriately for some teachers and not for others. Teacher aides were in a position to see this; particularly when a relief teacher was in the room. The importance of relationship and two-way respect was stressed,

> If you've got no relationship with your students, they're not gonna want to listen to you. Like they're not gonna do as they're told. So, you've got to come in there and like [give] the same respect for them as they do, that you expect from them. Not go in there and think that you're better than them. (Teacher)

Another teacher expressed the link between respect, relationship and students being prepared to work.

> You are gaining respect. And the relationship you are forming a relationship as well that uhm, well, you gonna get them to learn then at the end of the day, you get them to learn, you get them to react and open up whether it is a question on the board or you want them to read a story, you know, things like that. So by me sharing a piece of life or my heritage to them they are able to go 'Ah, you know, yeah, she's all not that bad. I'll do some work for her. She not that bad. She's earned that'. (Teacher)

Staff emphasised connection. A liaison officer said of one teacher, "She's really good at bonding. The kids love her". Staff detailed ways to achieve that connection; through giving students time, through showing empathy and compassion. One early years' teacher "talks to them and the way she is with each child. ... I have seen her touch the kids and get down low". Connection came from paying an interest in their lives and getting to know them; asking them their favourite colour, their friends and parents, how many brothers and sisters they have. A teacher recommended that teachers do not judge appearances, "Don't notice hair, clothes, shoes. Don't say anything negative. Tell a positive comment". Also, being

welcoming and “having that relaxed flow of conversation; not being so uptight” (Liaison officer). Ideas included, opening the classroom 10 minutes early spending time outside of school at sporting events or asking about the weekend. Further, “Getting the job done, but without coming down on them like a ton of bricks” (Liaison officer). Some examples of making connections included celebrating birthdays and shouting a struggling student lunch on his birthday. Several staff mentioned telling a little of yourself, “I usually share a lot with them about me for them open up to me as well”. (Teacher)

Secondary teachers in a boarding school also needed an understanding that boarders missed their families and that a teacher may need to go and find them and invite them to class and encourage them. Teachers could connect to students by getting to know their communities, in person or online. Staff recommended, “Checking in on them in the afternoon to see how they’re going”. Consistent care and reliability help, “And just being there every day is … gold to them you know, like, ‘cause they’re… [one male teacher] hasn’t had many sickies”. The consistent attendance of this teacher and the impact it had on his students was noticed by a teacher aide. Reconnecting after a student has been sent for a time out also built relationships, “if the kids have to go home or be suspended, because of inappropriate behaviours, engaging with them as soon as they come back. So, it’s not, it’s not a hostile environment, saying hello” (school leader). This school leader had seen the positive effects of that strategy.

One secondary teacher mentioned teacher-student and student-student relationships that became like family:

> [They] read me like a book. Like, I had assembly this morning and they look at me and they are all smiling. This is what they say. I make ‘em shame. Yeah because they don’t want me to do those kind of things. (laughing) ‘Miss why you have to do assembly?’. Like that. ‘Because it’s my turn, all teachers have a go’. ‘Yeah but you make us shame’. ‘No stop it, you should be proud!’… They’re like my children you know, …and I’m like the big mummy in their eyes or the auntie. And we’ve got a special bond now in our little class.

In that class relationships were close. Staff suggested that a new staff member should connect with students out of school time, at sports for example, and they noted that length of relationship made a difference to the quality of relationships.

Staff spoke about respect for students and avoiding idle or casual curiosity.

> I guess teachers ask them too many questions about their community and things like that you know. I think enough is enough to them. They tell you bits about the community and about them. And that's where it stops. They don't want to tell you their whole life story because sometimes, that's private. And they'll tell you things when they're ready. (Liaison officer)

Respect could also be shown by, "using the young person's name; saying it the right way" (School leader), and by believing students. One staff member complained that her daughter would not go to class because the teacher thought she was a liar.

Listening to students was important, an experienced teacher aide suggested that teachers,

> listen, understand where they're coming from and you'll get the job done .... because as soon as they know that they understand that the teacher's listening, like nodding, nodding. Because most kid want attention, you know? Once they get that good attention, not the bad one you won't have issues in the classroom. And what I mean bad one is that you don't listen to a kid and he'll do something to get your attention and boy! If he do that, everything is you know.

This teacher aide saw the value of listening to students and the ways students would use to gain teacher attention if they could not get it easily. Staff discussed the value of relationship and ways teachers could make positive connections.

4.2.4.4 Discussion.

As mentioned previously, while the need to create positive relationship was a teacher quality, it received so much attention in the international literature, and now emphasis in participant conversation, that it required a separate theme. Participants all said that teachers need to connect with students, and respect was important. Staff and parents then explained ways that teachers could achieve close relationships. International research examined the importance of relationship between teachers and students of other cultures and ways to achieve it (Bondy et al., 2007; Brown, 2003; Kennedy, 2011; Milner, 2008, 2011; Noguera, 2003; Schlosser, 1992; Sheets & Gay, 1996; Ullicci, 2009). When students like their teacher, there was an increase of positive student behaviours within the classroom. This was supported by international research (Milner, 2011; Sheets & Gay, 1996), Australian discussion (MacGill, 2016), and Australian advice literature (Bamblett, 1985; Berry &

Hudson, 1997; Groome, 1995; Harrison, 2008, 2011; Howard, 1995; Linkson, 1999; Nichol & Robinson, 2010; Perso, 2012; Shaw, 2009).

This theme has less coverage in Australian research literature. Australian research has investigated the necessity for successful relationships for success at a school level. Successful relationships between teachers and students were paramount when measuring success at the whole school level (Munns et al., 2013). Relationships with teachers were significant in student perceptions of schools and schooling (Lester, 2016; Nelson & Hay, 2010), and research mentioned influencing students though caring and body language (Hughes et al., 2004) that is, relationship worked better than an assumed power differential (Gillan, 2008). Advice literature suggested that respect was earned, not based on authority (Bamblett, 1985; Christie, 1987a). That relationship may be necessary before students would work for a teacher was mentioned in advice literature (Christie, 1987a; Howard, 1995; Linkson, 1999) and recently in research (Lester, 2016). This was expressed by two teachers and was evident in a student's discussion about two teachers with whom he did not connect and for whom he behaved in a way that the teachers found unacceptable.

There was paucity in the details of how to create those relationships in Australian research literature. In the interviews for this study, all categories of participants discussed mutual respect and the need for staff to connect with students. Parents suggested that teachers introduce themselves and tell a little about themselves (Hudsmith, 1992; Hudspith, 1995), so students could get to know them. Creating less professional distance was mentioned by teachers and a liaison officer (Fanshawe, 1989; Hudsmith, 1992). Parents and staff suggested ways of connecting with students, some of which were spending time talking and listening to students, and respecting students as you would like to be respected. An important expression was speaking to students in nice ways rather than 'rough' ways, which was covered in advice literature (Harrison, 2008, 2011), and recently in research (Lester, 2016). This demonstration of respect was important. This was mentioned by parents and this related to the way teachers approach students. A secondary teacher described it as creating an atmosphere like family in the classroom.

4.2.5 Theme 5 Culturally Responsive Pedagogy

This theme highlighted how culturally responsive pedagogy reduced students' inappropriate behaviours. Staff highlighted detailed pedagogical decisions that created or hindered a supportive learning environment for Indigenous students, directly influencing their

behaviour; while parents and students only mentioned clear expectations and that they expected high standards from their teachers.

Table 4.5

Culturally Responsive Pedagogy

Students	Parents	Staff
Clear explanations	Clear explanations	Clear explanations
High standards	High standards	High standards
		Help for students
		Active learning
		Storytelling
		Adjustment for student needs
		Content
		Questioning

4.2.5.1 Students' Comments.

Four students identified two ways they would like their teachers to be effective. The first was to explain the work clearly. "She makes things easier, easier for those ones and the ones in case they need help" (primary girl). A priority was helping students who need it. One senior student suggested getting student attention by using Aboriginal Kriol or Torres Strait Creole, "like, my way, like the way I say… If you say Kriol they get it just like that!". So, they can, "catch it in their mind". The second point mentioned by students was their expectation of high standards from their teachers. The same senior student was frustrated by a teacher who was fun, but also showed a lack of organisation, misplacing things and not "doing his job properly".

4.2.5.2 Parents' Comments.

When making suggestions that related to pedagogy, parents also suggested that staff should explain work clearly for students and the high professional standards they expected from teachers. One parent was disappointed when she moved her child to another school, that he was not at the same standard of other students in the new school. A different parent appreciated extra help from a teacher to her child:

> Oh, he listened to her and he explained things and she was a little bit, behind, not behind but even because she wasn't reading at home. They didn't have reading books, so she read them at school and he used to get her to read at school, like some extra reading help. (Mother)

While parents did not detail pedagogical strategies that would help their children, they did recommend making sure that students understand work and appreciate professionalism and extra help for their child.

4.2.5.3 Staff Comments.

Support staff also highlighted the need for teachers to explain things clearly. One teacher discussed the need to be prepared and implement explicit teaching. "Explicit teaching is really important; I think for all children" (school leader). Support staff described student behaviour when students do not understand and cannot access the help they need:

> Yeah if a student doesn't know or understand their work, what they are working on, it could lead into aggressive behaviours, stuff like that which can erupt because even students themselves don't understand like how to like cope with their own feelings. Like they don't know what to do with them. So that's why they just push things and throw 'cause they don't know how to control their own feelings. (Liaison officer)

Several support staff, for example liaison officers and teacher aides, described how they, as students, and current students were more willing to work when they got the help they needed, acknowledging that it was hard for teachers to help all students, "It's hard to give a lot of attention too, like, if you put a kid in a classroom, with a room full of 20 students and the teacher can only do so much as well" (liaison officer).

Staff also discussed the high professional standards required by teachers. These included: being on time and providing high quality work; as well as the need for teachers to expect high quality work from students; and celebrating successes with them.

Staff recommended that active learning worked better than "have [students] sit there and have a person just talk, talk, talk, talk, talk". Further:

> Yeah, definitely, that hands on, um just especially with the lower school. The RoleM with the maths, you know, 'cause it is such a hands on learning, it will eliminate certain behaviours straight away...[it] does eliminate a lot of issues

> because they're kept busy, and yeah, it's built for them (teacher) because our kids learn by doing, so you have to show them exactly what you want. Sometimes words are not the best thing. You have to show action. (Teacher)

Active learning helps to create meaningful engagement for students.

> Traditionally, elders taught using storytelling,
>
> yeah, because most of - the way they teach is pretty much like a story, but they tell a story about, 'This is what's the bad side of the story'. If you go down this track, then… and hear the other side of the story as well. (Teacher aide)

So, teachers could teach using the traditional method of storytelling to convey a message. One school leader related how she would use storytelling and discussion while hanging out the washing or gardening, rather than talking to her children, particularly her boys. A liaison officer related,

> I think a lot of kids too and even myself like, they don't like the whole sitting in the classroom and textbook learning thing because culturally it's all about song and dance and hands on being out and learning that way and then I don't know. Even though people say oh, 'It's the new age and you need to get on with it and just be like everybody else', but I think sometimes that culture even if it's not taught to you it still burns inside.

One priority raised was adjusting to students' pedagogical needs, for example, eliminating homework or creating homework that suits home life.

One experienced teacher suggested using Indigenous learning styles such as giving the big picture before you break a task into sections:

> I don't know whether this is like a learning style thing necessarily, because it links with the way stories and knowledge is passed on. But, going from big picture, before you break it down... Western education seems to go step by step. You can have this little bit, and you can have that little bit. And you don't always know what the point of it is. But if you get the big picture, it's a bit like having a puzzle. This is the whole picture, and then we'll pull it apart and then we'll teach. So, I think that's a better way. (School leader)

Curriculum content was raised by one teacher, saying she appreciated a mainstream school that provided some Indigenous content for all students and time for Indigenous students with an Indigenous staff member. Another experienced classroom teacher recommended that Indigenous students learn about other cultures, and not just their own culture.

When talking about group work one liaison officer suggested, “You could maybe, if it’s not individual work, maybe pair them up with someone else that they can feed off”. A teacher said, “now I’m just trying to change the teaching method to ‘alright, let’s all do this together!”. One teacher aide said she worked better in a group of Indigenous students when she was at school because, “I guess in a way, I didn’t really feel ashamed answering questions. ‘Cause If I was in class like in math, if I knew the answer I would put my hand up. I felt really shamed at [mainstream school]”. This comment was supported by another liaison officer who ran groups for Indigenous students in a mainstream school. Students may feel more comfortable in a group of their peers or working in pairs for activities.

Because cultural shame or being singled out may make students uncomfortable, students may show reluctance to answer questions in front of others, “Make them answer or make them like… They ask the kid like, ‘What’s the answer to this question?’ Some kids would, [feel shame] the black kids anyway. I might say the wrong thing. They might laugh at me” (liaison officer). Offering pedagogy that was aware of cultural shame was important. It was also important for teachers to realise that repeated questioning of an individual student increases the likelihood that a child may feel increased shame.

4.2.5.4 Discussion.

Pedagogy relevant to Indigenous students was covered elsewhere in Australian literature (Hughes et al., 2004; Lester, 2016; Lewthwaite et al., 2015; Yunkaporta, 2009; Yunkaporta & Kirby, 2011). In this theme, students and parents suggested that staff give clear explanations and have high standards, while staff highlighted pedagogical decisions that created or hindered a supportive learning environment for Indigenous students which directly related to behaviour. International research was replete with evidence-based pedagogical strategies that reduce inappropriate behaviours (Anderson et al., 1980; Bondy & Ross, 2008; Lewthwaite & McMillan, 2010; Milner, 2008; Monroe, 2006; Winterton, 1977). Australian advice literature offered suggestions about pedagogy in numerous sources (Berry & Hudson,

1997; Christie, 1980, 1987a; Clarke & Dunlap, 2008; Garvis, 2006; Harris, 1987a; Harrison, 2008; Ionn, 1995; Linkson, 1999; Osborne, 1996; Sarra, 2011a; West, 1995).

Most suggestions from participants were supported by Australian research. These include, that students and parents held high expectations of curriculum and professionalism of staff (Bond, 2004), and that parents requested that staff have high expectations and success for their students (Hudsmith, 1992; Lewthwaite et al., 2016). Staff gave more detailed ways in which teachers could support learning and behaviour: use real-life meaningful tasks (Hughes et al., 2004); offer group work (Gillan, 2008); question sensitively, with an understanding of how questioning is culturally different (Hudsmith, 1992; Simpson & Clancy, 2012); avoid talking too much (Hughes et al., 2004); provide for students' needs (Gillan, 2008; Lewthwaite et al., 2016); use hands on learning (Hughes et al., 2004); use storytelling (Yunkaporta & McGinty, 2009); and allow students to see the whole (bigger) picture before engaging in parts (Malin, 1990b). The primary concern for all categories of participants was the need to make explanations clear for students and check for their understanding (Lewthwaite et al., 2016).

4.2.6 Theme 6 Proactive Behaviour Support Strategies

Proactive strategies for behaviour support are those which are put in place to prevent inappropriate behaviours from happening. These strategies differ from teacher qualities because they can be learned and implemented as they do not require personal or philosophical change on the part of the teacher. Students and parents contributed to the discussion by stating the need to examine reasons for behaviour and making expectations clear. Staff detailed strategies to support students and prevent inappropriate behaviours for school. These suggestions included whole school strategies as well as ideas for teachers in their classrooms.

Table 4.6

Proactive Behaviour Support Strategies

Students	Parents	Staff
Understand student needs/ reasons for behaviour	Understand student needs/ reasons for behaviour	Understand student needs/ reasons for behaviour
Awareness of Lore/ gender		
		Students with trauma background
Let students get used to routines	Expectations taught	Clear boundaries and teaching
	Someone they connect with (teacher aide)	Someone they connect with
Motivation	Motivation	Motivation and monitoring
Keep students busy		
		Whole school strategies
		Social behaviour teaching
		Fruit breaks
		Meeting basic needs and health needs
		Accessing help from specialists
		Classroom strategies
Goal setting		Giving kids space
		Goal setting
		Consistency
		Physical environment
		Early proximity
		Selective attending/planned ignoring
		Seating plan
		Breaks
		Distraction

4.2.6.1 Students' Comments.

Students listed ways that teachers could meet their needs to prevent potential inappropriate behaviours. For example, students appreciated teachers' understanding of Lore. "If teachers don't understand [that certain boys and girls should not be in class together], students may walk out of the room and calm themselves down". One teacher let students calm themselves when they needed it; if they told her they were going. Students also appreciated teachers who met their needs for sleep and their need for personal space when emotionally upset. One primary student praised a teacher who suggested a counsellor or time out, kept personal information private and encouraged students to support each other. Students appreciated such teachers.

Other students appreciated teachers who kept them busy, helped them set goals, and evaluated the extent of achieving their goals. Other strategies mentioned by students included teachers who motivated them and gave them time to get used to routines that may have been different from their previous experiences.

Students explained reasons behind some behaviours, "they just want their teacher back because they don't like new teachers" (primary student). A senior boy suggested, "I guess mood swings as well. Kids here have mood swings from back home, terrible things happen". A senior girl suggested, "You know sometimes people do [behaviours] for freedom, sometimes 'cause they can't do things back home… so sometimes they'll break out yes. Long way from country. Because they can't do things back home". By giving examples of the reasons for behaviour, students were encouraging teachers to understand these reasons to be better able to support students.

4.2.6.2 Parents' Comments.

All parents proposed meeting the needs of students as a way to reduce behaviours in the classroom. They referred to problems like poor hearing and possible dysfunction at home and suggested that teachers offer a way to meet basic needs for sleep and food if necessary. One parent suggested that student phones caused problems and that students should leave them outside the classroom or put them in a box during the day.

Teacher aides, whether they were Indigenous or not, were seen to be a support for students. Another key point raised by parents was that teachers who relate to students could tell straight away if something was wrong and they knew which strategies might work for each child.

> It's actually knowing how to handle that kid, you know, suited to their needs, and you know if you know them. They should already know what works and how to talk to them by then, so it's easier for them [teachers] to deal with them [students]. (Mother)

Parents also recommended that teachers gently and explicitly teach new expectations. A common suggestion was to use parent and community help. One mother sat in the prep class with her son until he had adjusted to the school environment. Another mother related a story where teenagers had tricked a naive staff member (not a teacher) new to the community by teaching him swear words in 'language'. Parents had to step in to educate the person who had been unwittingly insulting elders around town. In this case, the students did not know, respect, or trust the staff member and felt able to take advantage of his naiveite.

Parents suggested motivating students through trips away and team building where students have no choice but to work together, "And I think that does a lot of self-respect and respect for each other and working alongside each other, so they get along. Yeah, I found that as beneficial". Proactive suggestions given by parents centred around getting to know students and seeking community support.

4.2.6.3 Staff Comments.

School staff were able to identify proactive strategies in detail. Many conversations with staff concerned examining the behaviour for the cause, or using a functional behaviour assessment (Scott & Eber, 2003; Simmonds & Llewellyn, 2017) to work out reasons for the behaviour to find the cause and attempt to meet student needs, "Usually, if there's something wrong with behaviour, it stems from something else, so you need to investigate that further, you know, one-on-one chat, what's going on?" (teacher). This was reinforced by a school leader, "whenever there is a behaviour looking at what the, what is that behaviour really telling me, what, you know, if behaviour is symptom of something, what is it?" (school leader).

Some possible reasons for behaviour suggested by staff were: not liking change, such as their usual teacher and teacher aide being away; students having experienced trauma; staff not understanding the impact of trauma; possible problems at home; a need for sleep; wanting to avoid the work; not understanding instructions; needing adult help and not getting it; being bored; having pride hurt through shame; fear of each other and not understanding each

other's cultures; and stereotypes. One experienced, young teacher aide was able to sit back and quietly watch incidents unfold, then inform the teachers where the real problem started.

A primary teacher recalled their tiredness and restlessness, "They're having stuff at home then they come here and they play up, because I don't know, they just don't feel comfortable anywhere I guess and they want to be in control of their life". An experienced leader said:

> Also think about pride, shame and hurt, and you know, what makes you…'cause often the stuff that makes a kid angry… The first thing that poor old teacher knows is that kid's just blown up and kicked the desk, or sworn at somebody. But that could have been like an hour and a half coming up, so what else is actually happening around them, the young person.

Staff looked for the reasons for inappropriate behaviour.

A school leader explained how students might end up in fights,

> There's some silly stuff that's been happening and there's some people that haven't thought stuff through but why is it that people are doing this? Because this is paranoid thinking and everybody starts looking at this one and that one and then everybody goes into that fight/flight thing so quickly. I don't know what the answer is with that. But that's part of the problem - that the problem is that everybody goes into protection mode. I've got to keep myself safe, I've got to keep my family [safe] and sees everybody else as a threat. And all of a sudden you've got a problem; where we should have just been able to sit down quietly and calmly and say, 'Ok she said this', but what really happened, 'well, he said that', but what really happened?

She was talking about how misunderstanding and the need to keep family safe contributed to fights.

One school leader directly referred to trauma while others described it differently.

> Kids also need to know how an adult is going to react to the different situations, and a history of trauma has told us that kids need to be able to predict what behaviour trusted adults are going to do, and how they are going to react. (School leader)

When asked how staff provide for students with a history of trauma she related:

> We have a case management system where we look at the needs of the kids… putting different strategies in and accessing different services for those high-end kids, so could be behaviour support with our behaviour specialist, … or it, it could be, additional work with the school counsellor. It could be identifying a key adult. It could be a behaviour management plan. It could be contacting the family. So, we have an array of strategies that we can use that can help with those high needs children. It could be a referral to an external counselling service. (School leader)

Staff gave possible reasons for student behaviour and suggest ways to meet student needs to avoid the student choosing an inappropriate behaviour to meet their needs.

A frequent discussion item for staff was having clear boundaries and teaching expected behaviours. Phrases like "lay down the law" (teacher); "explaining that it is not acceptable in the classroom" (teacher aide) and "classroom structure covering rules and …setting the boundary between the teacher and the students" (teacher) were used to describe how to teach and implement boundaries. One school leader suggested:

> Talk to the kids about what our classroom should look like. Most kids have a good understanding of what's right and wrong generally, and by setting that up and negotiating what the rules are, and only having five rules and a good rule, but in positively framed words would um... The fact that a six-year-old can tell you that a reward is somebody talking to them in kind words, the kids have a good handle on it. (School leader)

Further suggestions from staff included: not getting into a "power struggle" (teacher); using the head of primary to back you up (school leader); as well as firm, consistent strategies (three teachers and a teacher aide); and incentives (school leader, three teachers, two teacher aides and a liaison officer).

Other strategies included: making sure the teacher aides were aware and consistent with the teacher (teacher), and making sure all students are focused and listening before you start; making sure they were looking and listening (teacher). An experienced teacher suggested counting from five to one to get students focused. Some staff suggested keeping phones at the front of the room (teacher and two teacher aides). Staff recommended

reminding students about the expectations and the goal they are working towards (two teachers and a teacher aide), whether that be a personal achievement or an external reward. In one school, all categories of staff also referred to the whole school proactive program they were involved in which included proactive teaching expected behaviours and social skills.

Like parents, staff recommended that schools provide an Indigenous liaison person or teacher aide with whom students could create a positive connection. These Indigenous staff related well with children due to the similarity of their own experiences and those of their children. These staff might present information differently, so students or parents could understand it or be the one who is "making sure there is somebody in the school that is culturally appropriate that you feel and you can come and sit down and have a chat too as well, I think that's very important" (liaison officer).

A proactive strategy in a mainstream school involved putting students in a setting with their peers because it created a,

> safe place where they can really be themselves…[their] home life is similar to the person sitting beside them… they really come out of their shell. They're a lot more talkative. They will be the quietest person in the classroom [and in the group] they'll get up and dance. (Liaison officer)

In this setting with their peers, students were less shy about answering a question and more able to be themselves. One teacher aide related how she had not answered questions when she was at school, unwilling to expose herself.

Several staff referred to a system for monitoring and motivating students. Several primary teachers and teacher aides spoke about a chart or scale on the wall and moving names up and down, or daily and points counted towards something at the end of the term so students could monitor their own progress. Initially, reinforcements included external rewards, like iPad time, free time, afternoon tea, sleepovers, class parties and excursions. One experienced teacher detailed how this process was inclusive, supportive and avoided shame in her class:

> I don't like to exclude children, but if I feel you haven't earned it, I will. So, I don't like exclusion and the less exclusive activities I do, the better. 'Cause I like it to be inclusive…If I see you've made an effort and you're nearly there, I will let you go. But I'm not even using that reward chart now. 'Cause, you

> know, as a class I think you deserve to go, everybody's trying. It's not perfect but…I needed [the rewards chart] in first and second term, I needed that chart. I needed to aim for something. They'd go there and count that and then if we seen something good. If my kids seen something good, we'd put it on there! And they directly saw it, you know. And they needed it that first and second term. And if there was a person who wasn't reaching up, I'd go, is there something that you can do, you know, to get some more points you know, and give, and you give them their own little target to get to the point where they're up, the goal is bigger for the other kids, but you know, they have smaller goals. So, we push, we push them, yeah.

This teacher used the chart graduating from extrinsic to intrinsic rewards to move students towards behaviour that was more appropriate for learning in her classroom.

Several teachers recounted how students helped to motivate each other to reach that goal in learning or behaviour. Students also celebrate each other's successes (teacher and teacher aide). Several other staff recalled whole school practical proactive strategies like, "selected seating and fruit breaks and mind breaks" (school leader, two teachers). Also, a school leader recommended teaching pro-social skills.

> [A specialist] will do social emotional programs with each class, targeting different things like, in the lower grades we do protective behaviours… It's really important 'cause…no one else teaches those skills about how to solve conflict, … and I think that, I think that as, as we continued through the journey of, of the last two years, I think that the number of critical incidents in [this part of the school] is diminishing and it's falling. And we're getting kids talking about their feelings, and talking about the behaviours instead of fighting. … because if kids are talking, they are using the language, they're talking about the strategies. I could have done this, this, or this, but I chose to do this, and I made this choice. And that's a good thing. [She also recommended], doing all those bonding, activities, at the start of the year, icebreakers, games, getting to know you, asking questions being engaged, making the kids know that you care, that they're there.

One primary school leader described formalised ways of providing proactive support for students using a team approach: using a case management system to meet students' needs;

using the counsellor; input from a behaviour specialist; identification of a key adult to mentor the child; implementing an individual behaviour plan; contacting parents; accessing external agencies; providing transport; and providing breakfast or fruit break and emergency lunches if needed.

Practical ways of supporting the needs of students and families were mentioned. One school was equipped with a wellbeing centre with full-time nurse and Indigenous health worker and visits from specialist teams of doctors, sexual health practitioners, a paediatrician and hearing and sight checks. This helped to meet student needs, which reduced inappropriate behaviours. The classrooms in one school were equipped with a hearing support system. One family was being supported by external agencies and needed a permanent address before students could be assessed. The school was working with external agencies to provide support. By reducing barriers to accessing education in practical ways, the school was helping to reduce inappropriate behaviour.

Proactive suggestions given by staff for individual classrooms included: checking that things were okay after lunch and settling any problems (teacher aide); giving students some quiet space when needed (school leader, teacher); and meeting sensory needs because there's "quite a lot of simple things you can put in place that takes that [sensory need] away" (School leader). Also; knowing the student's history, and how they learn best (school leader); finding out the problem and what happened before they came to school or class (three teachers); and letting them have time out and they come around slowly (teacher and two liaison officers). In one school campus, if a child went to a teacher carrying a marker, the teacher knew that child had been sent for a subtle break, so the child was distracted with a small job to do, positively reinforced and returned to his or her classroom.

Staff also suggested: well established routines through being consistent (two teachers); using a seating plan (primary school leader) and arranging classes carefully (primary school leader); reminding students when transitions are coming (secondary school leader); planned breaks (primary school leader); distraction (primary school leader); giving kids space (liaison officer, teacher aide, teacher, secondary school leader); selective attending in some situations (secondary school leader, teacher aide); using some Creole/Kriol (teacher); and setting goals with the students (two teachers). "Having a goal, and reminding them of the goal; showing progress visually" (teacher). Also, teachers recommended visually and practically supporting students through school routines, timetables and transitions.

> You know, when you go in those classrooms, where, a couple of teachers, they have… the day's there. It's all planned out so it's no surprise. They remind the kids when it's coming up to transition, that things are about to happen. Having lots of visuals there for the kids, so whether that's a visual timetable, or something on the wall so they actually know and they're prepared. (Secondary school leader)

One teacher recommended getting in early if the kids were looking like some negative situation might happen. She advised intervening early while problems were small. In a more long term sense a Torres Strait Islander liaison person used the metaphor "Grandpa always say... when you have a kid, you get straight to that kid when he smoke, before it comes to an adult. So like bamboo, green bamboo".

An important piece of advice was giving kids space when they are going through 'sorry business'. This referred to the cultural protocols and ceremonies around funerals. "You have to be compassionate because they cope and deal with it in their own way. 'Cause if you're all in their face, they get, you know, sorrowful, in their face and everything". This liaison person recommended giving students space to grieve if they need it. Staff also referred to the physical learning space making Indigenous students feel comfortable,

> Put up pictures of Cathy Freeman, you know, put up stuff that these kids can identify with, you know, it is a safe learning environment where they feel comfortable. Uhmm, and comfortable learning environment I had to say, even with primary school kids a big rug on the floor, but like a learning/yarning circle rug. With Aboriginal, Torres Strait designs on it. That's another thing. 'Cause then they'll go sit on the rug. (Teacher)

The referral room in one school had posters of Indigenous and non-Indigenous role models on the wall, demonstrating the classroom worldview.

4.2.6.4 Discussion.

The notion that more time spent on meeting student needs and proactive work results in less time and effort spent coping with behaviour was supported by international and Australian research (Edwards-Groves & Murray, 2008; Gillan, 2008; Sanford & Evertson, 2006). If teachers could code-switch when interpreting the behaviour of their Indigenous students (Gillan, 2008; MacGill, 2016) they could move towards understanding why students use behaviours that may be considered inappropriate for a school setting (Partington et al.,

2001). Staff and students gave several examples of teachers not interpreting behaviour correctly, and all categories of participants offered suggestions that fit this theme. Learning about the reasons for behaviour could help teachers avoid misinterpreting the behaviours they see (MacGill, 2016; Malin, 1990a, 1990b) and implement strategies to meet student needs. (Appo, 1994; Dockett et al., 2006; Garvis, 2006; Groome, 1995; Hones, 2005; Milgate & Giles-Brown, 2013; West, 1995).

Evidence-based research supported strategies at a whole school level (Gillan, 2008; Keddie et al., 2013; Partington et al., 2001) Those suggested in the interviews included: giving a fruit break; accessing external specialist help; and teaching social skills. Research supported strategies for the classroom suggested by the participants included: teaching behaviour expectations (Partington et al., 2001); looking for reasons for behaviour (Partington et al., 2001); meeting individual student needs (Edwards-Groves & Murray, 2008; Gillan, 2008); consistency (Partington et al., 2001); valuing cultures other than mainstream (Hudsmith, 1992; Keddie et al., 2013); and encouraging a strong sense of self (Hudsmith, 1992). Strategies suggested in the interviews and not covered in previous research included: teachers being aware of personal space; privacy concerns; modelling behaviour; keeping students busy; setting goals; and teaching about equity. In an important discussion, a school leader described ways that they supported students who had experienced trauma resulting from colonisation practices (Aitkinson, 2002a, 2002b; Ralph et al., 2006). The proactive supports put in place helped to minimise behaviours arising from student experiences. These were evidence-based practices from research that focused on trauma experienced by Indigenous students and may not be part of the general education literature.

4.2.7 Theme 7- Culturally Appropriate Reactive Behaviour Support Strategies

Reactive strategies are implemented after a student uses a behaviour which is inappropriate for school. This theme was a popular topic for staff and parents. Each category of participants had strong views of what did and did not work when dealing with behaviour after an incident and suggestions about culturally appropriate reactive strategies were frequent and similar across categories of participants. The most prominent was discussion of ‘shame’ when using reactive strategies.

Table 4.7

Culturally Appropriate Reactive Behaviour Support Strategies

Students	Parents	Staff
Avoiding shame	Avoiding shame	Avoiding shame
A motivation/monitoring system		A motivation/monitoring system
Reasonable requests		Attitude and calm manner
Family involvement	Family involvement	Family involvement
Strategies	Quick responses	Quick responses
Refer to goals		Strategies
Address the whole class		Planned ignoring
		Proximity
		Non-verbals
		Get in early
		Listen to all parties
		Speak to the right student
		Choices or Restorative Practices
	Consistent responses for different cultural groups	
		Specialist help
		Culturally appropriate strategies

4.2.7.1 Students' comments.

Secondary students appreciated teachers making a reasonable request rather than being reprimanded and preferred the teacher who had a private conversation with them rather than one who used public shaming. When a teacher talks "loud and strong" kids do not like it and would "go off and swear back". Instead, what worked was "telling them what to do and make them feel good and talk, like gentle and talks quietly, not like, in rough ways and stuff".

Primary students referred to the visual motivation and/or monitoring system being used in classrooms and names being moved down, names on steps or traffic lights in a positive way, as though knowing what would happen was reassuring. One secondary student described the teacher who referred them to their goals:

> He doesn't get angry, ... he goes, 'We'll give you a go at doing 85% or 75%', you know. 'You don't have to be 100% but at least achieve one of your goals', you know. He likes talking about goals and Lore and stuff like that.

This teacher did not expect perfection but encouraged students to set goals and measure their performance against behavioural and academic goals. Another suggestion from a student was to address the whole class rather than individuals, "[so we're talking to everybody] so they can make them want to come too" (senior girl). One senior student described her reaction if her parents were notified about her inappropriate behaviour, "if the parents is [involved in] discipline… If you called my parents, oh my god! I would be in trouble ok. My mum would be like, 'Oh my God, I didn't teach you this'".

4.2.7.2 Parents' comments.

Five parents recommended that staff should avoid shaming students after an event. Staff should talk respectfully one-on-one with the student without an audience. Yelling was discouraged.

> Don't get them up and point at them and start accusing them of things, you know, just talk to them like you talk to a proper person, having a conversation beside you. If you talk good ways they'll talk back to you good ways. If you try to talk and show them up, they get that real, 'Oh this teacher really don't care about us'. If they talk to them in a disrespectful way, well then, the kids are gonna say we'll talk back the same way to them. But if she talks to them like, you know, proper conversation that don't show them up in front of all their friends because they're gonnna have that sort of macho situation. (Mother)

One father who worked in a different school, said teachers at his school call the Indigenous staff to help with behaviour. A mother said if family are not in the same town they do a teleconference with them. Another said they involve elders to support parents. One strategy that worked in one of the target schools, as well as a community school, was for a family member to come to the school and be in the classroom for a time.

Suggestions from parents included: to talk to the kids and ask their problems; give them time to think about what you have said; listen to both sides of the story; and deal with things quickly. "If you see something out of the corner of your eye, don't let it go. Just say

'Hang on I seen that!', and call the two students and say, 'What are we going to do to sort this out?'".

Parents complained about the way behaviour issues had been handled in the past. One parent identified that,

> they blame the kid and they want to get them suspended and things like that 'cause when I've worked the problem out they could sit down and talk to the kids. The easy way out for everyone is to just send them home. My kid's got anger management, but they send him home straight away.

Another parent was angry that her children were suspended in a case of mistaken identity. Two parents pointed out that their children had been treated differently from "white" students in the past and Indigenous students should be treated the same as non-Indigenous students.

> Just because you're Indigenous doesn't mean the incident report shouldn't be filed, or [parents] shouldn't be informed. Like every other school. The parent is supposed to be informed and that's where they biggest downfall. A lot of regulations slide when it comes to [certain independent schools]. Like everything gets really slack. And if they were to work in a mainstream school they…you know, contacting the parents, incident report put are part of everyday procedures. There's been a lot of times at [this school] where things that happened and I've never even been told about it because it was an in-house [issue] so I should have been told of the incident. (Mother)

Another parent had related to staff, "We don't want to hear the kids can talk to us and tell us through crying" (female family member visiting the school).

4.2.7.3 Staff comments.

Shame was frequently mentioned during staff interviews. Several staff recommended coming quietly later to talk to a student when he or she was calm, rather than causing pain in front of everybody. "Do it quietly, subtle you know, without others knowing about it I think. Especially when they're old… they will be shamed" (liaison officer). Avoiding shaming a child was very important to the staff. It was a "big deal". A school leader said, "We want them to acknowledge their behaviour and be responsible and find a way to move on from their behaviour as opposed to shaming them because of it. And I think an audience would shame people". Further,

> singling them out that's another huge thing, where, they don't need to be singled out. If you've given them options, ahhh choices should I say, and of course limited choices at that. Rather than single them out or yell at them, like talk to the individually, quietly, or pull them aside that's a huge one as well. (Experienced teacher)

Four staff (teachers and teacher aides) mentioned the organised system of visual monitoring of behaviour in relation to reactive strategies. Primary staff used a variety of visual in-class behaviour scales ranging from pegs on a card to class Dojo points and visual escalating steps to time out with a buddy teacher. "I think visual helps because it keeps them and they can see what track, what tracks them, you know, keeping track on how well they are sailing along throughout the day" (teacher). These processes were used in the 100% Indigenous school. In secondary, one or two teachers used steps or warnings on the board leading to a referral room. This referral room actively problem solved behaviour with students and staff, rather than being a minding service.

The calm persona, attitude and approach of the teacher in a reactive situation was important to avoid the "I'm the boss" approach mentioned previously in teacher qualities.

> Instead of as a challenge or a 'You must do this!', there's other ways of approaching it. There's more subtle ways instead of standing there like chest out finger out. You go over and put your hand on his back 'come on brother. What are you doing?' You've got to talk to them… It's more the body language than anything. You can challenge them in a good way but don't do it in a bad way in that tone. They hear it and they'll react. Yeah, so you've got to do it in like good way but not angrily because they'll sense it. Yes, and then they will get defensive, then their shield will come up and 'F… you!' And all that. 'Don't f..ing tell me what to do!'. (Liaison officer)

Further, from a school leader,

> talk calmly with the kids, sometimes ignore behaviour that is not helpful for the young person or the situation. Commend kids that they're doing the right things. Go alongside and you know, sometimes, just quietly insisting, rather than reprimanding, even their behaviour [as opposed to the young person], not talking to them about behaviour in front of everybody where it will

> shame them, like catching up with them later maybe, but just making sure that, it's done quietly, it's done low level. (School leader)

When responding to behaviour, staff suggested talking about the behaviour and not the child and to use "simple language, you know if ... you can see the young person is not in a space where they can reason" (school leader) when students were upset. "Sitting down beside the students at their level, talking in a calm, in a calm voice, not using angry words, not, not direct body language" (school leader). "If you fight with them they'll only fight with you more and just take off" (liaison officer). An experienced teacher suggested offering the child several options in a reactive conversation. Staff also stressed: the need to intervene early (two teachers, teacher aide, secondary school leader); to remain calm (two teacher aides, two teachers, primary school leader); giving students space and choices to cooperate (teacher); and save face to avoid shame (three liaison officers, two teacher aides, three teachers, secondary school leader, primary school leader).

> Yeah what works better that I use, is giving them instructions and saying it in a really polite manner. Because some kids don't take demands lightly. So, you would ask them to pick up after themselves and leave it at that. Walk away. But keep an eye on whether they are doing that. (Teacher)

This advice from staff offers some insight into culturally appropriate ways to respond to incidents of inappropriate behaviour.

Accessing family help to support student behaviour was a strong recommendation by staff and parents in this theme. Early and frequent communication was recommended by a primary school leader (see also section 4.2.8.3). Parents may have information about the issue, which the student may not have been able to communicate to the school (secondary school leader). One school transported family from communities to support a boarder, saying that it was good for young people to have family around when they were distressed and for family to make connections with the school and see the school where their child was learning.

All teaching staff suggested several reactive strategies that were successful. They detailed some low level responses. One teacher told a story of one girl who was trying to access adult attention, "ignoring [low level behaviours] at times when that seemed to work" (teacher). "Sometimes ignore behaviour that is not helpful for the young person or the situation" (school leader). Staff mentioned the effectiveness of non-verbals, such as "physical proximity" (teacher). Students knew one experienced teacher's expressions. "I just have to

stand there and look at someone and I have that look of, 'I'm waiting for you'" (experienced teacher). Staff also mentioned using a time out space (teacher, primary school leader), going for a walk (two teacher aides), counting (teacher aide) and buddy class (teacher and two teacher aides) as consequences as part of the school system, but also that for some individuals, certain things did not work (liaison officer, primary school leader). In these cases, the school implemented an individual plan for behaviour. Teachers should also watch for students bullying or teasing each other (teacher aide), sometimes because of cultural differences (secondary school leader). In conflict resolution between children, it was suggested that staff might use storytelling to negotiate a resolution (school leader).

Teaching and support staff suggested after a major event it was important to listen to all parties, see the whole picture and make sure you have the right student. One experienced teacher aide said, if you "talk to a student who didn't do anything … then you start stirring, boiling the kettle up and then obviously they're going to flip and you're going to have another naughty kid in the classroom". One school leader praised a non-Indigenous relief teacher who made that mistake, took responsibility for her behaviour and subsequently apologised to the student:

> So, I have to have that kind of conversation but the behaviour escalated, 'cause he wasn't treated, with respect I think or a sense of fairness actually investigate the situation. What I did really like with that relief teacher was, … and she hasn't worked for us very long, and she actually took the responsibility and went and apologised for it first... so a sense of fairness is always really important to investigate both sides. (School leader)

An effective strategy that staff also utilised was to access help from outside of the classroom from the nurse and counsellors, "There's plenty of strategies within the school, also to help the child, you know, move along comfortably" (teacher). One school leader talked about taking a student away for a while because the teacher may have,

> twenty-six students and six things going on with four different people… If you [take the student back] too soon, then it is just going to continue to escalate, it's like, the teacher gonna get stressed, if the teacher's stressed, the child's gonna get stressed, problems gonna get bigger without being fixed.

One school leader spoke about her own boys and culturally appropriate ways of dealing with behaviour.

> When there's been need to have a chat, their uncles have taken them. You wouldn't do that. So that, you are, you are doing something. Whether that's gardening or, you know, the fishing works, hanging clothes on the line, but it's physically doing something, talking, you know, especially teenagers, especially teenage boys, and also thinking about the shame because for a young man. If you're starting to talk to them and they know they've done right or wrong by that stage. But its, with pride, it can be hard to admit that you're wrong, and it can be hard to bring that out. So it's about, sometimes kinda ignoring… Is it ignoring? It's kinda ignoring what's happened so that you don't talk directly to it but you talk around what needs to happen. So, if you talk to what exactly happened; as in 'you did this, you then, da da da', then it builds on the shame, then they get angry, then they're not listening. So, if you're talking around, maybe like a story or maybe, uhmm, you know like, you might say. Look, I don't care what happened, I don't know what happened, but I'm thinking sometimes, this, it looks like this or looks like this or looks like that, and what we need to get to is things looking like this or that. And then, that lets them recover from whatever is that went wrong, and they can go back and like, whether it was a fight with their sister, whether they did something wrong in the house. But breaking something or doing something the wrong way that they should know, but they can set it right without you telling them to set it right. If that makes sense. Yeah. 'Cause saving face for the boys is very important and I don't know if it's, 'cause the older boys, I notice, their dad is Aboriginal/Torres Strait Islander. And the middle one is very much like his father, and that pride stuff is very important. And it's, he's very different, I noticed, yeah, in a way that they would respond.

Structuring a restorative chat this way was recommended as a culturally appropriate way to deal with behaviour, particularly with teenage boys.

Staff agreed that following through with consequences was important, "because [if] there's no consequence they know they can do anything" (liaison officer). Staff offered detailed suggestions for reactive strategies that would be more culturally appropriate than targeting students, yelling or embarrassing them in front of others.

4.2.7.4 Discussion.

Using culturally appropriate reactive strategies to avoid unnecessary escalation of an incident was common in international research (Baydala et al., 2009; Sheets & Gay, 1996; Weinstein et al., 2003). This study focused on culturally appropriate reactive strategies in particular, because while Australian advice literature offered suggestions for reactive strategies (Christie, 1987a; Groome, 1995; Guider, 1991; Harrison, 2008, 2011; Nichol & Robinson, 2010), there was a paucity of Australian evidence-based literature.

While parents offered a few ideas, students and staff offered detailed suggestions about how teachers should approach students when facing behaviour that was inappropriate for school. Suggestions put forward by participants that were supported by Australian research, though not with evidence of implementation, included: avoiding an I'm the boss approach (Partington et al., 2001); defusing quickly (Partington et al., 2001); examining motivations for behaviour (Partington et al., 2001); taking students away from an audience to discuss behaviour (Gillan, 2008); letting students present their point of view (Gillan, 2008; Lester, 2016) rather than rendering student voices powerless (MacGill, 2016); using more flexible approaches to suspension (Lester, 2016); and involving families early (Gillan, 2008; Lester, 2016). Strategies that were suggested by participants that were not supported by evidence included: using low level non-verbal skills; paying minimal attention to minor behaviours; using simple language; sitting beside students after an incident; talking around the issue rather than accusing or blaming; offering ways for students to make reparations; listening to all parties; staying calm; and avoiding shaming students. Indigenous students receiving different treatment from their non-Indigenous peers (Gillan, 2008; Lester, 2016) was only mentioned by one staff member about her child in a different school, perhaps because the context of one participating school was all Indigenous.

Importantly, in contrast to previous research where Gillan (2008) found that students resented a public display of behaviour records, in one of these schools, students and staff spoke positively about behaviour records being visible on the wall of the classroom as a way of teaching and encouraging behaviour that was appropriate for school. Students did not resent that system being used and staff relied on it, particularly at the beginning of the year to teach expectations. The positive reception of this strategy may have been because the classes were 100% Indigenous students. Also, while Partington (2001) found fault with one whole school referral system, in the same participating school in this study, staff and students positively discussed their school-wide system of referral, both in primary and secondary.

4.2.8 Theme 8- Connections with Family and Community

All participants made mention of the importance of family connections in their discussion about student behaviours, among for students only the senior students did so. Parents expressed a need for close connections and involvement in schooling and student behaviour. Staff described their experiences and positive ways of connecting with families and involving them in student behaviour matters.

Table 4.8

Connections With Family and Community

Students	Parents	Staff
	School connections with family	Connecting with family
Parents involved in behaviour	Parents involved in behaviour	Parents involved in behaviour
	The importance of schooling	The importance of schooling but not at the risk of cultural identity
	Supporting the needs of parents	
		Strategies to connect with families

4.2.8.1 Students' comments.

In the previous theme one senior student mentioned that if her family was notified about behaviour, she said her parents would be disappointed in her.

4.2.8.2 Parents' comments.

A parent highlighted the importance of connection with families,

> Well, I reckon every teacher should engage the parents from the very start, and try and build a bond there. Because that's like the biggest downfall of getting parents' involvement in a lot of school things. And then you know, like, having them come in and you know talk and keep them included.

She spoke about the possibility of having morning tea, transport and child minding for parents and carers. One parent spoke about a successful principal who engaged parents. She drove to the families and talked to them. She connected with them.

Parents repeatedly stressed the importance of schooling for their children. “Education is important. We told them we’re not going to be around you know. When we’re gone, you’re on your own. So, we tell them to start thinking about the future”. Parents wanted children to learn for their futures. One Aunty saw it as her responsibility to encourage her niece to behave while she was at school. “If I was there with you, you wouldn’t, you know [be] doing that stuff you know?”. Sometimes parents could be involved in settling problems. A community meeting might be called to help stop children fighting, even in the boarding school communities have come together to settle problems.

Parents spoke of the need to support some parents who were having social problems which may be impeding their children’s engagement. Often the community stepped in to help children and families in that circumstance. This reflected a holistic notion of pastoral care, which a school may include in their attempts to support families.

4.2.8.3 Staff comments.

The importance of making connections with family was addressed by a primary school leader:

> When problems start, I think you need to establish that and maintain that communication line the whole way through. So, you talk to them if things aren’t going well, you talk to them about the strategies you’ve put in place and things you are trying to implement, and then you keep going, so I don’t think that communication should ever stop. It needs to continue the whole way through. And then after that, oh we’ve had a really good day today, so and so did this and this. …I could speak to some families four times in one day. But that’s what this job is, I think, and it establishes, maintains the positive relationship with families when they have faith and the knowledge that you’re doing the best thing that you can do and you’ve tried all these things before the problem escalates.

When there was a problem, this leader kept in frequent contact with the family.

Another school leader explained that elders could provide guidance through,

> Telling stories, um teaching the kids to play didg[eridoo], talking to them about .. stories around the landscape. The stories about how you behave; the stories about, you know, why things might to wrong, and stories around the

> landscape. The stories about how you behave, the stories about why things might go wrong, and stories around seasons… When they're little they learn things, which are a bit like nursery rhymes, which tell you about the way things are you know. Oh, and sharing and looking after things and then it comes about stories that you know when this is right. You look for the emu constellation, you can go to, you know, collect emu eggs and things like that…some wisdoms, and sometimes skills for living. (Secondary school leader)

Schools could use the elders for guidance and structure reactive or restorative chats in a way that was culturally appropriate.

One of the benefits of involving families with behaviour was teachers might find out more about what was happening for students,

> Actually asking parents what is it that you think might not be going right for your child, here? What else can you tell me, you know, making sure that they're involved actively in problem solving, what the situation it is. (School leader)

One student had a teasing situation with a family member at school and the student had not told staff. Students might not have trust, or confidence in staff, or the skills to explain it, but could tell a parent who can help staff to understand what was happening. Communicating with the family helped to explain the behaviour of a child in this way. Involving family in behaviour helped to create a sense of safety for students and family,

> So, we travel parents in from communities to help 'cause I think the kids, when families are a long way away, they need to be able to see what's here, but also the kids need that safety, you know, when a young person is in distress, they need to have, whoever the caregiver is, they need to have that person close so they can help, you know. And so, that the young person feels safe and we can start putting things back together. (School leader)

While parents valued education, the story of one teacher's own schooling experience illustrated that education did not come at the expense of cultural identity. She was singled out by her teacher for missing school for cultural sorry business. Other students teased her and she missed school for a further three months. Her mother did not make her attend because she

knew it was hurting her, even though the mother had worked for the local court system and knew police,

> I didn't have to go to school if I didn't... If I woke up and I'd be like, I don't want to go to school today Mum. She'd be like, "Yep, that's okay". Go and do the washing for me. Education was not… I didn't go to school for 3 months in grade 5. Three months straight. 'Cause I was getting bullied at school… And I lost so much school. I lost heaps of school and when I did go back my teacher'd be like, "Where have you been Miss [child]? Where have you been? You haven't been at school for two weeks!" And then when I'd say I couldn't come to school because Aunty or Uncle or Grandfather or somebody died, they'd look at me like I was crazy. They didn't understand. They had no idea whatsoever. And I was so embarrassed because, you know, I'd get asked in front of the whole class and I used to just think, you know…and I think that's what made me a target of you know, bullying… You know, she could have just pulled me aside but no! The nasty bitch asked me in front of everybody and embarrassed me yeah. And the kids got on the bandwagon and then they started teasing behind her back. Sometimes in front of her and she didn't give a shit. She didn't care. It was like I could feel hate radiating off her. I hated school. I actually hated; so three months I jacked up in grade 5.

While most families value education highly, some were reluctant to put their children in situations that distressed them.

Staff in both schools discussed that families could be reluctant to come into the school for various reasons which included transport problems for families coming to school and the lack of confidence with classroom activities (liaison officer, teacher, primary school leader). Therefore, they described strategies to involve families in school in order to overcome potential boundaries. One primary school planned whole school fun events that involved families and required parents to bring their children. Transport was provided if needed. Social events, including time at the local pool, movies and themed evenings, to engage families offered a relaxed setting for and parents/ carers to connect. "You don't want anything heavy, …and then, when you ring them up, they're… they're easier to talk to" (experienced teacher). One suggestion was to invite two parents from the class for excursions. The school leader

recommended that the parents did not have to come, but they had to be invited. One primary school was attempting to set up a parent's room and play group sessions. A teacher in secondary suggested planning an afternoon tea and inviting elders to come along.

In this theme, students commented that parental involvement in behaviour changed their response to it. Parents considered that links were family were crucial and offered suggestions that could facilitate such connections. Staff provided justification for connecting with families and examples of how it could be done successfully. Staff gave examples of successes experienced when they involved family in understanding and follow up of inappropriate behaviours.

4.2.8.4 Discussion.

The notion that a positive relationship with family reflected a holistic caring for students was reflected in international (Glynn & Berryman, 2005; Hammond et al., 2004; Monroe, 2009) and Australian research (Bond, 2004; Keddie et al., 2013). Students were more engaged in learning when there are connections between home and school (Bond, 2010; Lester, 2016) and behaviours would decrease because some basic needs would be met (Guider, 1991). Involvement of family and community in proactive and reactive ways led to a sense of security and fairness for the student (Gillan, 2008) and comfort for the family (Bond, 2010). Involvement of parents in school behaviour matters created a feeling of being heard and a sense of justice (Gillan, 2008; Lester, 2016), as well as possible solutions. Australian advice literature suggested that close connection with family and community would help to avoid the discipline problems that arose from a cultural disconnect (Bamblett, 1985; Y. Clarke, 2000; Dockett et al., 2006; Harrison, 2008; Milgate & Giles-Brown, 2013; Perso et al., 2012).

All categories of participants mentioned connections with families helping with student behaviour in ways that are supported by research. Parents particularly, expressed a need for close connections and involvement in schooling and student behaviour. Three staff members raised the concern that parents may be reluctant to come to schools due to their history with schooling, which was mentioned in advice literature (Budby, 1994) but not research. However, examples of good practice involving parents in schools exist in Australian literature (Gillan, 2008; Monroe, 2009; Sims et al., 2003) and some practices were mentioned by seven staff in one of the schools, who shared some creative ways of proactively attaining and maintaining that connection. One student reiterated that parent involvement made a

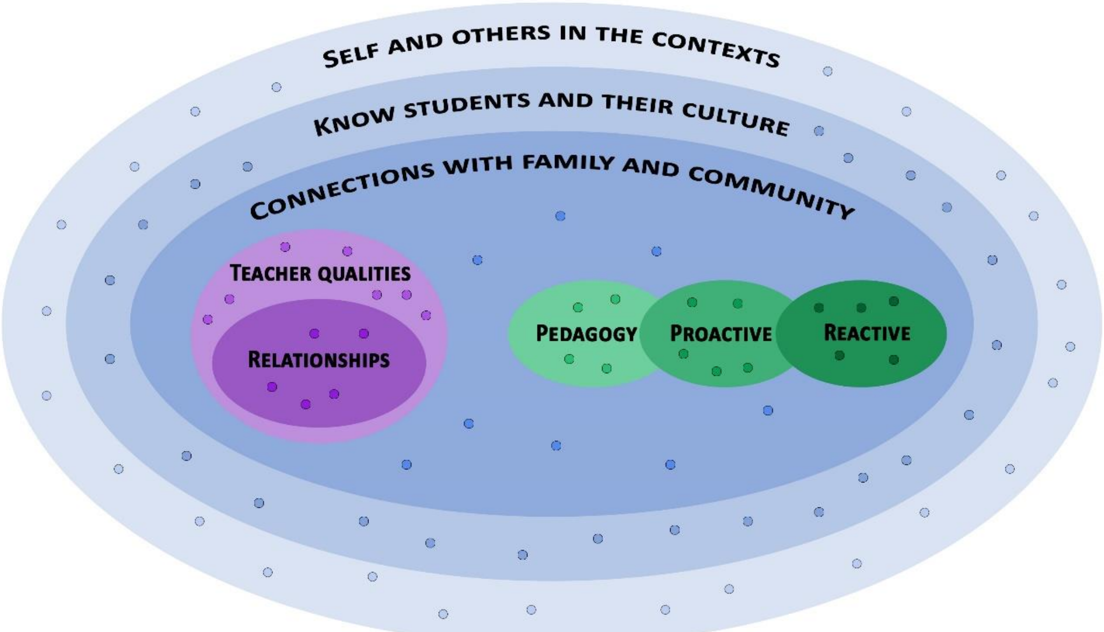
behaviour consequence more serious for her. Staff recounted examples of the benefits of involving families to problem solve (Gillan, 2008), as students would see that parents saw the process as fair if parents are involved. Mainstream education can threaten the cultural identity of minority learners (Rahman, 2012). Critically, one thing that emerged from the interviews, recently supported by literature, was that while education was seen to be important (Holt, 2021), it must not come with a loss of cultural identity.

4.3 TASSAIS Items Grouped in Themes

Continuing the visual representation of the progress of the TASSAIS work in graphic form, Figure 4.1 depicts the items as small dots inside each of the TASSAIS themes.

Figure 4.1

TASSAIS Items Grouped in Themes



4.4 Conclusion

Cologon (2014) suggested about inclusive education that, "[u]ntil we examine our beliefs and attitudes, we may often be unaware that we hold them. We all exist within our context and time and are enculturated into the dominant beliefs and attitudes of our society" (Cologon, 2014, p. 19). Similarly, self-examination in a cross-cultural sense was recommended in international literature (Lewthwaite & McMillan, 2010) and Australian

(Guider, 1991; Perso et al., 2012) and international advice literature (Houtson, 2002; Pinto, 2013).

Due to the history of Australia (Aitkinson, 2002a, 2002b; Milroy, 2005; Ralph et al., 2006) and a general lack of understanding by non-Indigenous teachers (Craven et al., 2007; Lowe, 2017; MacGill, 2016), teacher misunderstanding of Indigenous student behaviour (Malin, 1990a) can lead to increased student disengagement and escalated negative behaviour (Gillan, 2008; Lester, 2016; MacGill, 2016). Gillan (2008) offered that, "Indigenous student misbehaviour is generally misinterpreted in isolation as both students and teachers arrive at school with differing perspectives secured from their life experiences outside the classroom" (Gillan, 2008, p. 58). For Australian Indigenous students, "mainstream education settings are not only considered assimilatory, but they also potentially threated the cultural identities of minority learners" (Rahman, 2012, p. 661). Further, student behaviour was related to the degree to which their needs are met by the education system. Suspensions can be seen as a resistance to school (Lester, 2016; Munns et al., 2008).

During semistructured interviews, Indigenous students, staff and families made suggestions for non-Indigenous teachers about behaviour support for Indigenous children. This chapter presented data from those interviews, presented in the a priori themes identified in the literature review. This data presented an understanding of reasons why Indigenous students may experience school differently from their non-Indigenous peers and further, why they may receive different responses to their behaviour and differing suspension rates as a result. These themes and subthemes give staff a list of attitudes and strategies that could increase their awareness and reduce current inequity in outcomes from student behaviour. Featuring heavily were suggestions that teachers get to know their students and their cultures without a deficit notion of difference, understand student behaviour, connect with students and code-switch when interpreting student behaviours (Gillan, 2008) avoid 'shaming' students and the importance of relationship with families and wider communities.

The findings from this initial qualitative phase, coupled with the literature, were subsequently used to develop an instrument that could be used to observe, and measure teacher frequency of use of the attitudes and strategies suggested by participants. The processes associated with this instrument development are described in Chapter 5.

Chapter 5 Quantitative Analysis

5.1 Introduction

This chapter outlines the process used in the validation of the TASSAIS questionnaire (Appendix C). Section 5.2 explains the Rasch analysis, as previously described in Chapter 3, Methodology. Section 5.3 describes the first analysis of data and adjustments made. Section 5.4 presents the results from the Rasch analyses undertaken, followed by discussion in section 5.5 and conclusions in section 5.6.

5.2 Method

The questions derived from the findings of interviews with participants in Phase 1 were constructed into a survey instrument using Likert-type response options. Items 1-56 required a frequency of teacher use as behaviour support *strategies*, ranging from 'Almost never' (< 20% of the time), through 'Once in a while' (20-39% of the time),' Sometimes' (40-59% of the time),' Frequently' (60-79% of the time), to 'Almost always' (≥ 80% of the time). Items 57 to 71 related to teacher personal development in their understanding of Australian Indigenous cultures and are deemed as *attitudes*. These were answered using the four ordered response options from 'Strongly disagree' to 'Strongly agree'. Items 72 to 78 were demographic questions covering whether the respondent identified as Aboriginal or Torres Strait Islander or both, gender, initial teacher training (Early Childhood, Primary, Secondary), years of teaching experience, currently teaching years, percentage of students in their classes who were Indigenous, and percentage of those Indigenous students in their classes who display behaviour they considered to be inappropriate for the school setting.

As described in section 3.7, 125 participants answered the 78 questions. These participants were gathered in three groups and completed the survey online or on paper. It was estimated that the survey on average took 30 minutes to complete.

Data were downloaded from Survey Monkey into a spreadsheet and paper responses were entered manually. Item groups were coded with a single letter to indicate to which theme they referred; for example: P23 is item #23, a pedagogy strategy relating to theme five. Two of the items (18 and 24) assessed the construct in the opposite direction (Burns, 2000) and were reverse coded before being entered. Survey items are listed in Appendix C, with codes recorded in Appendix F. Professor Trevor Bond, an expert in Rasch analysis advised me how to prepare the data, ran the analysis and together we interpreted the data. As stated

previously, I brought to the process of interpretation a deep understanding of the contexts, the participants, and the phenomenon under investigation.

Table 5.1

Coding of Items

Code	Theme Number	Theme Title
S	1	Knowledge of Self and Other and power relations in the socio-political context
K	2	Knowledge of students and their culture without a deficit notion of difference
T	3	Qualities of the Teacher
R	4	Positive relationships
P	5	Culturally responsive pedagogy
O	6	Proactive behaviour support strategies
E	7	Culturally appropriate reactive behaviour support strategies
F	8	Connections with family and community

Winsteps Rasch analysis software (Linacre, 2018) was used for the analysis.

5.3 Rasch Analysis

The purpose of the survey was to structure the suggestions provided by Indigenous staff and students in Phase 1 to provide a single latent variable on which to measure respondents; this means looking for the 'sameness' that holds the variables together as a phenomenon. In this way, then the defining characteristics of the latent construct are revealed in the content of the items (Boone & Noltemeyer, 2017) provided by Indigenous staff and students in Phase 1. It is asserted, a researcher should be able to summarise the items into a sentence which matches our intended definition of the construct (Boon & Lewthwaite, 2015). The TASSAIS records how frequently teachers use the 71 strategies and to what extent they agree with the content of the items relating to attitude. To determine if the survey instrument was suitable to measure teacher's understanding of attitudes and strategies beneficial to supporting Indigenous student behaviour, Rasch analysis was employed because it "excels at constructing linearity out of ordinality and at aiding the identification of the core construct in a fog of collinearity" (Schumacher & Linacre, 1996, p. 470). In classical test

theory, the scale is treated as an interval scale based on ordinal level items which are either summed together or summed and a mean found (Boon & Lewthwaite, 2015).

Rasch analysis provides a consistent interval scale (Boon & Lewthwaite, 2015) to compare item and person scores by transforming item and person data from ordinal data to yield interval data (Bond & Fox, 2015). This consistent interval is made explicit, and not presumed (Bond & Fox, 2015). The Logit (log odds unit) scale used in Rasch analysis is an interval scale in which unit intervals have a consistent value or meaning (Bond & Fox, 2015). The Logit value of 0 is routinely set at the mean of the item difficulties (Bond & Fox, 2015).

Rasch analysis helps to address validity and reliability issues by combining quantitative data with qualitative understanding to refine the questionnaire (Bond & Fox, 2015; Boon & Lewthwaite, 2015) by reducing the number of items (Boon & Lewthwaite, 2015). Rasch analysis can confirm the unidimensionality of the survey instrument, that is, the capacity of the instrument to focus on one single underlying construct or attribute at a time (Bond & Fox, 2015; Boon & Lewthwaite, 2015; Boone & Noltemeyer, 2017; Fox & Jones, 1998) and not confusing two or more dimensions in a single construct. Each item should contribute to the single construct being investigated (Bond & Fox, 2015). Several other capacities of Rasch analysis will be used in this chapter: to identify the optimal number of rating scale response categories; to identify misfitting persons and items; and to unconfound measures from particular subsamples. Rasch analysis provides a way of estimating the consistency of responses from individuals. It also deals with missing data. This will be a useful advantage in a further phase, when using the questionnaire at an individual level (Boon & Lewthwaite, 2015).

5.3.1 Predictions and Validity

Boone and Noltemeyer (2017) discussed whether the ordering of items matches predictions based on theory. In the current study there was no previous theory. I made predictions based on my professional experience and knowledge of the groups before the data was released. I hypothesised where items and participants would fall on the scale of most frequently used items, and where groups of participants would not meet this hypothesis. Those predictions are available in Appendix G. The process of predicting outcomes of the Rasch analysis aims to provide qualitative verification that the survey functioned as the researcher intended it should, by using the understanding of the researcher to predict the

results. A comparison of the prediction and the results supports my claim about the construct the survey is measuring.

In Rasch analysis, evidence for instrument validity can come from several sources (Fox & Jones, 1998). The researcher can examine the ordering of items along the continuum (Fox & Jones, 1998). To assess that ordering, the survey measures what the researcher was intending, which is known as construct validity (Bond & Fox, 2015).

> Although variable interpretation is best facilitated when compared with theoretical expectations, experienced persons working in the substantive area can aid in the process when a theoretical basis did not drive the data collection. This information, whether gained from theory or from experienced practitioners, helps the researcher refine the instrument to include only those items that define valid measures. (Fox & Jones, 1998, p. 3)

5.3.2 Reliability

In classical test theory, reliability is usually done using Cronbach's alpha (Fox & Jones, 1998). Rasch analysis provides a person separation reliability index, which indicates the ability of the survey to differentiate persons along the measured variable. It can also indicate the replicability of person placement across other items measuring the same construct. There are no universal cut-offs, but it is suggested that the separation reliability should be higher than .8 (Bond & Fox, 2015).

5.3.3 Fit

The concept of 'fit' is a quality control mechanism. Transformed or standardised fit statistics have a mean of 0 and SD of 1 (Fox & Jones, 1998). A high misfit score indicates that the data do not fit the single concept or unidimensionality required by the model (Bond & Fox, 2015). As Linacre (2018) notes, "[i]n test construction, the guiding principle is all items must be about the same thing, but then be as different as possible" (p.508). To approach a unidimensional construct, person and item mean squares should be as close to 1 as possible, with the mean standardised fit statistics as close to 0 as possible (Linacre, 2018). If the fit indices of an item are outside an acceptable range, the researcher could try rewriting the item in later versions of the survey instrument. Using fit indicators can help the researcher to learn about the construct and improve data collection (Bond & Fox, 2015). "Items that do not fit

the unidimensional construct are those that diverge from the expected frequency of use pattern" (Bond & Fox, 2015, p. 42). If these misfitting items are put aside for further consideration, the remaining fit statistics can move closer to 0 and the alignment of items and persons closer to the straight line underlying the concept of the Wright Map.

5.3.4 The Wright Map

The Wright Map provides a "power visual of person-item relationships on an equal interval logit scale" (Boone & Noltemeyer, 2017, p. 8), where "[m]easurement units were expressed in logits, a logarithm of the ratio of 'pass' and 'fail' probabilities" (Boon & Lewthwaite, 2015, p. 43) with 0.0 logits allocated to the mean item difficulty. We want to examine the extent to which the data adhere to the straight line or deviate from it (Bond & Fox, 2015). This can be used to see which item and person performances need closer scrutiny. With discussion between the researcher and the expert, qualitative discussion and quantitative data work together to make decisions about the data (Bond & Fox, 2015). Persons, ranked on the left of the centre vertical line, who are more able have a greater likelihood of using the strategies more frequently (Bond & Fox, 2015) will be placed higher on the Wright Map, Figure 5.1.

Figure 5.1

TASSAIS Wright Map

```
----------------------------------------------------------------------------

MEASURE                    Person - MAP - Item
                               <more>|<rare>
    4                                +
                                     |
                                     |
                                     |
                                 A   |
                                 A   |
                                     |
    3                            B   +
                                     |
                             A A A  T|
                               A B   |
                               B C   |
                           A A A A   |
                           A A A C   |
    2                          A B  S+
                     A A A A B B B   |
                         A A A B C   |
               A A A A A A A B B C   |
                 A A A A A A B B B   |T P23
                   A A A C C C C C  M|  O35
      A A A A A A A A A A A B B C C  |  E33 K1  P18 P20 P22
    1          A A C C C C C C C C   +  T32 T64
                           A B B C   |
             A A A B B C C C C C C   |S K9  O25 O46 T24
               A A A A B C C C C C  S|  F52 P19 T16
                       A A A B C C   |  K36 O31 O42 O51 S68
                         A A A C C   |  K69 O12 O50 R54 S58 T4
                                 C   |  E10 E34 O37 O43
    0                          C C   +M E39 F65 O2  O40 O44 O6  P21
                                 C  T|  F67 K71 O53 O7  P13 P17 R11 S57 T26
                                 C   |  E30 E38 K60 K62 P55 T5  T70
                                     |  O56
                                     |  E28 K61 K63 O49
                                     |S O15 O41 R14 S59
                                     |
   -1                                +  E27 E48 R66 T29
                                     |  O3
                                     |  T47
                                     |T
                                     |
                                     |
                                     |  R45
   -2                                +  R8
                               <less>|<frequent>
```

Item measures (on the right side of the line) are also expressed in logit units. A higher item measure indicates an item that was harder to endorse (used less frequently) (Bond & Fox, 2015). The item at the top, the least frequently used, is P23, directed at including

Indigenous role models in my teaching. Easier to implement attitudes and strategies are more likely to be endorsed or used more frequently by all persons (Bond & Fox, 2015); the data here supports that supposition. Located towards the bottom of the Wright Map is one example, item R8, that is directed at showing respect for my students to be able to expect respect from them seems well utilised.

5.4 Preliminary Analysis of the TASSAIS Data

The first Rasch analysis of the TASSAIS data demonstrated that not all the questions were clearly expressed. The Rasch measurement consultant and I decided to put aside five items (18, 24, 32, 37 and 38) as their fit indices were outside of the acceptable range.

Item 18, (misfit value 2.52) 'I target individual students with repeated questions' may have been misunderstood. This item was reversed scored. The intended meaning was 'I do not shame students by asking them repeated questions'.

Item 24, (misfit value 1.78) 'I use an 'I'm the boss' approach' was also reversed in meaning and appears to have confused participants.

Item 32, (misfit value 1.68) 'If my emotions are escalated, I ask for help' was poorly worded to convey meaning.

Item 37 (misfit value 1.53) 'I use a seating plan if needed, so that student combinations complement each other' incorporates two key ideas, so it was poorly worded.

Item 38 (misfit value 1.72) 'I use low level behaviour management strategies like proximity to address inappropriate behaviour', the language does not convey the meaning intended, 'less-intrusive' would have more clearly expressed the intended idea.

These items, indicated as misfitting, were probably unclear to the respondents and framed in the negative. They were removed in the second run of the analysis.

Item 9 (misfit value 1.45) 'I avoid singling out my students publicly for positive and negative reasons' was the most erratic item that was retained, because it worked well with the high-scoring respondents (those who reported frequent use of the strategies) but did not work well with the low-scoring group. That is, this item was one that people who are 'in the know' would understand, but people who are not 'in the know' would not. What was evident, was that people 'in the know' understood it. Conversely, people who do not know what the key words mean in this context will use it as the words are used in general English language.

Items 9 (1.45) and 16 (1.40) have a misfit value of almost 1.5. These were deemed to be essential to the TASSAIS despite being slightly misfitting. The fit of these items to the model is sufficient for descriptive low-stake analyses such as this (Bond & Fox, 2015).

Qualitative inspection and discussion of the data is a prerequisite to meaningful quantitative analysis (Bond & Fox, 2015), in this way the research is epistemologically iterative, where theory informs practice and practice informs theory (Bond & Fox, 2015). Likert surveys rely on communicating the idea clearly (Kervin et al., 2006), so, Rasch analysis results were used to refine the instrument. In this case, qualitative examination resulted in removal of items that were unclear in communication. When those misfitting items were removed, the person fit improved and no persons needed to be put aside for further examination. Misfitting persons might have chosen answers at random. When developing an instrument, the researcher may eliminate such persons because they add noise to the measurement process (Fox & Jones, 1998). Further discussion of person statistics will be included below.

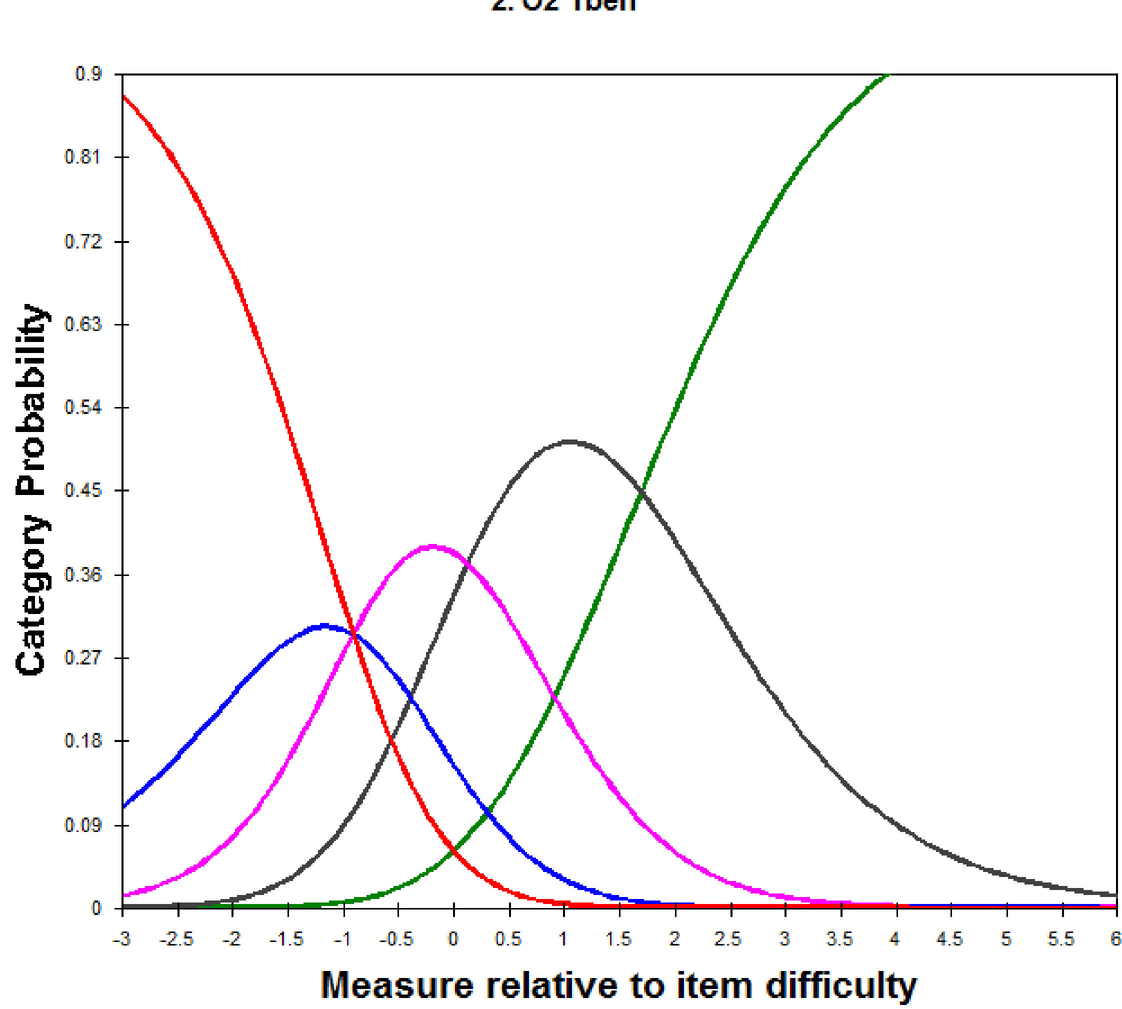
5.5 Results

5.5.1 Category Probability Curves

In the category probability curves graph, each response category should have a peak on the curve, revealing that it is the most probable category for some portion of the construct (Bond & Fox, 2015; Boone & Noltemeyer, 2017). The first run of the Rasch analysis revealed that response 2 was not being used appropriately by the respondents.

Figure 5.2

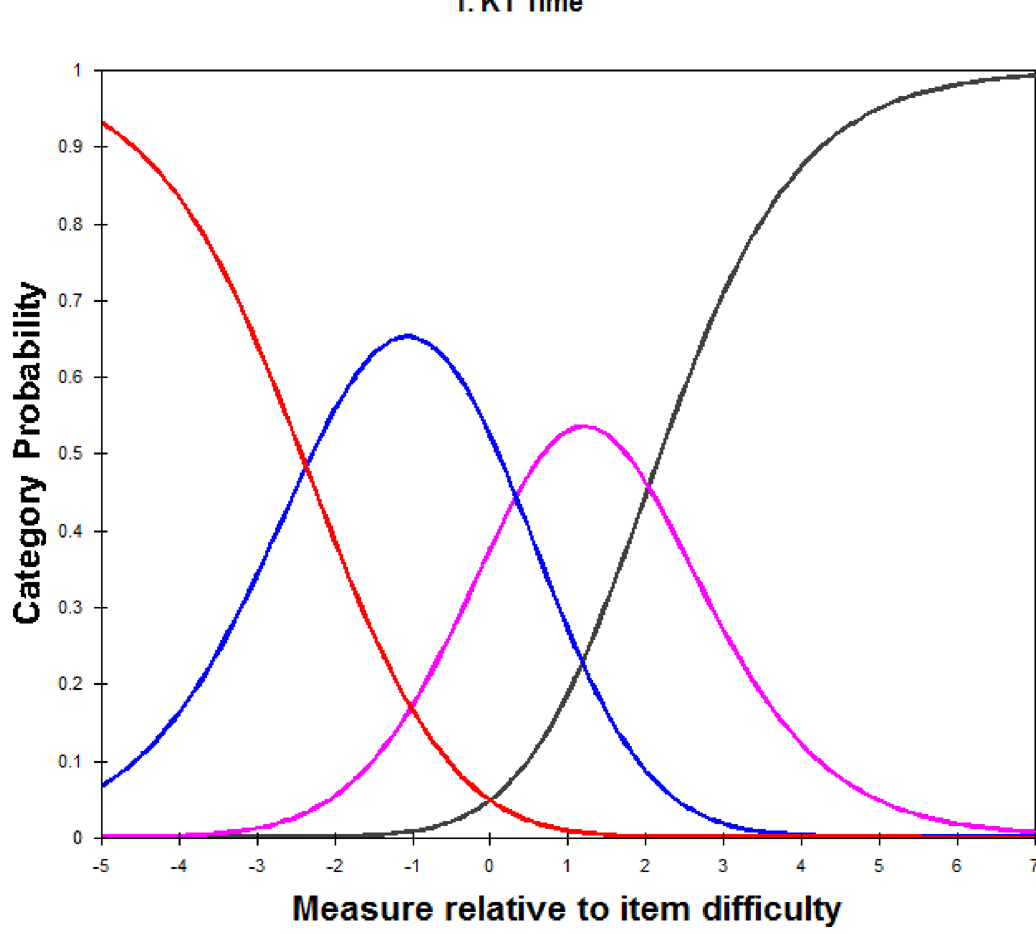
TASSAIS Preliminary Category Probability Curves



It was surmised that the problem was that participants did not distinguish between two different labels: 2, 'Once in a while' and 3, 'Sometimes'. So, the responses to categories 2 'Once in a while' and 3 'Sometimes' were combined. The response categories graph then revealed that the new response options were working as intended. See Figure 5.3.

Figure 5.3

TASSAIS Revised Category Probability Curves



5.5.2 Total Distribution - the Wright Map

The validity of the TASSAIS survey instrument was examined by using Rasch analysis results to evaluate the fit of the data to the unidimensionality requirement of the Rasch model. The 125 persons and the 71 items were measured along the same metric using one scale. These were calibrated in terms of the degree of frequency of use as self-reported by the teachers, or their agreement with attitudinal statements. This corresponds to item 'difficulty' in a typical Rasch scale. A high level of difficulty means low frequency of use of, or agreement with, the item.

Separation index values can range from 0 to infinity and higher values indicate better separation and higher reliability. A Person Separation index of 3 or greater is desirable. As can be seen in Figure 5.3, the TASSAIS Person Separation Index is 4.13, with a reliability value of .94 and the TASSAIS Item Separation Index is 5.43, with a reliability value of .97.

When the Person Reliability Index is high, this is prima facie evidence that we have developed a line of inquiry where some participants score high and others score low on the underlying dimension (Bond & Fox, 2015). When the Item Reliability is high, we have developed a line of inquiry where some items are difficult, and some are easier (Bond & Fox, 2015). The separation values of the TASSAIS suggest a sufficient sample to reveal the hierarchy and spacing of terms across different samples of similar respondents. As expected, given that respondent N is much lower than item N, the Person Separation Index reveals a lower, but very satisfactory Person Separation and a lower level of Person Reliability.

The Wright Map distribution (Fig. 5.1) reveals that the teachers were clustered towards the top of the scale. The sample was not well targeted by the TASSAIS because they reported high frequency of use of the strategies and strong positive attitudes. The total distribution shows that on average (Person Mean = 1.52, *SD* = .94; Item mean = 0), respondents found it relatively easy to endorse the TASSAIS items. As described in the participant selection part of the method section, there was not a wide selection of teachers due to the method of sourcing respondents. My professional acquaintances and their acquaintances (64), particularly those involved in Indigenous schools (21) and Indigenous education programs at university (40) are much more likely to be those with an interest in Indigenous education and to interact with Indigenous students in their classes. Teachers such as those described by a principal who have, "white middle-class values and don't understand what the Aboriginal kids are bringing to school and don't take time to build on what those kids are bringing to school" (Lester, 2016, p. 172) were unlikely to be included in the survey sample. Inclusion of a broader sample of practising teachers would be likely to spread the Person distribution.

Some items had good fit, which means that these questions work well together to make a good summary of the ideas encapsulated in the survey. These are the items with the closest meaning to the concept being measured:

> Item 17, 'I use meaningful learning tasks for my students'
>
> Item 55 'I explain things clearly and in different ways so that students can avoid the frustration of misunderstanding concepts'
>
> Item 62, 'I understand that students may need to see the larger context before attempting a specific task'.

There are many items that have good fit. Items 5, 13, 25, 60 and more. These items summarise a teacher's knowledge of how to work successfully with Indigenous children. It also summarises the participants' responses to other items. These items were able to predict a person's total set of responses from just a few items.

The Map in Figure 5.1 shows the mean of Items and mean of People. Overall, Persons found the Items easy to endorse.

5.5.3 Analysis of Fit Residuals

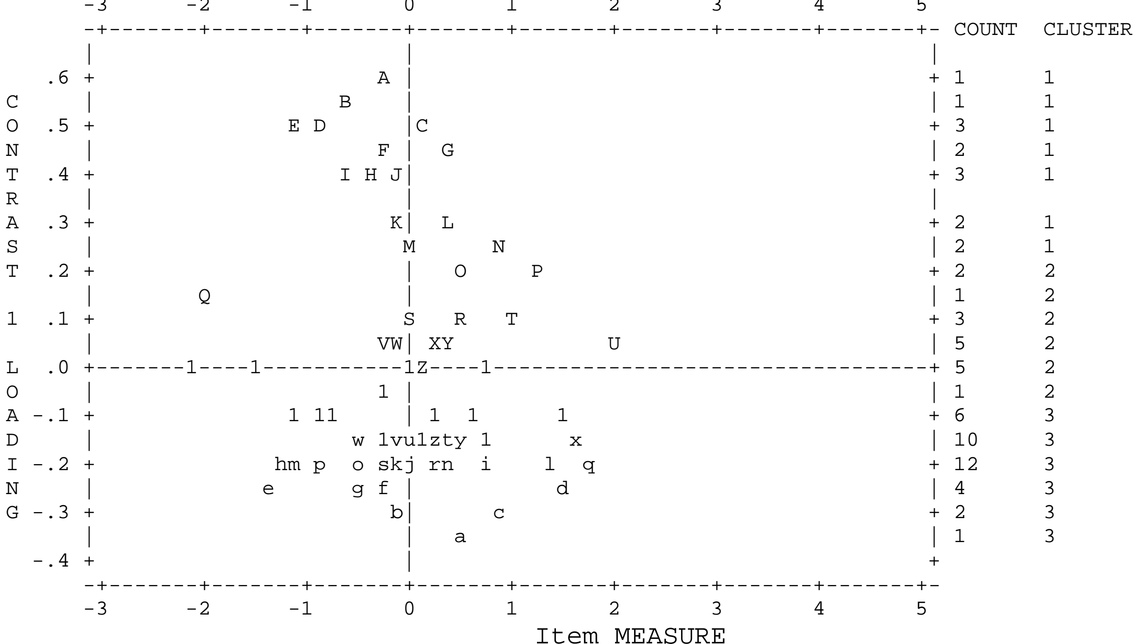
For good measurement, the item fit residuals should be distributed at random. Figure 5.4 indicates that the residuals in the TASSAIS instrument appear to be no different from random. This further supports the contention that the TASSAIS is measuring one construct, rather than many.

Figure 5.4

TASSAIS Residual Contrast Plot

```
     Table of STANDARDISED RESIDUAL variance (in Eigenvalue units)
                                                 -- Empirical --    Modeled
Total raw variance in observations     =       106.9 100.0%          100.0%
  Raw variance explained by measures   =        40.9  38.2%           38.5%
    Raw variance explained by persons  =        15.3  14.4%           14.5%
    Raw Variance explained by items    =        25.5  23.9%           24.1%
  Raw unexplained variance (total)     =        66.0  61.8% 100.0%    61.5%
    Unexplned variance in 1st contrast =         4.0   3.8%   6.1%
    Unexplned variance in 2nd contrast =         3.5   3.3%   5.3%
    Unexplned variance in 3rd contrast =         2.9   2.7%   4.4%
    Unexplned variance in 4th contrast =         2.7   2.5%   4.1%
    Unexplned variance in 5th contrast =         2.5   2.3%   3.8%
```

STANDARDISED RESIDUAL CONTRAST 1 PLOT



5.5.4 Persons

As discussed in section 5.3, the decision to remove the ambiguous items left 13 persons who did not answer in a way similar to the others. They are not from one group (A, B, or C), but are spread across the groups. There was something about these responses that was not consistent with those of the vast majority of respondents. It was not clear why this is the case for 13 teachers out of 125, or 10.4%.

Table 5.2

Person Statistics

Person: REAL SEP.: 4.13 REL.: .94 ... Item: REAL SEP.: 5.43 REL.: .97

Person STATISTICS: MISFIT ORDER

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTMEASURE-A CORR.	PTMEASURE-A EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Person
18	183	51	2.87	.26	2.17	4.3	1.83	2.6	A .37	.42	70.6	66.4	A018xxxxx
90	168	66	.23	.19	2.09	5.2	2.15	5.4	B .34	.49	30.3	52.6	C0902H111
69	211	66	1.70	.19	1.90	4.6	1.88	4.4	C .18	.47	30.3	53.1	B0691D291
4	193	66	1.07	.18	1.81	4.3	1.78	4.1	D .60	.49	33.3	52.4	A0042D241
17	222	66	2.12	.20	1.78	4.0	1.60	3.0	E .42	.45	31.8	54.9	A0172B211
124	239	66	2.92	.24	1.70	3.1	1.49	1.9	F .37	.40	65.2	68.6	C1242H111
40	241	66	3.04	.24	1.66	2.9	1.43	1.6	G .27	.39	60.6	70.3	A0402I211
6	241	65	3.28	.26	1.56	2.3	1.63	2.0	H .21	.37	69.2	74.6	A0062A292
42	208	66	1.59	.19	1.62	3.5	1.52	2.9	I .45	.48	40.9	53.4	A0422x112
80	180	49	2.92	.29	1.61	2.3	1.40	1.4	J .38	.33	75.5	71.3	B0802H294
116	222	65	2.25	.21	1.61	3.2	1.44	2.2	K .51	.44	46.2	57.3	C1162H231
59	206	66	1.52	.19	1.53	3.0	1.59	3.2	L .30	.48	40.9	52.9	A0592A211
39	219	66	2.00	.20	1.54	3.0	1.44	2.3	M .40	.46	45.5	53.6	A0392E224
47	215	66	1.85	.19	1.54	3.0	1.41	2.3	N .65	.47	36.4	53.7	A0472D211
55	191	66	1.00	.18	1.50	2.9	1.52	2.9	O .30	.49	33.3	52.3	A0552D193
50	219	65	2.11	.20	1.48	2.6	1.33	1.8	P .48	.44	46.2	54.8	A0502D293
125	211	66	1.70	.19	1.46	2.6	1.38	2.2	Q .50	.47	43.9	53.1	C1252H232
58	239	66	2.92	.24	1.45	2.1	1.26	1.1	R .41	.40	69.7	68.6	A0582E192
36	229	66	2.42	.21	1.44	2.4	1.19	1.0	S .55	.43	60.6	59.8	A0362H211
28	240	66	2.98	.24	1.42	2.0	1.16	.7	T .47	.39	72.7	69.3	A0282H211
100	204	66	1.45	.19	1.22	1.4	1.38	2.2	U .26	.48	62.1	53.1	C1002x133
68	219	66	2.00	.20	1.37	2.1	1.24	1.4	V .62	.46	45.5	53.6	B0682D294
74	227	66	2.33	.21	1.33	1.9	1.35	1.8	W .37	.44	43.9	58.4	B0742D291
24	253	66	3.98	.33	1.34	1.2	1.17	.6	X .23	.30	86.4	84.0	A0242H211
14	200	66	1.31	.19	1.30	1.8	1.33	2.0	Y .38	.48	45.5	53.1	A0142G211

13	202	66	1.38	.19	1.31	1.9	1.26	1.6	Z	.53	.48	43.9	53.0	A0132H211
73	206	66	1.52	.19	1.23	1.4	1.30	1.8		.14	.48	42.4	52.9	B0732D291
1	236	66	2.76	.23	1.20	1.1	1.27	1.2		.47	.41	66.7	65.4	A0012H291
10	249	66	3.60	.29	1.26	1.1	.89	-.2		.39	.34	77.3	79.0	A0102H193
45	217	66	1.92	.20	1.26	1.6	1.17	1.0		.43	.46	48.5	53.7	A0452F121
102	199	66	1.27	.19	1.26	1.6	1.23	1.4		.47	.48	51.5	52.9	C1022H111
22	234	66	2.66	.22	1.22	1.2	1.20	1.0		.43	.42	66.7	63.6	A0222H221
BETTER FITTING OMITTED														
9	214	66	1.81	.19	.82	-1.1	.78	-1.4		.52	.47	60.6	53.7	A0091D131
38	226	66	2.29	.21	.81	-1.2	.77	-1.3		.61	.44	57.6	57.7	A0382F222
112	207	66	1.55	.19	.81	-1.3	.80	-1.3		.54	.48	65.2	53.2	C1122H111
23	217	66	1.92	.20	.80	-1.3	.78	-1.4		.62	.46	50.0	53.7	A0232C211
33	224	66	2.20	.20	.78	-1.4	.76	-1.4		.47	.45	56.1	56.5	A0332I211
12	171	66	.33	.18	.75	-1.6	.75	-1.6		.51	.49	62.1	52.9	A0122H213
44	207	65	1.67	.19	.70	-2.1	.75	-1.7		.46	.48	63.1	53.2	A0442H213
97	191	66	1.00	.18	.75	-1.7	.75	-1.7		.48	.49	65.2	52.3	C0972H213
118	147	58	.29	.20	.74	-1.5	.75	-1.5		.24	.49	48.3	52.9	C1182H111
78	197	66	1.20	.18	.73	-1.9	.74	-1.8		.67	.48	59.1	52.5	B0782H291
104	167	65	.28	.19	.72	-1.8	.73	-1.8		.46	.49	58.5	52.8	C1042H111
109	183	66	.73	.18	.72	-2.0	.71	-2.0	z	.49	.49	59.1	52.3	C1092H194
87	184	66	.77	.18	.70	-2.1	.71	-2.0	y	.40	.49	65.2	52.3	C0872H111
114	174	66	.43	.18	.68	-2.2	.71	-2.0	x	.47	.49	63.6	52.5	C1142H133
88	206	66	1.52	.19	.66	-2.5	.70	-2.0	w	.30	.48	66.7	52.9	C0882x2xx
119	182	66	.70	.18	.68	-2.2	.70	-2.0	v	.57	.49	63.6	52.2	C1192x111
64	177	62	.92	.19	.66	-2.4	.68	-2.2	u	.44	.49	69.4	52.6	A0642C121
110	175	66	.46	.18	.68	-2.2	.68	-2.1	t	.46	.49	56.1	52.4	C1102E111
41	178	66	.57	.18	.65	-2.4	.65	-2.5	s	.47	.49	69.7	52.4	A0412H211
89	167	66	.19	.19	.65	-2.4	.65	-2.3	r	.44	.49	63.6	52.7	C0892H111
101	178	66	.57	.18	.62	-2.7	.64	-2.5	q	.28	.49	62.1	52.4	C1012H2xx
105	197	66	1.20	.18	.64	-2.6	.64	-2.6	p	.46	.48	68.2	52.5	C1052H211
27	197	66	1.20	.18	.61	-2.9	.63	-2.7	o	.61	.48	62.1	52.5	A0272H133
31	203	66	1.41	.19	.60	-3.0	.63	-2.7	n	.51	.48	72.7	52.9	A0312J293
66	222	66	2.12	.20	.63	-2.6	.60	-2.7	m	.68	.45	71.2	54.9	B0662D292
85	192	66	1.04	.18	.59	-3.1	.62	-2.8	l	.42	.49	71.2	52.6	B0852H191
95	162	66	.02	.19	.61	-2.7	.60	-2.8	k	.53	.48	56.1	53.4	C0952D111
96	189	66	.93	.18	.58	-3.2	.60	-2.9	j	.26	.49	69.7	52.3	C0962H241
122	173	66	.40	.18	.60	-2.8	.60	-2.9	i	.70	.49	68.2	52.6	C1222H111
60	201	66	1.34	.19	.58	-3.2	.58	-3.2	h	.66	.48	63.6	53.1	A0602H221
103	184	66	.77	.18	.58	-3.2	.58	-3.1	g	.47	.49	66.7	52.3	C1032D111

Note:

5.5.5 Comparison Between Groups

Group A were a group of professional teachers known to the researcher, contacted via email and social media who completed the survey online. Group B were a group of teachers in a 100% Indigenous rural school who completed the survey on paper and Group C were near completion Graduate Diploma of Education students. The average measure for TASSAIS across all groups was 1.52 (*SD*= .94). Group B had the marginally highest mean measure (*M*= 1.85, *SD*= 0.85), above Group A (*M*= 1.79, *SD*= 0.91). And Group C had a considerably lower average score than the two groups of practising teachers (*M*= .92, *SD*= .74). In plain language this means, the group who had the most experience with Indigenous students (Group B) demonstrated the highest endorsement of the items. These were staff in a rural school where enrolments were 100% Indigenous students. My contacts demonstrated the next frequent use of the items. and, Group C who had the least day-to-day experience in the classroom performed used the items less frequently.

The comparison independent t-tests of TASSAIS scores across the groups are shown in Table 5.3. No significant difference was found between Groups A and B ($p > .05$). A significant mean difference was found between Groups A and C, and between Groups B and C, with a moderate to large treatment effect. Groups A and B, the teachers with a focus on teaching Indigenous students, reported significantly higher endorsements than did the Graduate Diploma students, group C. A graphic simplifying the arrangement of groups is included in Appendix H.

Table 5.3

Comparison Between Groups of TASSAIS Participants

Groups	Mean Difference Measure	*T*	Degree of freedom	*p*	Confidence interval
A-B	-.06	-.26	35	.796	-.388- .508
A-C	.87	5.30	94	.000	.530- 1.20
B-C	.93	4.17	36	.000	.50- 1.35

5.5.6 Results of Demographic Information, Separation of Attitudes and Strategies and Themes

To provide context, a Rasch analysis was then used to determine the meaningful differences between respondents on the items from the TASSAIS (Boon & Lewthwaite, 2015; Boone & Noltemeyer, 2017). Demographic information provided by participants showed some differences, which are displayed below. The t-tests were done using Winsteps (Linacre, 2018) and the confidence intervals were calculated by hand.

5.5.6.1 Indigenous vs. non-Indigenous

Comparison independent t-tests of TASSAIS scores across the Indigenous and non-Indigenous groups are reported here. Five participants did not to respond to the question about their ethnicity, perhaps because the demographic questions were at the end of the survey and some participants did not finish. There were 110 non-Indigenous teachers and 10 Indigenous teachers.

Non-Indigenous teachers had a lower average TASSAIS measure (M= 1.50, SD= 0.95) than did the Indigenous teachers (M= 1.80, SD= 0.90). The combined standard error was 04. The mean difference between the groups on TASSAIS measures was 0.3 and therefore was not significant, $t(10)$= .95, p= .364.

5.5.6.2 Male vs. Female

Six respondents did not answer the question about gender. Comparison of TASSAIS scores across Male (n= 46) and Female (n= 73) groups follows: Males had the lower average TASSAIS measure (M= 1.15, SD= 1.00), Females (M= 1.76, SD= .83).

The mean difference of TASSAIS scores between groups of Males and Females was .61 (SE= -.18), which was significant, t(82)= -3.39, p= .001. In this measure, .5 mean difference is meaningful and .6 is very meaningful.

5.5.6.3 *Other Demographic Information*

Some secondary analyses were done using the demographic information and will be examined later (due to low numbers in some of the groups, Welch t-test assumptions were not satisfied).

5.5.6.4 Items Separated into Attitudes and Strategies

The attitudes and strategies responses were separated to examine if there was any difference in reported frequency of use between the categories of items (Appendix I). The results indicated that both attitudes and strategies were spread over the Wright Map, though attitudes were more tightly distributed around the mean. The one attitude that sat above the rest was item T64, 'I make an effort to learn some Indigenous language/s', indicating that teachers were less likely to agree with that statement.

5.5.6.5 Items Separated into Themes

The themes were also separated to examine if there was any difference in reported frequency of use. Appendix J shows the items separated into the eight TASSAIS themes that have carried throughout the study. This was done to see if any of the themes were less frequently used than others. The results indicated that all themes are spread widely over the Wright Map between ± 2 SD. Most themes had a wide distribution, especially above the mean. No one theme was harder to achieve or used less frequently than others. Minor differences indicate that proactive strategies were clumped within 1 SD of the mean. Most teachers reported that they use the attitudes and strategies related to relationship. Not all teachers used the pedagogical strategies. Teachers reported they were likely to use the reactive strategies, except for item E33: After an incident I do not talk directly to what happened but talk around it for example, 'sometimes these things happen and what needs to happen is this'.

5.6 Discussion

"When an instrument satisfies the three assumptions of the Rasch model, the instrument can reliably and validly be used for measuring the latent trait in question" (Boon & Lewthwaite, 2015, pp. 42,43). The three key requirements are:

1. Unidimensionality: This requires that a set of items must measure one and the same latent skill in a homogenous way.
2. Local stochastic independence: The response to one item should not influence the response to others, except for an influence that can be explained by the latent variable that is the measurement objective of the set of items.
3. Parallel item characteristic curves: Each item in the Rasch scale should contribute uniquely to the scale. Items with extremely high or low discrimination power indicate a violation of this assumption. (Boon & Lewthwaite, 2015, pp. 42,43).

According to Messick (1995) I should not hold the results of a single Rasch result as instrument validation. Mistakenly, validity is often presumed to be reflected in a score, assumed to be generalisable, extrapolated beyond the test, presumed relationships and anticipated outcomes (Messick, 1995). Rather, validation is an integrative summary (Messick, 1995). It is the relation between evidence and inferences that should determine if the survey instrument can be regarded as validated (Messick, 1995) and this process cannot be achieved by a single score.

> The challenge in test validation is to link these inferences to convergent evidence supporting them and to discount evidence discounting plausible rival inferences. Evidence pertinent to all of these [six] aspects needs to be integrated into an overall validity judgement to sustain score inferences and action implications, or else provide compelling reasons why there is not a link - which is what is meant by validity as a unified concept. (Messick, 1995, p. 747)

Responding to Messick's six aspects for the TASSAIS, the first is content relevance and representativeness. The Rasch process confirmed that the TASSAIS measured one construct. The interviews in Phase 1 gave multiple respondents the opportunity to contribute ideas to cover all important parts of the construct domain (Messick, 1995). Both content relevance and representativeness were covered by the workshop process where the assessment items were "appraised by expert professional judgement" (Messick, 1995, p. 745) which led to the list of TASSAIS items. Using the TASSAIS as an observation tool in Phase 3 covered functional importance. Further, consultations with professional expert volunteer educators in examining data and drawing conclusions as described in section 3.9, also increased relevance.

The second aspect put forward by Messick (1995) is substantive theories, process models and process engagement. There is no previous theory in this case, so that cannot be argued at present. The third aspect is structural - scoring models as reflective of task and domain structure. As will be discussed in Chapter 7, the structure of the TASSAIS in themes and field notes will be used to interpret the data and the application of the instrument, using structure to support a claim for validity. The fourth aspect is generalisability. This may come at a later phase, when the survey is applied to a different context. At present the data and validity is specific to this context. The fifth aspect relates to external variables. Again, future applications of the TASSAIS could be related to external sources (Lewthwaite et al., 2015)

and other applied settings. The sixth aspect is consequences, as validity evidence, which examines intended and unintended consequences of score interpretation. This too, will come with further application and development of the TASSAIS survey instrument and observation tool.

Phase 3 will "link these inferences to convergent evidence" (Messick, 1995, p. 747) and further work is needed to discount plausible rival hypotheses, for example, simply good behaviour management skills are enough to be successful with Indigenous children. Therefore, the TASSAIS survey instrument is still being validated and is not validated at present.

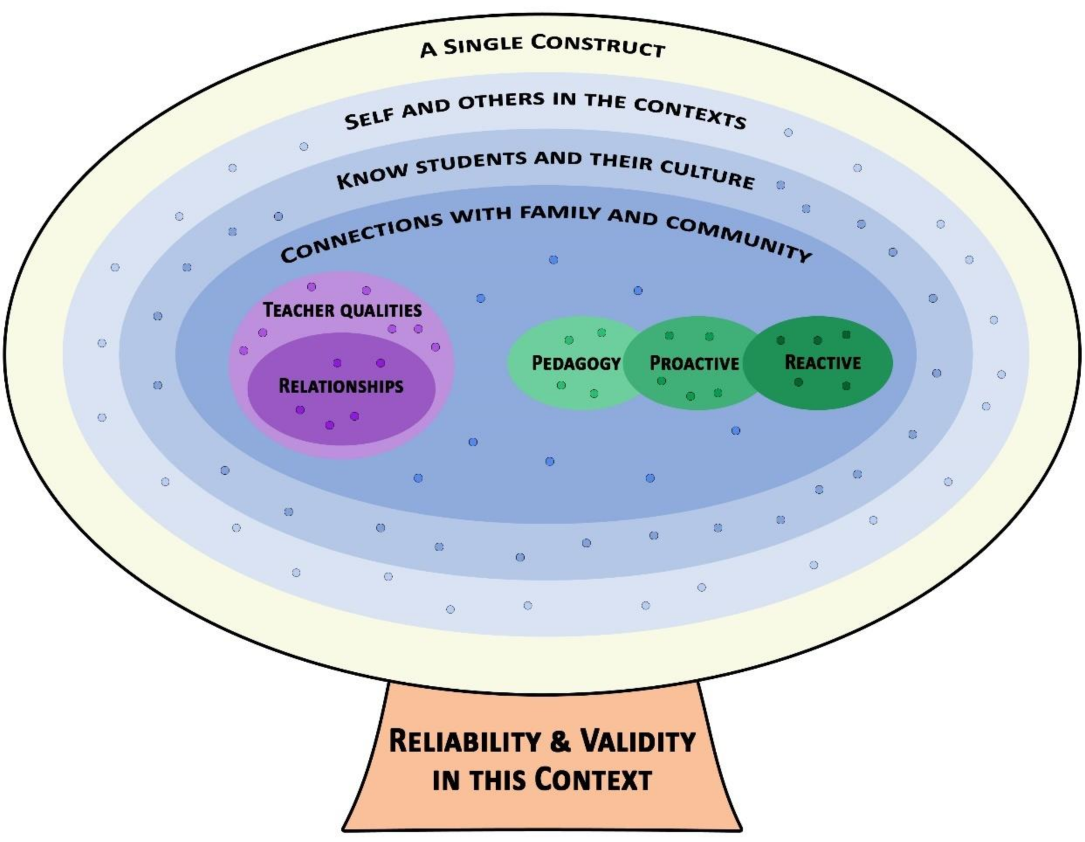
Since the respondents found the items easy to endorse, it is possible that the sample may have been skewed due to the limitations in the way I was able to access participants. Or, perhaps education and experience led many teachers to cater for the needs of Indigenous students. With a wider selection of participants, including those described in the data in Lester (2016), who "hold onto negative stereotypical beliefs and limited effective engagement with Indigenous student due to their ignorance and lack of willingness to find out about indigenous children's lives" (Lester, 2016, p. 172), a different result may be obtained.

5.7 The TASSAIS Themes Within a Single Construct

A visual representation of the work in this chapter is included in Figure 5.5. This graphic depicts the outcomes of the Rasch analysis. The purpose of the analysis was to examine if the items, whose genesis was informed by Indigenous people (see Chapter 4), related to a single construct. With the removal of four ambiguous items, the result was that the items all relate to a single underlying construct. I propose that the construct is strategies that enhance Australian Indigenous students' on-task rate and satisfaction with their environment. The single construct is depicted by the cream area surrounding the TASSAIS themes and items. The Rasch analysis also works to provide evidence that there is validity and reliability in the survey instrument in this case. This is indicated by the stand at the bottom of the graphic supporting the evidence.

Figure 5.5

The TASSAIS Themes Within a Single Construct



5.8 Conclusion

The first research question in this study was, According to Indigenous students, family members and staff working with Indigenous students, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved positive learning outcomes?'. Phase 1 of the study collected a multitude of suggestions from Indigenous staff, students and families. A group of Indigenous and non-Indigenous teachers, liaison officers and academics workshopped to synthesise a list of attitudes and strategies from Phase 1 data. This list was used in the TASSAIS survey instrument and responded to by 125 participants, described in section 3.7. This second phase of the study sought to confirm that the TASSAIS survey instrument was measuring a single construct (phenomenon), by using Rasch analysis to evaluate its unidimensionality and refine the instrument. Rasch analysis can also be used to further refine the instrument in future studies (Fox & Jones, 1998). In the third Phase, described in Chapter 6, the list of attitudes and strategies was taken

to classrooms as an observation tool to explore the second research question: 'To examine the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate behaviour)'.

Chapter 6 Qualitative and Quantitative Findings: TASSAIS strategies in classrooms

6.1 Introduction

Phase 1 of this study (Chapter 4) asked Indigenous staff, students and families to recommend behaviour support attitudes and strategies for teachers that they perceived would contribute to a supportive and improved learning outcomes for Indigenous students. In Phase 1b and 1C (Chapter 3) these suggestions were developed into items referred to as strategies (see Sections 3.8.3 and 3.8.4). From this qualitative foundation, a quantitative Rasch analysis was employed to confirm that the survey related statistically to a single behaviour support construct; that which supports Australian Indigenous students.

This chapter presents the Phase 3 data, which focused on the second research question, that sought to 'investigate the influence of the [TASSAIS] enacted behaviour support practices on student behaviour'. Student on-task, off-task and inappropriate behaviour was recorded numerically and in field notes. Section 6.2 presents an overview of the methods used, information about participants and the context. Section 6.3 presents the observation and teacher self-report data. Section 6.4 offers discussion, and 6.5, a conclusion.

6.2 Overview of Phase 3 Data Collection Methods

As described earlier, this study employs Creswell's 'Transformative Design' data collection and analysis approach. It is a fitting approach to "address injustices or bring about change for an underrepresented or marginalised group" (Creswell & Plano Clark, 2011, p. 222), as this study seeks to bring about change in teacher understanding of recommended behaviour support for Indigenous students. Data analysis in Transformative Design can be sequential or concurrent. In this phase, data collection was both sequential (teacher observations before student observations before survey data) and concurrent (qualitative field notes collected at the same time as quantitative observations). The sequence of data collection, purpose and instruments was explained in Chapter 3 and are presented in Table 6.1.

Table 6.1

Summary of Data Sets in Chronological Order of Data Collection

Data set	Participants	Qualitative/Quantitative	Purpose	Instrument	Data analysis
1	Teachers	Quantitative/numerical using tally marks in themes	Number of TASSAIS strategies used in themes	TASSAIS teacher observation tool	Total and Theme counts used in Chi-Squared Tests of Independence
		Qualitative brief observation field notes	Justified most tally marks	TASSAIS teacher observation tool	Used to support Chi-Squared Tests
		Qualitative conversation notes	Record notes from conversations	Research notes	Pertinent comments included in field notes
2	Students	Quantitative/numerical coded numerical student observations	Record student on-task/ off-task, reactions to interactions with the teacher and interactions with peers. Provided evidence of engagement and a supportive environment	Student observation form	Total count from a possible total of 180 observations for each student used in Chi-Squared Tests. Positive and negative reactions to interactions with the teacher counted. Patterns: for example, peer interactions also counted
3	Students	Qualitative anecdotal notes recorded during student observations and through conversations with teachers	Augmented numerical data with descriptions and examples, providing evidence of engagement and a supportive environment	Student observation form	Pertinent notes recorded and included with data

4	Teachers	Quantitative	Teacher self-report frequency of use of the strategies	TASSAIS survey instrument analysed through Rasch analysis	Survey answers added to Rasch data from Phase 3, identifying each teacher.

Phase 3 methods involved the collection of both qualitative and quantitative data to pursue a deeper understanding of the second research question. These methods included collecting:

- Qualitative data gathered in the form of conversations with teachers and the taking of field notes during observations. These were journaled into vignettes within 24 hours.
- Numerical data consisted of counts of strategies used by teachers, interactions between staff and students and counts of student on-task behaviour.
- Quantitative data through the TASSAIS survey identified each teacher position on the Rasch Analysis Wright Map.

The aim of collecting these data was to "demonstrate a symbiosis between the two methods resulting in support for each distinct yet complementary data source and analysis strategy" (Truscott et al., 2010, p. 324). "It is a purposeful and powerful blend intended to increase the *yield* of empirical research" (Truscott et al., 2010, p. 327). By using qualitative and quantitative methods in a complementary way (Hammersley, 1992; Kervin et al., 2006), multiple data sets provided more in-depth understanding of the phenomenon under consideration. In this case, it provided a means to enhance researcher observations to investigate the relationship between the frequency of strategy use and student engagement and response within the classroom context.

It is not simply the application of different data collection tools that makes a study mixed methods research. The quality of a mixed methods study is in the treatment of data, the use of mixed methods interpretations, and reporting of findings (Truscott et al., 2010). Various data collection methods included: interpreting the quantitative evaluation of observation counts; comparison of specific data sets about students; and incidents and stories from field notes. Thematic use of the TASSAIS strategies, along with the Rasch analysis, worked to provide a clearer picture of teacher impact on creating a supportive classroom environment and fostering student engagement in each classroom.

6.2.1 Context

The context for Phase 3 of this study was a primary school for Indigenous learners in Queensland, Australia, where classes comprised 100% Aboriginal and Torres Strait Islander students. The school was tailored to Indigenous education, adjusting curriculum, staff

approaches, support mechanisms and opportunities. Teachers in this school were experienced in this context and well informed by specific cross-cultural training and understanding of Indigenous culture. It is noteworthy that the context of this school differed from mainstream schools in that, culturally, some aspects of teacher-student relationships were allowed and encouraged to be different. For example, some kinds of touch between students and staff were regarded as acceptable; for example, a student might hug a teacher, and the teacher would accept the hug, without seeing this as inappropriate behaviour. The school was tailored to Indigenous education, adjusting curriculum, staff approaches, support mechanisms and opportunities. The research occurred in students' home classrooms (Years 4/5 and 6), or in other classrooms where these two grades were situated, for example, the art classroom, and the library computer room. The research process was conducted twice, once for each class and their teachers, as not all teachers taught all students.

6.2.2 Participants

6.2.2.1 Teacher participants

Four teachers agreed to participate in this part of the study, T1 and T2 were Indigenous classroom teachers of year 6 and year 4/5 respectively, and T3 and T4 were non-Indigenous specialist teachers who taught both of these classes. The four teachers were regarded by the school administrators as culturally responsive teachers, who "understand what the Aboriginal kids are bringing to school" (Lester, 2016, p. 172). Each class had a full-time teacher aide, most of whom had positive relationships with students. They went with the class to specialist lessons and were sometimes used by the teachers for assistance with behavioural issues.

The year 6 teacher aide was a young Indigenous man who was with the class full-time. The year 4/5 teacher aide position was split between a mature Papua New Guinea woman and a young Indigenous woman. A young male liaison officer, who had significant positive impact on the behaviour of some of the boys, was sometimes present in the classes.

6.2.2.2 Teacher Demographic Data.

T1 had been teaching at the school for more than 20 years. She has both Aboriginal and Torres Strait Islander ancestry. She had taught the year 6 class since term 2. Her quiet and supportive manner had created warm relationships with students.

T2 is of South Sea Islander and Aboriginal cultural background. She had been teaching at the school for 20 years. She had been the classroom teacher for the year 4/5 class

since term 1. She was entertaining and created fun in her classroom with the students. This teacher was able to seriously 'growl' (rouse at) students without them showing negative affect. She made her boundaries clear and enforced them.

T3 was an experienced non-Indigenous teacher who taught the year 6 class for Science and digital technologies. She had been teaching at the school for nearly 20 years, though she had just transferred to generalist primary classes and started teaching these students in term 1.

T4 was an experienced non-Indigenous teacher who was contracted to teach art one day a week to provide non-contact hours for the teachers. During times between observations, she discussed some of her experiences and understanding which provided an insight into her attitudes and strategies. These demographic data are included in Appendix K.

6.2.2.3 Student participants.

As described in Chapter 3, students were randomly selected for this study by the head of the primary school (Prep -7) and myself, as we did not want to target specific students. Table 6.2 provides a description of the student participants. Student participants included five students in year 6 and four students in year 4/5. Pseudonyms were allocated to preserve identities of participants. . There was no attempt to select students based on attributes such as identified disability, academic level or absenteeism. In Table 6.2 the attributes of these randomly selected students are described, to give an indication of student characteristics.

Table 6.2

Individual Student Characteristics

Year	Name	Sex	Characteristics
6	Quinley (Q)	Girl	Had been cognitively assessed and the result showed she needed an Individual Education Plan.[4] She required and received individual help.
6	Rebecca (R)	Girl	Checked her work with her peers regularly but worked steadily.
6	Solomon (S)	Boy	Was often tired and off-task; finding distractions to avoid work.
6	Tishona (T)	Girl	Was mature for the group and had support of teachers with her sporting abilities. She continued developing self-regulation strategies during the year. She had significant number of absences towards the end of the data collection period due to cultural reasons and returned at the end of the term.
6	Uriel (U)	Boy	Was a student leader who was responsible and usually on-task.
4/5	Victor (V)	Boy	Was usually on-task but was observed being off-task and disturbing the learning of others if staff were not watching.
4/5	William (W)	Boy	Displayed challenging behaviours with some teachers. He sometimes got angry and had to take time to calm down again.
4/5	Yaran (Y)	Boy	Was medicated for ADHD, and his behaviour varied from focused on-task, to using inappropriate behaviour with the other boys in the class.
4/5	Zena (Z)	Girl	The only girl observed in the 4/5 class. Her observed behaviour was typically on-task and cooperative. In one lesson she was unusually distracted during a NAPLAN practice task with her class teacher.

All students were in age-appropriate classes. Year 6 students were generally well behaved and on-task. Year 4/5 students varied more in their behaviour. Three boys in 4/5 were often off-task together, that is, not learning and disrupting the learning of others if the opportunity arose, as identified in the field notes.

6.2.3 Teacher Data Collection - Observations

The TASSAIS survey items were arranged on a page in themes, with space to record

[4] An Individual Education Plan is an education and support plan for students with disabilities.

with tally marks, the number of times each attitude or strategy was observed in the classroom. Each item was reduced to a code that was easily found on the sheet (Appendix D). The four participating teachers were observed for their frequency of use of the TASSAIS strategies in their classrooms. As well, brief field notes were recorded on the TASSAIS observation tool at the time of teacher observation. Some of these are presented in Appendix D. This was accompanied by field notes and journaling of vignettes that captured the focus of conversations between the researcher and staff, or students and staff. If a teacher used a negative example of a strategy, for example, raising her voice instead of being calm, I recorded an asterisk beside that strategy. Teachers were observed for a total of three hours with each class, in six 30-minute segments. These observations took place over several days, so that the data were not skewed by the teacher or students having an 'off day'. The Chi-Squared Test of Independence was chosen because this test suited the data collected. A Chi-Squared Test of Independence examines if there is a relationship between two categorical independent variables that are presented as counts. In this case, the data were collected as a count of teacher use of strategies and a count of student time off and on-task. It could be said that the kind of data captured by recording carefully on and off time, created a demand for a tool such at the Chi-Squared test. Table 6.3 below lists the uncontrolled variables (American Psychological Association, 2020) associated with these student-teacher interactions. These are listed as uncontrolled variables because in the school context, timetable, task, and teacher employment status were not controlled.

Table 6.3

Some Uncontrolled Variables for Teacher Observations

Teacher	Taught	Indigenous	Class/ specialist teacher	Contact hours with the class	Employment status per week	Tasks observed
T1	6	Yes	Class	11 hours	Full-time	Reading, writing, maths, computers
T2	4/5	No	Science, Digital Technologies	2 hours	Full-time	Reading, writing, computers
T3	6, 4/5	Yes	Class	11 hours	Full-time	Reading, writing, maths, computers

T4	6, 4/5	No	Visual Art	1 hour .	One day	Painting, colouring in

6.2.4 Student Data Collection - Observations

When teacher observation data had been collected, the students were then observed for one hour with each teacher, in three 20-minute segments. The teacher observations preceded student observations to limit the possibility of my observational bias of the teacher by knowing the on-task times of the students. Student behaviour was recorded on a student observation tool at 20 second intervals either on-task or off-task behaviour, including interrupting learning of themselves or others, as well as positive or negative reactions after interactions with an adult (Appendix E). Student on-task time can also be expressed as a fraction as the number of observations were consistent. On-task behaviour was judged as activities related to learning, and in some cases, specifically following teacher requests, for example, ‘All eyes to the white board, please'. A student reaction to an interaction with a staff member was judged as positive or negative based on the observable verbal and non-verbal (affect and manner) reaction of the student following the interaction, not on the content of the interaction or manner of the teacher. Brief field notes were also recorded during student observations when deemed significant.

6.2.5 Teacher Data Collection-Self-Report on Rasch Analysis

Following teacher and student observations, the four participating teachers were asked to complete the TASSAIS survey instrument (Appendices C and F), and these data were added to the dataset for the Rasch analysis conducted in Phase 2. As described in Chapter 3, this analysis represented the self-perceived frequency of teacher use of the TASSAIS attitudes and strategies. The results of the Rasch analysis are presented in section 6.3.5.

6.3 Presentation of Data and Analyses

This section presents the data, starting with Chi-Squared Tests of Independence on Teacher Use of Strategies to Student Time on-Task, and Teacher use of Strategies and Themes. The Themes are those that emerged from the literature review and carried through presentation of the qualitative data. Following presentation of the Chi-Squared tests, numerical and field notes are presented to illuminate the Chi-Squared results. The results of the Rasch analysis follow, showing teacher self-perceptions of their use of strategies.

6.3.1 Quantitative Analysis of Numerical Observations Supported by Field Notes - Teacher Use of Strategies and Student Time on-Task

6.3.1.1 Introduction.

To answer the second research question, ‘to investigate the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task, and inappropriate)’, this section reports the quantitative analyses of the data related to Teacher use of Strategies and Student Time on-Task. To complement these results, numerical and field notes from student and teacher observations are included.

6.3.1.2 Data from Teacher and Student Observations of Student Time on-Task.

Table 6.4 presents data collected in Phase 3, relevant to Student Time on-Task. It presents each teacher’s Rasch Measure, their total count of TASSAIS strategies used with each class, and Student Time on-Task with each teacher. As T1 and T2 were classroom teachers, they taught only one class each, not all students. Although it would have been optimal to submit the data to a single statistical analysis, because some cells are necessarily blank, three smaller data sets were analysed.

Table 6.4

Contingency Table of Raw Counts of Teacher Use of Strategies and Student Time on-Task

Teacher	Rasch Measure	Teacher strategies		Students								
				Q	R	S	T	U	V	W	Y	Z
		Yr 6	Yr 4/5									
T1	1.52	430		162	166	148	167	167				
T2	0.95		458						148	145	155	162
T3	2.28	286	372	152	145	144	169	154	101	94	93	180
T4	0.72	310	280	157	164	127	163	163	171	146	151	176

Interpretation of these counts requires firstly a test of statistical significance, and then, an understanding of the substantive significance of the results, using qualitative field notes. The statistical test most relevant to this arrangement of data is the Chi-Squared Test of Independence. Pearson's Chi-Squared is a test of significance for nominal data, where observations can be classified as discreet categories and treated as frequencies (Burns, 2000).

It looks for trends in descriptive statistics (Kervin et al., 2006). Pearson's Chi-Squared test is used to determine whether there is a statistically significant difference between the expected frequencies for a group and the actual or observed frequencies for that group in the categories of the contingency table. It tells us whether the results could be expected by chance alone, and with what probability (Anderson & Arsenault, 1998, p. 108).

In this case, the data are the counts of Teacher Use of the (TASSAIS) Strategies and the counts of Student Time on-Task. The requirements for the Chi-Squared test include that there are no empty cells, and most of the cell counts are greater than 5 and none is less than 1. This requirement was not met for the whole dataset, so the analyses were conducted on three smaller subsets of those data. In all cases comparing Teacher Use of Strategies to Student Time on-Task, the data represent actual counts, and the categories are distinct. All counts were greater than 5, with no expected count less than 5, thereby satisfying the aforementioned requirements for the Chi-Square test. In these analyses, the null hypothesis is this: there is no association between Teacher use of Strategies and Student Time on-Task. If the null hypothesis is rejected that would suggest that there is an association between those two variables. Table 6.4, which shows both classes, was divided into the two classes, each including that class's full-time teacher, for the test of significance. First are the data for the year 6 class in Table 6.5.

6.3.1.3 Year 6 Chi-Squared Results for Teacher use of Strategies and Student Time on-Task.

Table 6.5

Counts for Teacher Use of Strategies and Student Time on-Task Year 6

Teacher	Students				
	Q (Quinley)	R (Rebecca)	S (Solomon)	T (Tishona)	U (Uriel)
T1	162	166	148	167	167
T3	152	145	144	169	154
T4	157	164	127	163	163

A Chi-Square Test of Independence was performed to examine the relation between Teacher use of Strategies and Student Time on-Task in the year 6 class with teachers T1, T3 and T4. The results, X^2 (8, N=8) = 3, p = 0.934, mean that the null hypothesis is not rejected (i.e., p>0.05). The Chi-Squared analysis results of the three Teachers' Use of Strategies and

Student Time on-Task (reported in full in Appendix L) suggest that there is no association between Teacher use of Strategies and Student Time on-Task in these data.

6.3.1.4 Year 4/5 Chi-Squared Results for Teacher use of Strategies and Student Time on-Task.

Table 6.6

Counts for Teacher Use of Strategies and Student Time on-Task Year 4/5

Teacher	Students			
	V (Victor)	W (William)	Y (Yaran)	Z (Zena)
T2	148	145	155	162
T3	101	94	93	180
T4	171	146	151	176

A Chi-Square Test of Independence was performed to examine the relation between Teacher use of Strategies and Student Time on-Task in the year 4/5 class with T2, T3 and T4. The results, X^2 (6, N=7) = 23.012, p = 0.001, mean that the null hypothesis was rejected for the year 4/5 class. Thus, the alternative hypothesis, that a relationship does exist, stands. The Chi-Squared analysis results of the three Teachers' Use of Strategies and Student Time on-Task (reported in full in Appendix L) led to the interpretation that, for the year 4/5 class, there is an association between Teacher use of Strategies and Student Time on-Task in these data.

Figure 6.1 reports the Chi-Squared data for the two classes visually, in order to examine which data cells contribute to the evidence for some association. Overall, Student Time on-Task counts range from 93 to 180 on the vertical axis. There are gaps in the columns for each student as T1 (blue) and T2 (yellow) taught only their own class. Observations include that T1 actual (blue) and expected (orange to the right) are consistently close for all students, whereas for T3, there is variation of actual counts from the expected. As examples of such differences, T4 actual (green) and expected (orange to the right) are markedly different with Zena and T3 actual counts with Victor, William and Yaran are lower than expected. The expected count comes from the distribution that would be expected if there was no association between teacher use of strategies and student time on-task. Higher than expected means the result was higher for that teacher-student combination. Lower than expected means the result was lower for that teacher-student combination. Both these results contribute to the evidence of association between Teacher use of Strategies and Student Time on-Task.

Figure 6.1

Student Time on-Task Counts – Actual and Expected With Each Teacher

Note. Teachers are represented by an assigned colour. All Expected counts are orange. Actual counts are coded a, expected coded e.

6.3.1.5 T3 and T4 with All Students Chi-Squared Results for Teacher use of Strategies and Student Time on-Task.

Table 6.7

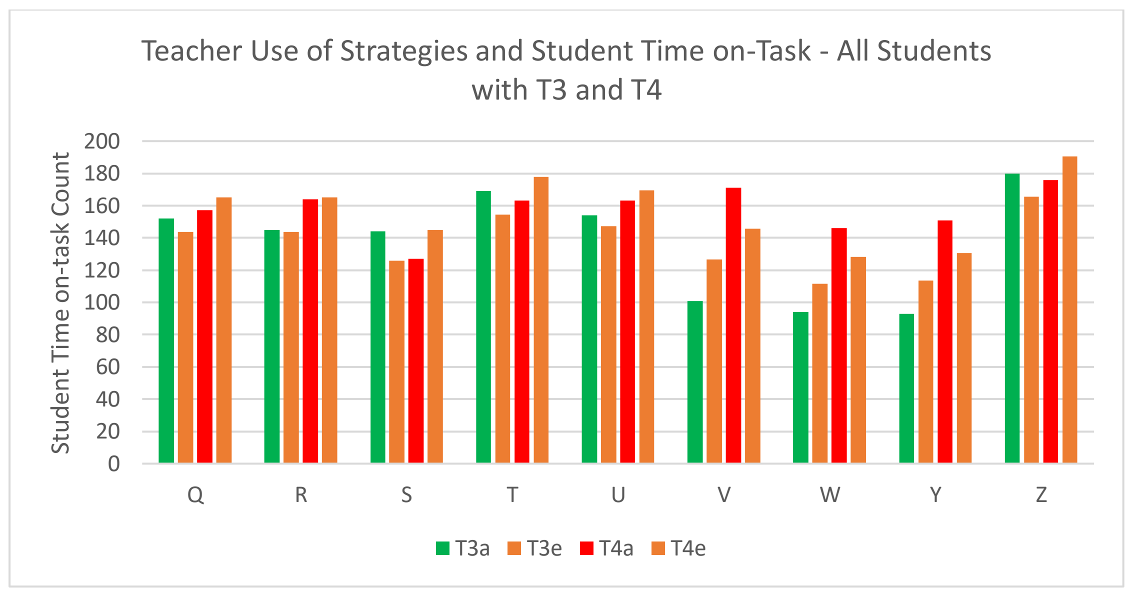
Counts of Teacher Use of Strategies and Student Time on-Task – All Students With T3 and T4

Teacher	Students								
	Q	R	S	T	U	V	W	Y	Z
T3	152	145	144	169	154	101	94	93	180
T4	157	164	127	163	163	171	146	151	176

A Chi-Squared Test of Independence was performed to examine the relation between Teacher Use of Strategies for T3 and T4 and Student Time on-Task for all students. The results, X^2 (8, N=11) = 32.9, p = 0.00, mean that the null hypothesis is rejected. The alternative hypothesis stands. The Chi-Squared data are represented visually in Figure 6.2, for all students. The Chi-Squared analysis results for Teachers' Use of Strategies and Student Time on-Task (reported in full in Appendix L) suggest that there is an association between Teacher use of Strategies and Student Time on-Task.

Figure 6.2

Graph of Results of Chi-Squared Analysis of Teacher Use of Strategies and Student Time on-Task, Actual and Expected for All Students With T3 and T4



6.3.1.6 Interpretation of Statistical Results.

Each of the Chi-Squared results will be discussed in light of the descriptive statistics displayed in Appendix M as well as the field notes from classroom observation records. The descriptive statistics include the percentage of Student Time on-Task with each teacher, the number of positive and negative student reactions after interactions with teacher / aide, and Time on-Task and off-Task with peers. This provides a more comprehensive description of how the students behaved with each teacher.

6.3.1.7 The Year 6 Class Collation of Data.

In the first Chi-Squared analysis, for Year 6 Data, the results of observed are close to expected, with only very few higher or lower than expected scores. Overall, in the first analysis, the null hypothesis is not rejected. That is, there is no association between Teacher use of Strategies and Student Time on-Task.

6.3.1.8 The Year 4/5 Class Collation of Data.

In the second Chi-Squared analysis of Teacher use of Strategies and Student Time on-Task for the year 4/5 class, more actual scores varied from expected, leading to the rejection of the null hypothesis. Teacher-student combinations that support the alternative hypothesis, that Teacher use of Strategies and Student Time on-Task are related, include higher T2W, T2Y, T3Z, T4V and lower: T2Z, T3V, T3W, T3Y, T4Z. Classroom observations reveal that T2 worked differentially with her students. T2's actual counts with William and Yaran were

higher than expected. She used several particular proactive strategies (Theme 6) to keep the boys on-task. She paid attention to the emotional state of the class and of individuals. She allowed time to debrief or celebrate, and often played a game before settling back to work. Her facial expressions demonstrated humour and connection. She monitored one boy and set a timer for a whole class break. She had strong relationships (Theme 4) with the students to the stage that she could growl Victor or Yaran and each reacted positively. On another occasion, another teacher had said that Victor had been disrespectful to her in a specialist lesson. T2 spoke to him away from other class members to discuss that event. T2 made frequent positive contact with William and Yaran (Appendix M). Her use of the TASSAIS strategies encouraged time on-task, which was particularly evident for the boys while doing literacy and numeracy. T2's use of the TASSAIS strategies were associated with William and Yaran's Time on-Task.

T2's actual count with Zena was lower than expected, which was surprising. With T2, Zena's Time on-Task counts were 60/60 for Maths, 53/60 for English, but only 49/60 in the NAPLAN practice lesson. Closer examination of the raw data showed that 10/11 of those off-task observations in the third lesson were in the 5m:20s of NAPLAN practice that Zena had with T2. She was, quite uncharacteristically, off-task in the NAPLAN practice.

The actual count of T3 with Zena was higher than expected, and lower than expected for T3 with Victor, William and Yaran. There are many anecdotal examples of the boys' off-task times and high level of intensity of those behaviours. For example, as T3 came to redirect William to put a paper in the bin, William faked kicking the teacher, which T3 ignored. Later in that lesson he called out loud enough for the class to hear, "Give me …woman!" to a girl. In another observation, William and two other boys came into the library before the class and hid in the shelving. William was threatened with being sent to time out at the beginning of the lesson. He was chatting to peers loudly to disturb the class while they were on the computers and was not sent to time out.

Yaran was off-task for 53 observations out of 60 in one lesson. T3 had instructed students to use the program 'Scratch' and to follow the paper instructions on the desk. The teacher had said to Yaran early in the lesson, "Can you go on Scratch please?" He replied, "It is on Scratch". It was not. The teacher told another student to be in 'Create' in 'Scratch'. There was a sheet on the desk to follow. Yaran went into the correct program at about 20m:20s, after the observation had finished.

Victor's behaviour was also escalated with T3. Victor went outside to watch the teacher have a one-on-one chat with another student about his behaviour. Victor then hid

outside the classroom in the library, then the teacher redirected him. On another day a student yelled, “MISS!”. The teacher responded to the question and paid no attention to the yelled delivery of the question. Students required frequent help from T3, perhaps due to the subject matter, and grew frustrated when the teacher was not able to help immediately. These examples indicate that T3 did not implement effective boundaries. In the next section it will be seen that T3 relied more on reactive than proactive strategies. Her lower use of pedagogy and proactive strategies was associated with decreased Time on-Task for Victor, William, and Yaran.

The T4-Victor actual count was higher than expected and T4-Zena was lower than expected; both differences support the Teacher Use of Strategies to Student Time on-Task alternative hypothesis. With Victor, T4’s use of the strategies, given the culturally relevant nature of the painting task, related to his time on-task. Zena might have been less motivated by the painting task. In the same way that T2-Zena was lower than expected, the actual Time on-Task count was high (176/180). In this Chi-Squared analysis for the year 4/5 class, there was enough variation, both higher and lower, from the expected counts that null hypothesis was rejected, and the alternative hypothesis, that Teacher use of the Strategies was associated with Student Time on-Task was allowed to stand.

6.3.1.9 All Students with T3 and T4 Collation of Data.

In the results of the third Chi-Squared analysis, for all students with T3 and T4, the null hypothesis was rejected as there was more variation of actual scores than expected. Teacher-student combinations of counts that supported the alternative hypothesis that Teacher use of Strategies and Student Time on-Task are related, include: higher T3Q, T3S, T3T, T3U, T3Z, T4V, T4W, T4Y and lower T3V, T3W, T3Y, T4Q, T4S, T4T, T4U, T4Z. T3’s actual counts with the year 6 class were higher than expected for T3 with Quinley, Solomon, Tishona and Uriel. This might have been influenced by the teacher aide’s supportive interventions. Classroom observations reveal that the year 6 teacher aide had a high level of involvement with students, supporting time on-task in lessons with T3, which may have contributed to increased student time on-task. There are several examples where students cooperated with him more than with their teacher. For example, in one lesson, Solomon was spinning in his chair. This was a frequent behaviour for Solomon in the library, indicating distraction. He would often spend time spinning on his chair, instead of working on the computer. T3 asked Solomon to come to the front of the room with the other students, but Solomon did not cooperate. The teacher aide walked in and asked him to move to the

front and he moved.

Further, when Uriel was being observed, he was uncharacteristically open and audibly disruptive until the teacher aide entered. Then, though his behaviour was still off-task, it was quieter and hidden behind a desk or chair so that he was out of sight of the teacher aide. One observation of Quinley recorded that she was playing with a jigsaw puzzle on the floor while T3 was talking. When the teacher aide moved to the front of the room, she hid the puzzle. This was an obvious and repeated change of behaviour with the student keeping an eye on the location of the teacher aide. These examples demonstrate that Solomon, Uriel and Tishona followed the directions of the teacher aide more than they followed the directions of T3. The teacher aide's interventions might have contributed to the higher score for T3. In the scope of the research and ethical boundaries, it is not possible to determine why the students responded more to the teacher aide. The year 4/5 class had a different teacher aide who did not take over behaviour. T3's actual count with Tishona was higher than expected. T3 had a very high interaction rate with Tishona, (see Appendix K). These data were skewed as it was the last lesson of the year and T3 focused on her to get assessment finished, as she had been absent for some time. Tishona was more on-task that lesson because T3 was with her most of the time. T3 also had a close relationship with Tishona, due to transporting her to sports out of school hours.

T4's actual counts with the same four students in year 6 were lower than expected. In the next section, the Chi-Squared analysis will show that T4 used fewer strategies in Qualities of the Teacher and Positive Relationships. Observation data for T4 recorded several asterisks on the observation sheet (when a teacher demonstrated negative use of a strategy), which may contribute to lower student cooperation or Time on-Task. There were only five times I marked an asterisk and four of these were for T4 with year 6. T4 raised her voice to a student, and the student raised her voice in return, then mumbled while echoing what T4 had said. On another occasion she used an accusatory statement rather than an 'I' message. She said to a group, "This table here, you keep asking me what to do, but you're busy [not listening]". Another was regarding eye contact, "Girls, are you watching? Eyes please." Another was related to students not listening, "I'm going to have to repeat myself with …". The last was directed at a girl, "Don't rip pages out", the girl answered, "It wasn't me". There were incidents with Solomon, Quinley and Tishona that indicate a lack of follow through (Appendix N). When Uriel was redirected by T4, he argued with her. The teacher aide did not intervene with T4 as he did with T3. He usually sat with students and quietly helped them, encouraging them back on-task. He did not speak out loudly or follow up with statements the

teacher had made, as he did with T3. T4's lower count with the year 6 students may have been due to her negative use of strategies which could indicate a lack of relationship, or possibly the lack of involvement from the teacher aide. In the scope of this study, it is difficult to make further interpretation of the aide's motivations and ensuing impacts on the teacher's performance.

T3's actual counts with Victor, William and Yaran in year 4/5 were lower than expected and consistent with the field notes in the previous section related to their behaviour. T3's reliance on reactive strategies and lower use of proactive and pedagogy strategies was associated with less on-task time with these boys.

T4's actual counts with Victor, William and Yaran in year 4/5 were higher than expected. This higher count could be caused by the fact that the three boys had much higher on-task counts for T4 than they did with T3 (Appendix M). For example, Victor's on-task count with T4 was 171, and with T3 was 101. Observations revealed that Victor's Time on-Task with Peers count was 23 and he did not need redirection from T4 to stay on-task. William's Time on-Task with Peers count was 40, and he only received two redirections from T4. He argued once and was offered a choice on the second occasion. He also had six positive interactions with T4. Yaran's Time on-Task with Peers count was 29 and he did not need a redirection to stay on-task. The three boys were also engaged with the task, they were able to enjoy chatting while painting and did not require redirections. Further, there was no need to record an asterisk when observing T4 with the year 4/5 class. T4's actual count with Zena was lower than expected. Zena's on-task count was 176/180, which was high, but lower than when Zena was with T3. In the third analysis, the differences from expected were common. There was enough variation from expected–both higher and lower–that supported the alternative hypothesis, that Teacher Use of Strategies was associated with Student Time on-Task.

In summary, in two of the three analyses of Teacher Use of Strategies with Student Time on-Task data, the null hypothesis was rejected and the alternative hypothesis, that there was an association between Teacher use of Strategies and Student Time on-Task, was allowed to stand. I suggest that the teacher aide's increased involvement in behaviour support in year 6, with T3 particularly, influenced Student Time on-Task. The students behaved more appropriately for T1 than for T3, but the teacher aide did little behaviour support work with T1. When with T3, the teacher aide demonstrated more frequent involvement with behaviour. It could be that the teacher aide's higher level of presence and involvement with behaviour impacted the Student Time on-Task count when the class was with T3.

6.3.2 Quantitative Analysis of Numerical Observations Supported by Field Notes - Teacher Use of Strategies in Themes

This section will report the quantitative analyses of the data related to Teacher and Use of Strategies in Themes. To complement these results, numerical and field notes from student and teacher observations will also be included.

6.3.2.1 Introduction.

The a priori themes were used to arrange the multitude of suggestions made by participants in Phase 1 recommending what would support behaviour of Indigenous students (see Appendix F for a full list of strategies and themes). After observing the teachers, I felt that each teacher used the TASSAIS strategies differently; that is, they had strengths and preferred strategies. I decided to investigate further, to see if patterns emerged. This section reports on the Chi-Square Test of Independence analyses for Teacher and Use of Strategies in Themes. In these analyses, the null hypothesis is: there is no association between Teacher and Use of Strategies in Themes. If the null hypothesis is rejected that would suggest that there is an association between the two variables. There are two analyses, one for the year 6 class, and one for the year 4/5 class.

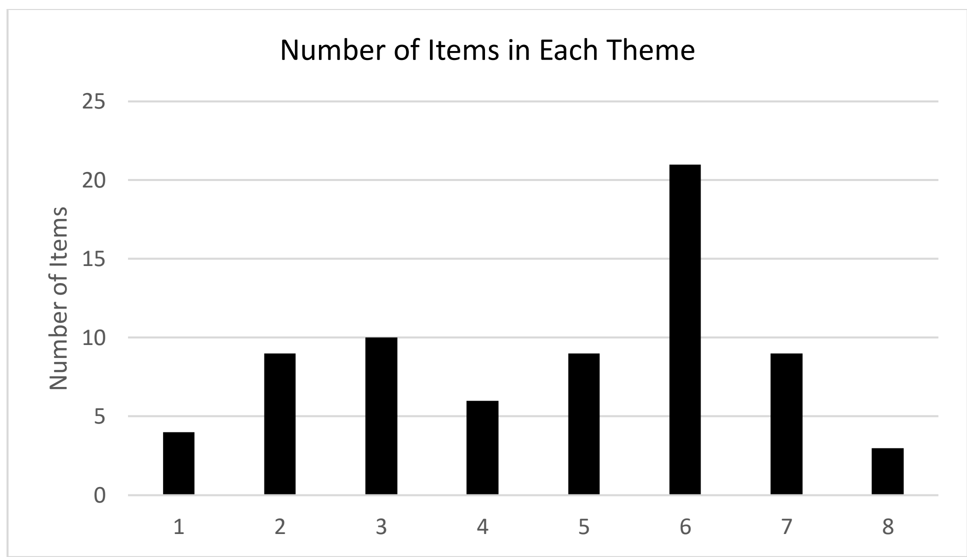
The TASSAIS Themes are listed below, and Figure 6.3 shows the number of attitudes and strategies in each theme. Theme 1 (Knowledge of Self and Other in the Socio-historical, Political Context) and Theme 8 (Connections with Family and Community) have few items, with four and three respectively. Theme 6 (Proactive Behaviour Support Strategies) has 21 items.

1. Knowledge of Self and Other and power Relations in the Socio-Historical Political Context
2. Knowledge of the Students and their Cultural Backgrounds Without a Deficit Notion of Difference
3. Qualities of the Teacher
4. Positive Relationships
5. Culturally responsive pedagogy (strategies that prevent inappropriate behaviour)
6. Proactive Behaviour Support Strategies
7. Culturally Appropriate Reactive Behaviour Support Strategies

8. Connections with Families and Community.

Figure 6.3

Number of Items in Each Theme



The present comparison of teacher use of strategies provides a snapshot of each teacher's strategy style, but teachers may not have had an opportunity during the study to demonstrate all themes in their use of strategies. As noted in the literature review, the paucity of evidence-based suggestions for Culturally Appropriate Reactive Behaviour Support Strategies, it is reassuring that so many were suggested by participants in Phase 1 and demonstrated in classrooms.

6.3.2.2 Year 6 Chi-Squared Test Results for Teacher and Use of Strategies in Themes.

Table 6.8

Counts of Teacher Use of Strategies in Themes Year 6

Teacher	Themes							
	1	2	3	4	5	6	7	8
T1	1	19	12	47	128	195	23	5
T3	2	8	18	47	70	100	40	1
T4	9	6	7	15	128	104	20	21

A Chi-Squared Test of Independence was performed to examine the relation between Teacher and Use of Strategies in Themes in the year 6 class with T1, T3 and T4. The results, X^2 (14, N=11) = 126.0, p = 0.00, mean that the null hypothesis is rejected for the year 6 class,

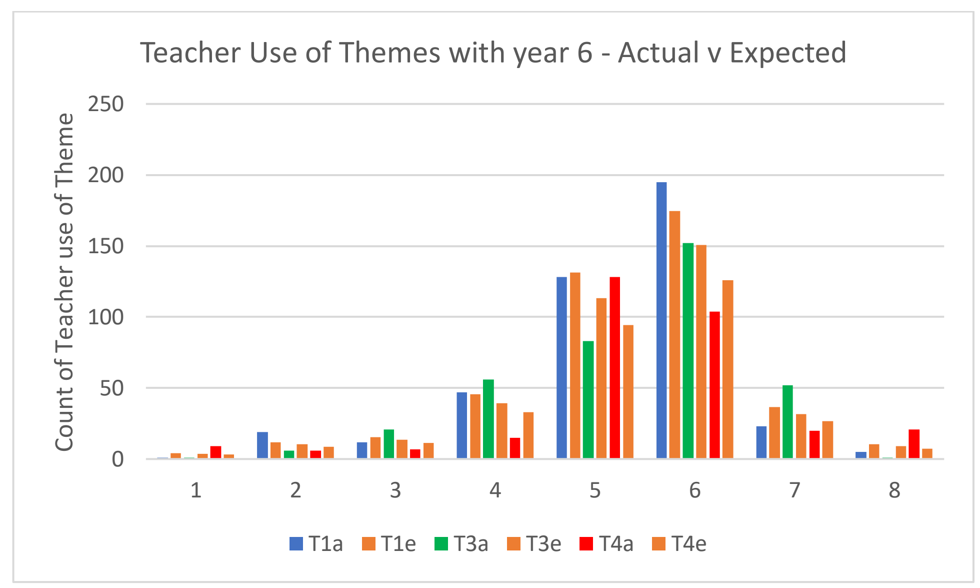
and the alternative hypothesis, that a relationship does exist, stands. The Chi-Squared analysis results of Teachers with Teacher use of the Strategies in Themes (reported in full in Appendix L) leads to the interpretation that for the year 6 class there is an association between Teacher and Use of Strategies in Themes.

It is important to note that the assumption for the cells has not been met in both the Chi-Squared tests in this section. The minimum expected count in some cells is less than 5 because some of the themes have only a few strategies. Three cells (12.5%) have expected counts of fewer than 5. The minimum expected count is 3.07. So, the normal Chi-Squared test supported by the Fisher-Freeman-Halter exact test could not be computed, so the process for this Chi-Squared test was switched to Monte Carlo estimation; because it has a 99% confidence interval, it is not likely to be inaccurate.

Figure 6.4 reports the results of the Chi-Squared analysis for T1, T3 and T4 with the year 6 class visually, to examine which data cells contribute to the evidence for some association. Observations include that T1's actual result (blue) showed that she used Proactive Strategies higher than expected (orange to the right). T3 used Culturally Appropriate Reactive (green) Strategies higher than expected. T4 (red) showed higher than expected in Connections with Family and Community. The expected count is the distribution that would be expected if there was no association between Teacher and Use of Strategies in Themes. Higher than expected means the result was higher for that teacher-strategy combination. Lower than expected means the result was lower for that teacher-strategy combination. Both sets of unexpected results contribute to the evidence of association between Teacher and Use of Strategies in Themes.

Figure 6.4

Graph of Results of Chi-Squared Analysis of Teacher Use of Themes Actual and Expected



Note. Teachers are represented by their colour. Expected counts are all orange.

6.3.2.3 Year 4/5 Chi-Squared Test Results for Teacher and Use of Strategies in Themes.

Table 6.9

Count of Teacher Use of Strategies in Themes Year 4/5

Teacher	Themes							
	1	2	3	4	5	6	7	8
T2	4	14	36	70	102	195	24	13
T3	1	6	21	56	83	152	52	1
T4	2	7	2	16	107	106	25	15

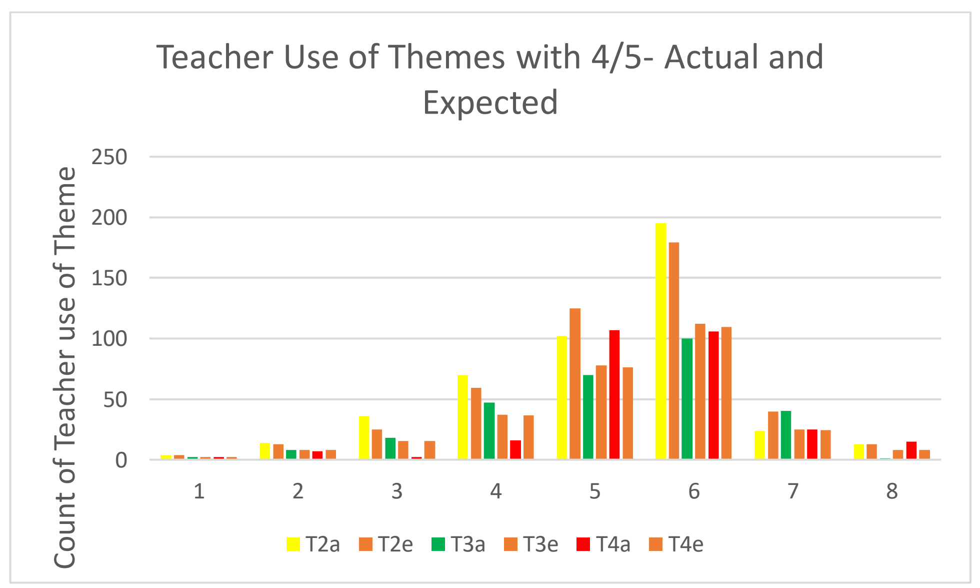
A Chi-Square Test of Independence was performed to examine the relation between Teacher and Use of Strategies in Themes in the year 4/5 class with teachers T2, T3 and T4. The results were *X*2 (14, N=11) = 81.0, p = 0.00. Thus, the null hypothesis is rejected for Teachers and Use of Themes in the year 4/5 class. This finding is reflected visually in Figure 6.5, for the 4/5 class. The Chi-Squared Table is in Appendix L.

Again, three cells (12.5%) have an expected count fewer than 5. The minimum expected count is 2.19. My interpretation of these findings is that there may be some association between Teacher and Use of Strategies in Themes in the year 4/5 class.

Figure 6.5 displays the results of the Chi-Squared visually, in order to examine which data cells contribute to the evidence for some association. As with the year 6 class, it would be more effective if teachers used a high number of the strategies that are included in each theme, though the literature would suggest that Proactive Behaviour Support Strategies is better than high in Reactive Behaviour Support Strategies (Bondy et al., 2007; Hepburn & Beamish, 2019; Sanford & Evertson, 2006). Observations include that T2 was higher than expected on Theme 6 Proactive Behaviour Support Strategies, actual (yellow) and expected (orange to the right). Also, T3 scored higher than expected on Theme 7 Culturally Appropriate Reactive Behaviour Support Strategies actual (green) and expected (orange to the right). The expected count is the distribution that would be expected if there was no association between Teacher and Use of Strategies in Themes. Higher than expected means the result was higher for that teacher-strategy combination. Lower than expected means the result was lower for that teacher-strategy combination. Both unexpected results contribute to the evidence of association between Teacher and Use of Strategies in Themes.

Figure 6.5

Graph of Results of Chi-Squared Test of Teacher Use of Themes Actual and Expected



Note. Teachers are represented by their colour. Expected counts are all orange.

6.3.2.4 Interpretation of Statistical Results.

In this section the Chi-Squared results will be interpreted in relation to classroom observations. The actual counts of Teacher and Themes combinations that were higher than expected will be listed in Appendix O. These data give an indication of each teacher's preferred strategies.

6.3.2.5 The Year 6 Class Teacher and Use of Strategies in Themes Collation of Data.

In the Chi-Squared test of Teacher and Use of Strategies in Themes with the year 6 class, there were several scores that varied from expected leading to the null hypothesis being rejected. Individual teacher and their use of strategies in themes combinations that support the alternative hypothesis – (that there is an association between Teacher and their Use of Strategies in Themes) include: higher T1 Theme 2, T1 Theme 6, T3 Theme 3, T3 Theme 4, T3 Theme 7, T4 Theme 1, T1 Theme 5, T4 Theme 8; and Lower T1 Theme 7, T1 Theme 8, T3 Theme 5, T3 Theme 8, T4 Theme 4, T4 Theme 6, T4 Theme 7, which would allow the alternative hypothesis to stand.

Classroom observations support T1's use of Knowledge of Students and Their Cultures (Theme 2) and Proactive Behaviour Support Strategies (Theme 6). During her teaching, T1: provided students with ideas if they did not have their own; listened to both parties after a disagreement; and did not hesitate to follow through with behaviour. Moreover, T1 helped a student avoid feeling shame when that student was referred to a speech pathologist. Further, she removed barriers to learning as she discussed four students in a quick chat with a liaison officer. They discussed issues for each student, ways to solve the issues and who would take on which task. Her use of themes was lower in Culturally Appropriate Reactive Behaviour Support Strategies (Theme 7), and Connections with Family and Community (Theme 8). She used few reactive strategies as her proactive strategies were high in number and supportive of student needs. She was not observed demonstrating connections with family and community. In the scope of this study there may not have been time or suitable activities during observations.

T3 used Qualities of the Teacher (Theme 3), Positive Relationships (Theme 4) and Culturally Appropriate Reactive Behaviour Support Strategies (Theme 7). T3 demonstrated humour. She indicated relationships with students in conversation, in reading body language of students and checking in with two girls. She demonstrated Positive Relationships by creating close relationships (Item 11, see Appendix F). Tishona identified herself as being the "crazy one" zone for the Zones of Regulation (Kuypers, 2011). T3 chatted with her about that and congratulated her when she had come back down a calm state, ready to work. T3 said she had a good relationship with Tishona because she collected her for hockey. The student also helped in the classroom. On another occasion, one student was unhappy. The teacher knew that she had been teased and asked who had teased her. T3 later checked in with the girl who said she had been teased. The student gave her a hug. She also used correct names (45) and

putting relationship before work (66) She used many culturally responsive reactive strategies. T3's Theme use was lower in Culturally Responsive Pedagogy (Theme 5) and Connections with Family and Community (Theme 8). She made contact with students and demonstrated connections with family less frequently. The field notes support the findings of the statistical analysis in relation to the way T3's use of strategies.

T4 demonstrated higher use of Knowledge of Self and Other (Theme 1), Culturally Responsive Pedagogy (Theme 5) and Connections with Family and Community (Theme 8). In Knowledge of Self and Other, she demonstrated local historical knowledge and supported the behaviour of students from different cultures (see the conversation record in Appendix K). Her use of Culturally Responsive Pedagogy included cultural visuals around the room (22), which were counted each lesson, and used Indigenous role models (23) to teach students that you can't be perfect first go. She used a local hero to demonstrate that we are not perfect first try, we need to practice. "JT [star footballer] had a lot of practice to kick goals. We need …" storytelling (20) and explaining tasks clearly (55). She also used videos and images of Indigenous people and her task was centred around family and culture. She scored high in Family and Community because she frequently had conversations with the students about including family song lines in their paintings and their cultural identity (68, 65). Statements from the teacher such as, "Do you know where your family is from?". "Your family is from…". "So, you're from the Islands, are you?". T4 spoke in Creole/Kriol sentence structure, "Do you go Cairns, Mackay?". T4 exhibited lower use of Positive Relationships (Theme 4), Proactive Behaviour Support Strategies (Theme 6), and Culturally Appropriate Reactive Behaviour Support Strategies (Theme 7, see Appendix F). Her low use of Positive Relationships was explained in a chat: she saw students for only one lesson a week (Appendix K). As well as not using Positive Relationships strategies frequently, T4 demonstrated some negative strategies, which might have decreased her capacity to create positive relationships. On one occasion T4 raised her voice, and a student raised her voice in response. As mentioned previously, I recorded four asterisks when T4 used negative strategies. T4 used several Proactive Behaviour Support Strategies, but she also scored low in Culturally Appropriate Behaviour Support Reactive Strategies as she would refer matters to the teacher aide or the teacher as she taught for only one day a week.

6.3.2.6 Year 4/5 Class Teacher and Use of Strategies in Themes Collation of Data.

In the Chi-Squared test of Teacher and Use of Strategies in Themes with the year 4/5

class, there were several scores that varied from expected, which led to the null hypothesis being rejected. Teacher-strategy combinations that support the alternative hypothesis that there is an association between Teacher and their Use of Strategies in Themes–include: higher T2 Theme 3, T2 Theme 4, T2 Theme 6, T3 Theme 4, T3 Theme 7, T4 Theme 5, T4 Theme 8; and lower T2 Theme 5, T2 Theme 7, T3 Theme 5, T3 Theme 6, T3 Theme 8, T4 Theme 3, T4 theme 4.

T2 scored highly on Qualities of the Teacher (Theme 3), Positive Relationships (Theme 4) and Proactive Behaviour Support Strategies (Theme 6). Classroom observations support these results in recording that T2 used many examples of humour (16) and was very expressive as she had fun with students. She also apologised to students when needed (29). To create positive relationships, she spoke to individual students confidentially, gently, and carefully on several occasions (11 [Appendix O]). T2 used emotional expression to create closeness with students. Her emotional expressions were a little exaggerated which created entertainment and laughter from the students, as well as from herself. When a student hugged her when they returned to the classroom, not uncommon in this context, T2 received the hug. This was a demonstration of closeness. She also believed in students (14): T2 reassured a student that she was capable and understood that relationship came before work (66). She recognised when students were struggling, gave them space or encouragement and revised time limits for work (Appendix O). The Proactive Behaviour Support Strategies T2 frequently used were: commending students (41); building student to student relationships (25); giving autonomy (12); teaching students to care for each other (15); routines (49); explicitly teaching behaviour (2); and addressing barriers to learning (40). She did not need to use many reactive strategies. On one occasion T2 gave Yaran a stern warning. I observed her do this on several occasions to Victor and Yaran. They received being growled with no visible negative affect. This was an example of T2 setting boundaries.

T2 scored lower on Culturally Responsive Pedagogy (Theme 5) and Culturally Appropriate Reactive Behaviour Support Strategies (Theme7). She did not need to use many reactive strategies and she was not observed using many of the recommended pedagogical strategies. Classroom observation data of T2 supported the results of the Chi-Squared analysis.

T3 scored high on Positive Relationships (Theme 4) and Culturally Appropriate Reactive Behaviour Support Strategies (Theme 7). T3 created close relationships and demonstrated many reactive strategies. T3 chatted to a student about picking her up for a

sports event. She understood the family situation and was deciding arrangements to support the student. During one observation there was a fight early in the lesson. T3 remained calm and dealt with the initial fight and subsequent outbursts. This demonstrated the strategy, staying calm. She said later that she was emotionally thrown by the fights, but she did not show it. She had planned to demonstrate the activity to show the students what it would look like, but she lost time due to sorting out the fights. After the fight had been dealt with, she thanked students who, "Tried to help to keep each other safe". The class was escalated emotionally after the fights and the teacher recognised this and asked students to do some deep breathing with her to be able to focus on the task. She taught them how to do this. It took a while for students to settle but they did. Further description of her using reactive strategies after the fight are in Appendix N. T3 used Culturally Appropriate Reactive Strategies several times with year 4/5. The inappropriate behaviours of the students in her lessons were at a higher level, as previously reported.

T3 scored lower than expected on Culturally Responsive Pedagogy (Theme 5), Proactive Strategies (Theme 6) and Connections with Family and Community (Theme 7). Yaran, with T3, was off-task 53 observations out of 60 in one lesson. As related earlier, T3 had asked him to go into Scratch, but he did not. These behaviours were not seen in the other classes. T3 was observed using connections to family once, and her scores on pedagogy and proactive strategies were low. These scores, and field notes and descriptive statistical evidence, explain her use of the strategies, and this would confirm the lower level of on-task time for the boys in that class. The classroom observation data for T3 with the year 4/5 class supports the results of the Chi-Squared analysis.

T4 scored high on Culturally Responsive Pedagogy (Theme 5) and Connections with Family and Community (Theme 8). Classroom observations supported these results. The Culturally Responsive Pedagogy strategies used by T4 included: having visuals on display (22); explaining tasks clearly (55); using Indigenous role models (23); having meaningful tasks (17); storytelling (20); and giving opportunities to show strengths (13). She scored high in connections with family through using dreamtime stories valuing culture (65) and mentioning family though the task (52). T3 said to a student, "You're from … What is your last name? I used to teach family in secondary who were…" She connected with that student. She did not demonstrate high numbers of teacher qualities. This could be because these are strategies that come from close relationships and time with students and this teacher only saw each class for one lesson a week. As for relationships, again, she only saw them for one

lesson a week and had lamented the lack of relationship and knowledge of students as compared to previous years (Appendix K). Positive Relationships and displaying Qualities of the Teacher may have improved with more time with the classes.

T4 scored lower than expected on Qualities of the Teacher (Theme 3) and Positive Relationships (Theme 4). There were several times when relationship was lacking. On one occasion T4 blamed a boy for making noises and it was not him. T4 could not see who it was in the dark and spoke to both boys, including the student because he had turned to face the other boy. His demeanour changed. He tried to explain, sat with a slumped posture, then began disrupting. The wrongly accused student was unhappy, and had his head down, mumbling and swearing. He yelled at the teacher and became noncooperative. By the end of the lesson, he was actively disrupting the lesson. T4 spent some time with him during the lesson and he settled a little.

Field notes helped to explain why T4 scored low in Culturally Appropriate Reactive Behaviour Support Strategies. She did not often use follow through (48) as demonstrated in the following scenario. William displayed high level behaviours that disturbed others in this lesson. He was running around the room with peers, noisily teasing back and forth with peers, chasing others with a paint brush. At the 10m:00s observation, the teacher put his name on the board. At the 13m:00s observation, she gave a second warning. After the observation William and others argued with the teacher over whether he should be sent out of the room and whether he had had two or three warnings. He was not sent out. T4 redirected students for talking too much three times. She threatened to put a student name up on the wall but did not follow through. She offered one student a choice. T2 (class teacher) had come with the class one lesson to keep an eye on behaviour. When T2 left, two boys became noisy. Their behaviour changed. T4 ignored the noise and responded with a chat about curriculum. On a third occasion, three boys were behaving inappropriately, swearing and mucking around. T4 warned two boys separately. She warned them again. The behaviour continued. She offered them a choice to keep working quietly or to go back to class with the class teacher. The two boys had finished so left to go back to class. The classroom observation data for T4 with the year 4/5 class supports the results of the Chi-Squared analysis.

In both Chi-Squared analyses comparing Teacher with Use of Strategies in Themes there was enough variation–both higher and lower–from the expected counts that supported the alternative hypothesis, that Teacher was associated with Use of Strategies in Themes; that is, that each teacher had both preferred strategies, and weaknesses, or a particular teaching

style. My interpretation of these findings is that there may be some association between Teacher and Use of Themes in the year 6 class.

6.3.3 Discussion of Chi-Squared Tests of Independence

Before I begin to deconstruct and critique how students engaged with each teacher, it should be noted that the Student Time on-Task percentages for most students with most teachers were high at 89.5%. This is a high on-task rate generally, and would suggest that in this 100% Indigenous context, teachers are succeeding at on-task or engaged student learning. The exception was the three, year 4/5 boys (Victor, William and Yaran) with T3, whose average Student Time on-Task was 53.3%. Further, negative reactions to interactions with the teacher were negligible. These are included in Appendix N.

Given the high rate of positive reactions, this would suggest that staff created a supportive environment. As the four participating teachers who volunteered did not all teach the same students, the data collection methods were repeated for the two classes. This was the reason for the data not being processed together. Thus, the two classes were processed separately. Effectiveness of each strategy was not measured in these data.

Zena's off-task rate during NAPLAN highlighted that some structures imposed on schools are not culturally appropriate. Zena was usually on-task. The NAPLAN task stood out as a time when Zena was uncharacteristically off-task. This would suggest that the task was not suited to her. Dalal (2016) suggested that examinations are designed to maintain social hierarchies and the legitimacy of academic verdicts. These may not value children's cultural capital. Examinations lead students to count themselves among those who fail. They may then self-exclude (Dalal, 2016) or disengage (Lester, 2016) when pedagogies are not suited to them.

It should also be noted that time on-task with peers was higher in art, as the task was often painting on canvas, and students could chat as they worked. T4 chose a rich (Aubusson et al., 2014; Johnston & Ferguson, 2017), or authentic task (Brady, 2009) which highly motivated students. During this task, teacher-student conversations centred around family stories and songlines. Student Time on-Task was higher due to the nature of the task, and it was less in the months before, as teacher observations were conducted. Further qualitative evidence are included in Appendices L and M so that the qualitative evidence is not devalued, as it provides rich context and detail. The effectiveness of some individual strategies is illustrated in these qualitative data vignettes, though not all. Efficacy of individual strategies alongside a variety of learning areas could be investigated for how subject interest impacts on

behaviour while accounting for elements of TASSAIS strategies.

6.3.4 Findings of Chi-Squared Tests of Independence

As an exploratory study, this phase opened new ground for observing and recording implementation of the TASSAIS strategies. It suggests a link between Teacher Use of the TASSAIS Strategies and Student Time on-Task. Further investigation will support or refute that notion. It suggests a tentative link between Teacher and Use of Strategies in Themes, suggesting that teachers have a preferred style, implementing more themes than others. Descriptive statistics, field notes and vignette data provide some context and explanation to the Chi-Squared Test of Independence findings.

6.3.5 Teacher Self-Report Data - The Rasch analysis

6.3.5.1 Introduction.

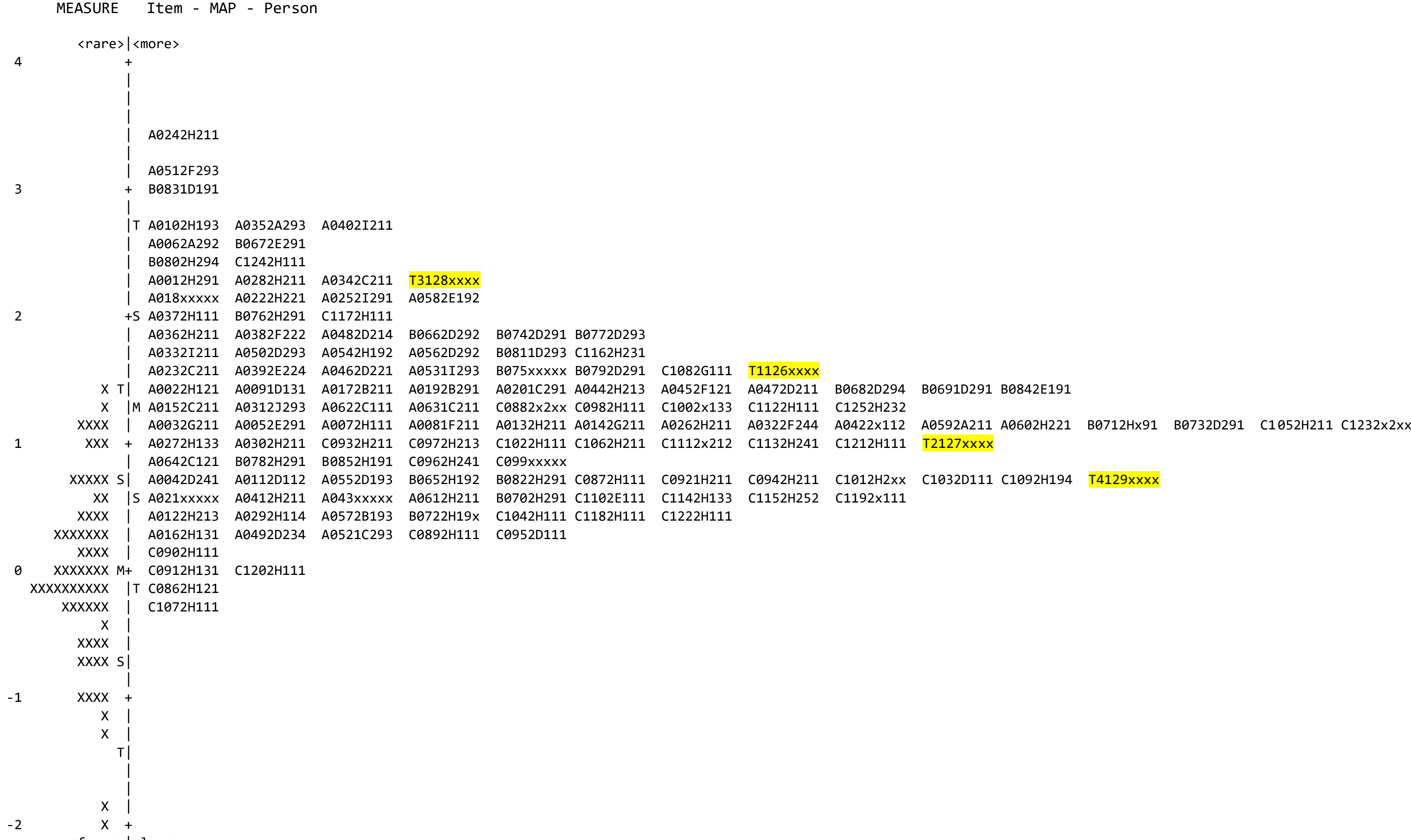
As detailed in Chapter 5, Rasch analysis was used to determine if the survey items described a single underlying construct. Rasch analysis provides a consistent interval scale (Boon & Lewthwaite, 2015) to compare item and person scores by transforming item and person data from ordinal data to yield interval data (Bond & Fox, 2015). The four teacher participants were added to the Chapter 5 analysis and identified to compare their self-reported frequency of use of the TASSAIS attitudes and strategies to the mean for all participants and then to their observed use in class.

6.3.5.2 Rasch Analysis Results.

The results of the Rasch analysis are presented in the Wright Map below (Figure 6.6) and the output showing the psychometric quality of their responses is detailed in Table 6.10.

Figure 6.6

Item and Person Map



Note: Each ‘x’ on the left denotes the difficulty of a TASSAIS item. The eight characters on the right denote participants in groups A, B and C as described in Chapter 3. Participant teachers T1, T2, T3 and T4 are highlighted.

Figure 6.6 displays the Wright Map which captures teachers self-report of their frequency of use of the TASSAIS strategies (See previous Wright Map in Chapter 5 Figure 5.1). The Wright Map displays the level of self-reported frequency of use or endorsement of TASSAIS attitudes and strategies by the participants, for example, Teachers, (right side of the vertical line) and the scale of endorsement or use of implementation of TASSAIS attitudes and strategies (left side of the vertical line). The values in the right-hand column range from -0.x to +3.x on the logit scale. The upper part of the left scale displays the TASSAIS attitudes and strategies survey items that participants are less likely to endorse (survey items that are harder for participants to agree with), while the bottom of the left scale displays the strategies that are more likely to be endorsed or reported as used by the participants. Participants at the top right side of the vertical line are those participants that were more likely to endorse more of the TASSAIS items (more agreement with the survey items). The Overall Person Separation Index indicates how efficiently the items can separate the participants. The Person Separation Index was 3.66 with a reliability of 0.93. As discussed in Chapter 5, when the Person Reliability Index is high, this is prima facie evidence that we have developed a line of inquiry where some participants score high and others score low on the underlying dimension. The reliabilities can range from 0-1. The higher the value, the better the separation and the more meaningful the differences in measurement.

Table 6.10 shows the Overall and Person Statistics of the four teachers T1, T2, T3 and T4.

Table 6.10

Overall and Person Statistics for the Four Participating Teachers

Person	Raw Score	Count	Measure	Model Error	Infit		Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Mean	278.9	69.7	1.25	0.16	1.08	0.1	1.02	-0.2
T1	299	71	1.52	0.17	1.02	0.2	0.92	-0.4
T2	275	71	0.95	0.15	0.55	-3.0	0.56	-2.9
T3	322	71	2.28	0.20	1.68	2.9	1.59	2.5
T4	252	68	0.72	0.14	2.19	5.2	2.19	5.1

Note. the first row refers N=129

The fit statistics indicate the extent to which the data were unidimensional (how consistently the teacher's answers matched the unidimensional construct and recommended attitudes and strategies for supporting the behaviour of Indigenous students).

> Closeness of observed scores to predicted scoring pattern was expressed by (1) outlier-sensitive fit (Outfit: sensitive to unexpected behaviour affecting responses to items far from a teacher's measure); and (2) information weighted fit (infit: sensitive to unexpected behaviour affecting responses to items matching teacher's measure). Both fit statistics must approach 1.0 with acceptable values between 0.6 and 1.4 (Bond & Fox, 2007). Point-bi-serial correlation coefficients were computed for each item, indicating the extent to which teacher's scores on an item correlated with whole test scores, this indicating predictable behaviour of items in relation to ability [or in this case, frequency of use]. (Boon & Lewthwaite, 2015, pp. 43,44)

The fit statistics compare the observed and expected response patterns. To conform to a unidimensional structure (all answers are consistent with the single construct), person mean squares should be as close to 0 as possible (Linacre, 2018). Table 6.10 shows that the mean of all participants' raw scores was 278.9 and that the person Infit MNSQ and Outfit MNSQ were 1.08 and 1.02 respectively, with their standardised Infit and Outfit means equalling 0.1 and 0.2. The person separation index is 5.43 with a reliability of 0.97.

T1's measure was 1.52 logits with a measurement error of 0.17. Her answers placed her at approximately 1.5 SD above the mean for all participants. Her infit is 1.02, outfit was

.92, both close to 1, so her answers were predictable with the observed point biserial correlation 47.9% and the expected 50.5%.

T2's measure was .95 with an error of .15 which placed her at just below the mean. Her infit and outfit statistics were .55 and .56 respectively. This makes her answers very predictable. Her observed point biserial correlation was 60.6% and the expected was 46.5%. Her answers were very consistent.

T3's answers placed her the highest of all the teachers at 2.5 SD above the mean, with a measure of 2.28 and an error of .20. Her answers were somewhat erratic, having an unexpected pattern of responses when looking at her Infit and Outfit measures (1.68 and 1.59) which were both higher than 1. Observed point biserial correlation was 56.3 and the expected was 61.1.

T4's fit statistics reveal a very erratic pattern of responses including endorsing more difficult items while not endorsing easier items. The fit statistics for T1, T2 and T3 are acceptable, for T4 they are not. The low value of 0.72 logits therefore should not be taken at face value. She did not answer three questions in the survey instrument and her responses were unpredictable. This may be because the questions asked for frequency of use and she was only at the school one day a week. Her infit and outfit statistics were both 2.19. These poor fit statistics prompted follow up conversations with T4. She related in conversation that she felt that some questions did not relate to her and left them blank. She also related that she did not do follow through after behaviour incidents herself but let the teacher aides follow up or forwarded the information to the teachers. Her answers placed her just over 1 SD below the mean with a measure of .72 and an error of .14.

6.3.5.3 Discussion of Rasch Analysis Results.

T1and T2 rated themselves slightly above the Phase 2 mean. While T1 and T2 were consistent in self-ratings, T3 rated herself highly, but her pattern of responses was erratic and unexpected. T4 self-rated below the mean, and her ratings were erratic. It must be kept in mind that T4 mentioned that she did not participate in reactive work and as she only worked one day a week, some questions were not applicable. The self-report frequency data of the four teachers will be compared to observations of each teacher's use of the strategies, in section 6.4.2.

6.4 Discussion

6.4.1 Discussion of Chi-Squared Tests of Independence

Bourdieu suggested that education can be a way of continuing a social divide (Houtson, 2002). Critical pedagogy is a way of investigating current educational practices in light of wider social, political and economic forces (Giroux, 2006). This study examined one aspect of pedagogy, behaviour support for Indigenous students, applying critical pedagogy to examine practices that may disadvantage students. Current state-wide and national behaviour support practices for Indigenous students were reviewed in Chapter 2 and found to be lacking in consideration of Indigenous students. Practices recommended by Indigenous staff, student and families were evaluated in the TASSAIS survey instrument. Phase 3 of this study sought to answer the second research question, examining the effects of the behaviour support practices (TASSAIS Attitudes and Strategies) recommended in Phase 1 interviews. The Chi-Squared tests of Independence suggest that there is association between Teacher use of Strategies and Student Time on-Task. This suggests that the TASSAIS attitudes and strategies suggested by the Indigenous participants contribute to Student Time on-Task. There is also a suggestion of an association between Teacher and Use of Strategies in Themes. This confirms my hypothesis that each teacher had a preferred style using the TASSAIS attitudes and strategies.

Initially, with volunteer educators, analysis through comparison of the separate sets of data in comparison tables was undertaken through narrative and using several expert gazes providing multiple perspectives (Creswell, 2008). As a first step, various data sets, presented as graphs were combined for comparison. This evolved into graphs within a table for each class. These overall data tables are presented in Appendix P for a visual comparison of all data sets. These data do not give the statistical accuracy of the Chi-Squared Tests of Independence and Rasch analyses but provide joint displays of the same data through visual images (Fetters et al., 2013), combining tables within tables.

6.4.2 Discussion of Teacher Self-Report Data and Observed Data

Teacher self-report use of TASSAIS did not match the observed use of TASSAIS strategies. The four participating teachers fitted into the patterns found for all teachers, that most teachers believe they used most of the items frequently; that is, that the items were too easily used frequently. The Rasch data (self-reported) and actual counts (observed data) supports the finding that teacher self-report data are not the same as their observed data. For

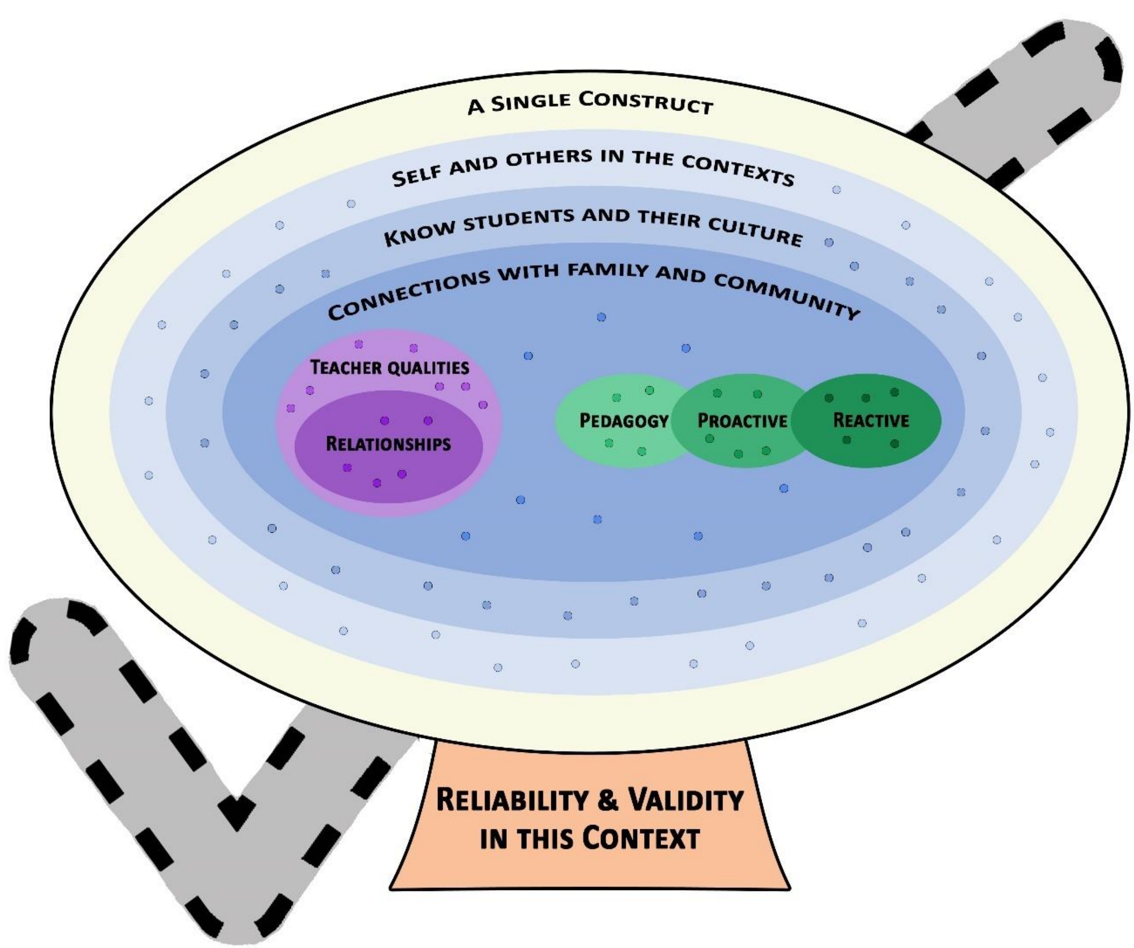
example, the overall graphs for year 6 in Appendix M show that T1, T3 and T4 self-report scores in the graphs in column 3 are high in all the TASSAIS themes, that is they report that they use each theme frequently. However, this is incongruent with classroom observations in column 2. This will be discussed further in Chapter 7.

6.5 The TASSAIS Items with Evidence of Efficacy

In summary, the attitudes and strategies were identified, grouped into themes, shown to have reliability and validity in this context and to be about a single construct. This chapter evaluated their efficacy, and I can report that, tentatively, there is a relationship between teacher frequency of use of the strategies and student on-task rate. This answers the second research question. The efficacy is represented by the tick in the background and the line is dotted due to two out of three analyses supporting that hypothesis.

Figure 6.7

TASSAIS With Evidence of Efficacy



6.6 Conclusion

This chapter presented the data from Phase 3 of the current study, answering the second research question, examining the influence of the identified behaviour support strategies on student behaviour. It explained data collection methods, context, and participants. In this chapter, numerical counts of strategies and qualitative field notes were used to demonstrate complementarity, where different data sets measure "overlapping but distinct facets of the phenomenon under investigation. Results from one type enhance, illustrate or clarify the results from the other" (Caracelli & Greene, 2008a, p. 233). The field notes and descriptive statistics data collected enhanced the findings of the Chi-Squared Tests of Independence. The next chapter is the conclusion which will report findings, limitations, and recommendations for further research.

Chapter 7 Conclusion

> If the culture of the teachers is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher. (Bernstein, 1970, p. 313)

7.1 Introduction

The journey to blend my two passions (Indigenous education and behaviour support) to investigate how we can improve outcomes for Indigenous children has been long, and at times, difficult. Education offers Indigenous students a pathway to navigate the dominant culture, only if that education is respectful of their culture, supportive and effective. The Indigenous young man who came to share my home is successful in many aspects of his life, and a leader among his peers. Helping him was a life-changing experience for me. Across the last ten years, my day-to-day work has centred around providing effective education for Indigenous children, and before that, as an assistant principal at an Indigenous school. Finding ways to support Indigenous students and educate non-Indigenous staff in the schools I have worked has been my contribution to my community.

The reward that follows my work is watching the transformative change at one school, as the care for students, safety, and effective teaching, helps individuals realise their potential. Recently I experienced watching a young student receive an award presented at assembly when, a year before, we adjusted the environment and expectations to support her challenging behaviour arising out of trauma. Such outcomes for students are what makes this work worthwhile, and it is the motivator that has kept me going through the more difficult times. Blessings and gratitude go to the staff who implement such care for students in schools.

In this final chapter, the background to the problem of behaviour support for Indigenous children in schools is summarised. The chapter restates the research foci and questions. It then outlines the research process and findings as well as reviewing the TASSAIS attitudes and strategies. Contributions to the field of knowledge are offered, while acknowledging limitations. This chapter concludes with my personal reflections and hopes for the future as a result of this study.

7.2 Summary of the Current Situation for Indigenous Students

Though Aboriginal and Torres Strait Islander children are a little over 6% of the student population in schools, they constitute 38% of students who were suspended, excluded or had enrolments cancelled. They also constitute 45% of children in the youth justice system (Department of Youth Justice, 2019): a tragic outcome for Indigenous children. Experiences

of generational trauma [arising from colonisation], cultural differences and inadequate responses by education systems contribute to the inequitable outcomes that exist for Indigenous students to this day. This leads to replication of the cultural inequities created by the dominant culture. Schooling often fails Indigenous students, who start their education well and 'fall out' of the system. They require teachers who understand and can engage with them more effectively.

Critical evaluation in the literature review of current programs and research in Queensland has shown what is described as 'colour blindness' exists in the locally supported behaviour support resources. Cultural differences in behaviour support have been ignored, yet treating all students the same is not appropriate. Treating all children the same can result in a mismatch of understanding and increased suspension and exclusion rate of Indigenous children. The research and evidence gap around behaviour support for Indigenous children motivates and informs this research. Although advice literature on this topic offered good ideas, research that focused on explicit attention to culturally responsive behaviour support strategies was sparse. Previous research touched on behaviour support, however, it did not specifically provide evidence of 'what works'.

The colour blindness described in current literature and evident in local practices has missed cultural nuances that can be examined using Bourdieuan theory (Houtson, 2002). Essentially, we understand, schools are a cultural field that replicate the dominant culture. If teachers are not aware that education is biased towards the dominant culture, they may not understand that some students lack cultural capital in this field; and in turn, judge them for lacking such cultural capital. In some classrooms, children learn 'being' who they are is not valued and understood by those authorised to shape their learning conditions – teachers. They are, in other words, learning their markers of habitus, or aspects of their identity, leading to particular kinds of responses from teachers which may positively or negatively impact upon them. It is not just the colour of skin or cultural background that help teachers to recognise students who are like themselves and students who are not. Markers of habitus include ways of being and speaking in an environment. If teachers are not aware of their own culture and habitus, they will interpret behaviour through their own habitus, and can misinterpret student behaviour. This mismatch of habitus can also be viewed as part of the 'hidden curriculum' that functions in schools. Students come to school not knowing and teachers suffer from teachers misunderstanding their behaviour.

A problem confounding the issue is that many non-Indigenous teachers have not met Indigenous students in their social worlds and are ill-prepared to meet their needs. The

Australian Professional Standards for Teachers requirement that teachers respond to the learning needs of students from diverse backgrounds (Australian Institute for Teaching and School Leadership, 2011a, 2011b), necessitate strengthening how this can be realistically achieved in day-to-day practice. When non-Indigenous teachers interpret behaviours of Indigenous students in the classroom through their own cultural lens (habitus), this can lead to an escalation, rather than de-escalation, of consequences. This leads to negative outcomes for children. Conversely, there are increased life benefits for Indigenous children in schools if that school environment is supportive. Culturally appropriate education is shown to be a restorative factor in future life choices (Aitkinson, 2002b). Teachers and schools that are responsive to cultural differences and provide for student needs will more likely see Indigenous children remain in school.

This study has opened the way for further investigation into how non-Indigenous teachers can help improve the outcomes for Indigenous children by offering advice that foregrounds Indigenous voice in recommendations to teachers. It provides the genesis of evidence-based information to fill the gap in the literature. The Australian Research Council study that this research was aligned with, researched aspects of pedagogy aside from student behaviour support. That research, conducted by expert Indigenous practitioners covers pedagogy generally, allowed me to focus on behaviour support strategies specifically (See section 1.2).

7.3 Research Questions, Methodology and Review of the Study

There were two research questions guiding the study:

1. According to Indigenous students, family members and staff working with Indigenous students, what behaviour support strategies are perceived to contribute to a supportive learning environment and improved positive learning outcomes?

2. This study sought to explore the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate)?

This study is a multistage mixed methods project. It is an exploratory sequential project where data was collected and analysed in one phase to inform the next phase (Fetters et al., 2013). The first research question is answered in Phase 1 of the study. Qualitative data was produced through semistructured interviews of Indigenous staff (20), students (12) and family members (9), in one Catholic Education primary school and one P-12 Indigenous boarding school. Participants suggested ways that teachers, particularly non-Indigenous teachers, could support the behaviour of Indigenous students in their classes. Chapter 4 presented the

suggestions gained in the interviews in conjunction with a priori themes that emerged from the literature review. The themes were:

1. Knowledge of self and other in the socio-political-historical context (referred to as S)
2. Knowledge of students and their culture without a deficit notion of difference (K)
3. Qualities of the teacher (T)
4. Positive relationships (R)
5. Pedagogy (P)
6. Proactive behaviour support strategies (O)
7. Reactive behaviour support strategies (E)
8. Connections with family and community (F)

Phase 1 qualitative data informed Phase 2 of this study, which continued answering the first research question. Phase 2 involved the development of a list of behaviour support suggestions collated by participants in a workshop setting into response items for a survey. The list was then refined through the Rasch analysis of the survey responses of 125 teachers to become the TASSAIS survey instrument. Rasch analysis identified that the items all relate to a single construct as reported in Chapter 5.

The qualitative data and TASSAIS list from Phase 2 then informed the third Phase, which was convergent, with qualitative and quantitative collected synchronously, and integrated through Chi-Squared analyses and combination of data sets. Phase 3 of this study sought to answer the second research question: 'To investigate the influence of the above-mentioned enacted behaviour support practices on student behaviour (for example, on-task, off-task and inappropriate)'; that is, behaviours that are inappropriate for school. In Phase 3, numerical, statistical and field notes detailing teacher use of the TASSAIS attitudes and strategies were collected during observations in an urban 100% Indigenous primary school. Three hours of observations of four participating teachers with two classes gave a snapshot of the teacher's practices. Qualitative data were also obtained and included field notes, journaled conversations and vignettes.

Following teacher observations, nine students were observed in two classes taught by the teacher participants. Student engagement was measured through student observations of on-task and off-task time, collated numerically. Field notes about behaviour were also recorded. To measure the supportive learning environment created by each teacher, positive

and negative student reactions after interactions with staff were recorded numerically and in field notes. These data suggest that students felt the classroom environments were supportive. For the four teacher participants, there were so few negative student reactions to interactions with the teachers they were displayed in the tables in Appendices L and O, but rarely mentioned in the discussion.

On completion of the observation data collection, the four participating teachers answered the TASSAIS instrument to self-report their use of the attitudes and strategies. It must be considered that all four were experienced teachers in Indigenous education. Two were Indigenous and the non-Indigenous teachers had received cultural awareness training. These teachers were able to effectively communicate and engage with Indigenous students.

The second research question was answered in Chapter 6, numerical (counted), qualitative (field notes) and quantitative (statistical) data were combined to gain insight into how the use of the TASSAIS attitudes and strategies impacted on students. These data suggest that there is some association between Teacher Use of the TASSAIS attitudes and strategies and Student Time on-Task. Though, it must be noted that this was a small sample, and further investigation is advised. Further analysis of these data is explained in the next section.

7.4 Findings

The first finding of this study is that behaviour support attitudes and strategies suggested by Indigenous staff, students and families can be identified. The identification of these attitudes and strategies and their inclusion in the TASSAIS survey instrument suggested attitudes and strategies that teachers, particularly non-Indigenous teachers, can employ to support student behaviour. In this way, Indigenous voice was heard and acted upon.

A second finding of this study is that the statistical investigation of these attitudes and strategies confirmed their unidimensionality. Rasch analysis can confirm the unidimensionality of a survey instrument; the capacity of the instrument to focus on one single underlying construct or attribute at a time and not confuse two or more dimensions in a single construct. Each item should contribute to the single construct being investigated. The statistical evidence from the Rasch analysis (Chapter 5) found that the items related to a single construct and supports a claim of construct validity for the TASSAIS list of attitudes and strategies.

The third finding was that two of the three Chi-Squared analyses allowed the alternative hypothesis to stand, that there is some relation between Teacher Use of the

TASSAIS Attitudes and Strategies and Student Time on-Task. This means that students are more on-task when teachers used more of the TASSAIS strategies. Extrapolating these ideas then, it translates into increased student engagement when teachers have the propensity to be interested in and have an understanding of students' worlds, demonstrated by the use of the TASSAIS attitudes and strategies. Further, engagement relies on teachers having the pedagogic and relationship skills to teach and support the behaviour of Indigenous children in the classroom. Teachers who do these things create a classroom environment where students are more likely to display behaviours that show they feel safe and supported and ultimately engage in learning.

The fourth finding, from additional exploration of Phase 3 data, was that when Teachers as individuals were compared to Teacher use of the Strategies in the TASSAIS Themes, the Chi-Squared analyses allowed the alternative hypothesis to stand, demonstrating some relation between them. That is, that each teacher had a style, or certain strengths. Each teacher used preferred themes more frequently and non-preferred themes less frequently. For example, T2's strengths included Qualities of the Teacher and Positive Relationship, whereas T1's strengths were Proactive Behaviour Support Strategies and Knowledge of Students and their Cultures.

The fifth finding was that teacher contributions to student engagement and student experiences of a positive environment can be both communicated and verified through observation. Student engagement was monitored through observation of on- and off-task moments, and in these classrooms were high. On average, most students were on-task for 89.5% of their time. The exception was the three boys in the year 4/5 class who were on-task for an average of 53.3% (see section 6.3.3 and Appendix M). In this independent primary school with 100% Indigenous population, students experienced a supportive environment. That is, their responses to interactions with staff were largely positive (Appendix M). There were very few negative responses to interactions with teachers (Appendix M), which suggests that this context provided a supportive environment for students.

The sixth finding was that teachers' self-reported frequency of use of the TASSAIS strategies were not consistent with teachers' observed frequency of use. The gap between observation and self-report data was clear. This discrepancy points to an opportunity for teachers to grow through reflexivity and develop higher levels of self-awareness guided by the TASSAIS strategies. This supports my recommendation that the TASSAIS observation tool be used for reflection and professional development.

7.5 Contributions to Knowledge

This study is exploratory. It breaks new ground by applying understanding of behaviour support to the systemic problem of the experiences of Indigenous students in our schools. It contributes to current knowledge by raising awareness of successful ways to support behaviour of those students. Theoretically, applying a critical lens to pedagogy, this study reframed the problem, defined the issues and decided how best to proceed, avoiding a paternalistic lens. It also applied Bourdeauian theory to examine why teachers may lack awareness of cultural differences and misinterpret student behaviour. The study has evaluated accepted local practices and suggested supplementary professional development for teachers: a pilot developing a set of culturally appropriate attitudes and strategies that teachers can use to support the behaviour of Indigenous students.

The major contribution to the body of education knowledge is the TASSAIS attitudes and strategies which translates Indigenous voice into learning for teachers. TASSAIS began as a search for a set of recommended strategies that teachers could implement to improve behaviour support for Indigenous teachers. Heeding Indigenous voice highlighted the need for the inclusion of attitudes as well as strategies. For ease of communication to an intended teacher audience, they are collectively referred to as ‘strategies’. Strategies can be learned and implemented quite easily with some awareness. Attitudes require a different level of commitment from teacher; attitudinal change brought about through reflexivity on the part of teachers might require deeper examination of attitudes and some personal growth. When using the TASSAIS observation tool it became clear that as self-report data differs from observed data, teacher development should come through reflexivity; deep learning with an observer and data (Section 7.4). Training and observations using the TASSAIS instruments will offer teachers growth and tools to implement to improve support for Indigenous students. Another contribution of this study is the student observation tool, which was adapted from functional behaviour assessment tools. Measuring student on -task and off -task time proved to be an effective way to record engagement with learning. Further, observing students’ reactions to interactions with the teacher proved to be a way to record student comfort in the learning environment.

The larger benefit of the study is its contribution to future teacher professional development by offering teachers a set of attitudes to examine and strategies to implement. It will help to fill a knowledge gap for teachers whose experience with Indigenous communities is limited. The knowledge gained during this study will be shared with the communities who

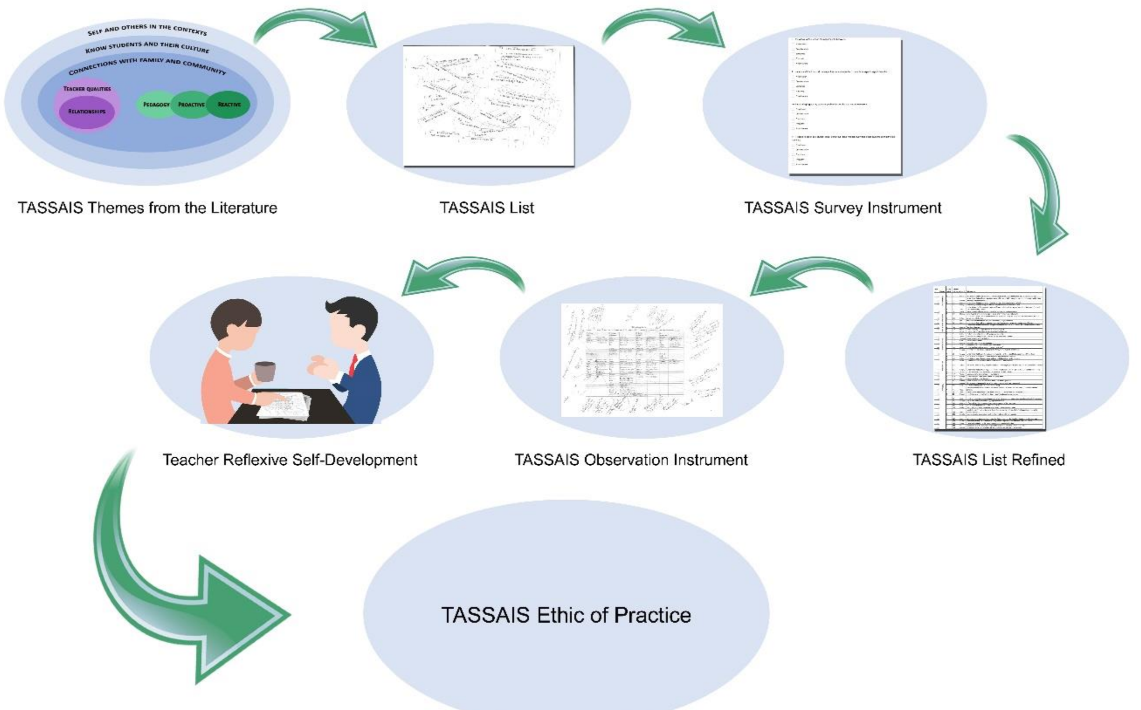
kindly participated in its development.

7.6 The Evolution of an Ethic of Practice

The TASSAIS strategies can be viewed as the basis for an 'ethic of practice' (Figure 7.1).

Figure 7.1

TASSAIS: Toward an Ethic of Practice



The TASSAIS strategies could act to promote an ethic which views behaviour support as more than a facilitation of behaviour management while teaching concepts; an ethic that promotes care for the Indigenous student's identity, being and community as part of day-to-day practice. The literature uncovered themes historically consistent with behaviour support that could be viewed in the light of an ethic of care (Knowledge of Self and Other in the socio-historical-political context Section 7.3). These themes were supported by the interviews with Indigenous students, staff and families, recoding Indigenous voices. Suggestions from participants were refined into the TASSAIS list of attitudes and strategies and collated into the themes. The TASSAIS list was worked into the TASSAIS survey instrument which, through Rasch analysis, provided a way to refine the list, determine that the items relate to a single construct, and have reliability and validity in this context. The TASSAIS observation

instrument was created from the list and grouped in the themes for conceptual congruence so particular attributes of practice would be easier to locate when observed. It provided tentative evidence of efficacy in the classroom. Future research could involve reflexivity through training, observations, and conversations with teachers to support their self-development. The TASSAIS themes, attitudes, strategies, and instruments have a synergy that transcends the sum of each to become something more than a simple sequence or addition. The end result is an ethical vision and an ideal for practice — to hold on a continuum as such ethics in reality are tenuous and slippery notions — to guide teachers in the process of learning to support Indigenous students that promotes a particular kind of ethic of care. The TASSAIS as an ethic of practice then, is more than a set of tools, it is an underpinning philosophy that provides the opportunity for change. The goal is to create environments where children feel recognised and seen and that they belong in the space.

7.7 Reflections on the TASSAIS Attitudes and Strategies

The TASSAIS is a compilation of teacher attitudes and classroom behaviour support strategies, informed by the Indigenous community, and trialled in practice for efficacy in this study. The TASSAIS was adapted and applied as two instruments: the survey instrument (Appendix C) and the teacher observation tool (Appendix D). These instruments are presented as outcomes from this study. A detailed evaluation of the instruments and observation tool, with recommendations, is included in Appendix Q. Two new strategies are recommended for inclusion.

7.8 Limitations

There are no simple answers to the complexity of student behaviour interactions in classrooms. Due to the nature of the study, there were a number of study limitations. Therefore, findings do not seek to prove causality, but simply uncover possible interconnections between teachers, community and students.

The first limitation of the study was the sample size. While a small number of participants allowed for rich conversations and detail, replication of the findings could be undertaken with a great number of participants. The nature of the school may account for the low number of negative responses to interactions with staff.

The second limitation of the study was a single observer. The funding and exploratory nature of this doctoral study was that it could only involve myself, as primary researcher. Smith (2012) talked about finding an appropriate set of skills to investigate an issue, and that

there are scholars who choose to work "for, with, and alongside" (Smith, 2012, p. 205) those on the margins of society. Changing conditions for marginalised people is considered as a 'standpoint'. My observations are a standpoint at the cultural interface, which is an analysis that raises an issue that is not always seen by others and persuade them to pay attention. Years of experience working with student behaviour, and Indigenous student behaviour, were advantageous by allowing me to recognise students' signals (such as body language) and interpret what I saw in terms of behaviour. I do, however, acknowledge that no matter how faithful I intended to be, my previous experience may also have influenced my interpretation "We cannot escape our values, but we have an obligation to present data on which we base our conclusions" (Anderson & Arsenault, 1998, p. 150).

Further, I am not Indigenous, but rather researching in a field that is sensitive to Indigenous people as a European ally. To implement reflexivity in my research, I worked with Indigenous people to help me bridge the gap in culture. As well as input from my supervisors and the workshop participants, I conscripted several cultural mentors and experienced staff whose critical opinions guided the interpretation of phases one and three data. I am grateful to these Indigenous community members and colleagues for their guidance and the opportunity to use my skills to share these recommended attitudes and strategies with non-Indigenous teachers.

7.9 Implications and Recommendations

Education institutions are instruments that replicate dominant cultures. Indigenous students face a variety of impediments to success in their education, framed from a dominant society perspective. These include racism, cultural mismatch leading to negative interpretations of behaviour and inequitable responses after incidents; particularly when teachers are not informed and adequately prepared. Graham et al. (2022) suggested systemic reform because in several measures their recent data showed that the inequities for Indigenous students are not improving but are getting worse. As systemic change is needed, perhaps systems could benefit from promoting teacher growth using the TASSAIS attitudes and strategies.

The TASSAIS list of attitudes and strategies is designed to support teachers in their connections with students and their communities, as well as increase teachers' understanding of student behaviours. It can help teachers code-switch from their instinctive cultural responses, forged through their own primary habitus, when interpreting student behaviour. The TASSAIS survey and observation tool add to teachers' cultural understanding and

attitudes, as well as suggesting practical proactive and reactive strategies. Such increased awareness can frame an ethic of practice and care as teachers interact with Indigenous students day-to-day.

The TASSAIS survey instrument and observation tool can also be used to inform preservice teacher education and teacher professional development, challenging current practice in a critically reflective way (similar to the coaching methodology used in 4D Classroom Observations (Blackley, 2022)). This could include cultural sensitivity training, and awareness of how school practices affect students' cultural identities. These ideas are underpinned by Bourdieu's theories of field, habitus and capital to increase awareness in school staff. The TASSAIS instruments could also be useful or prompt further research in complementary professions such as social work and psychology.

7.9.1 Alignment with Australian Institute for Teaching and School Leadership Professional Standards for Teachers

Australian teachers are required to meet standards for teaching. Several of these relate directly to teaching Indigenous students (Australian Institute for Teaching and School Leadership, 2011b), and are listed in Appendix R. To successfully support the behaviour of Indigenous children and meet these standards, cultural understanding and appropriate strategies are required, particularly if a child has not learned to code-switch for behaviour, or the child has not learned to navigate the hidden curriculum related to social and behaviour expectations. The TASSAIS instruments could inform teachers as they work to meet these standards and improve support for Indigenous students.

7.10 Recommendations for Further Research

As this was an exploratory study, and context specific, I suggest that it be built upon using the TASSAIS instrument in a variety of school contexts where Indigenous students are a minority and are taught by a wider range of teachers. Future research with varied parameters could explore further to provide additional insight (see Appendix S). For example, teachers could be observed using a tool for mainstream classrooms that gives more insight into the dispositional practice of teachers who may be struggling (for example, 4D Observations).

Using the TASSAIS as a basis for future research may further outline the usefulness of a well-defined instrument. Such research might incorporate teacher participants who are willing to undertake training and use the data collection as an opportunity to increase self-awareness and academic outcomes for Indigenous children. As recommended in culturally

appropriate research techniques, training will be offered to the participants to share knowledge gained through the study.

7.11 Conclusion

Having spent much of my career and energy supporting education for Aboriginal and Torres Strait Islander children, it is my hope that the TASSAIS attitudes and strategies contribute to increased culturally appropriate education where students feel safe and supported. Many teachers are not familiar with Indigenous Australian cultures and lack awareness of how to support Aboriginal and Torres Strait Islander children in the classroom in ways that respect their cultural contexts. Phase 1 endeavoured to be faithful to the Indigenous community that proffered insights for the creation of the TASSAIS as a selection of recommended attitudes and strategies to be incorporated into teachers' practice. Phase 2 provided reliability in the context of the survey instrument developed from those attitudes and strategies. Phase 3 provided an observational evaluation of the efficacy of the TASSIAS strategies in classrooms using a dichotomy of on or off-task.

The TASSAIS instruments act as a model and the basis of an ethic for practice and needs to be considered seriously alongside other research supported training for teachers to improve the classroom experience for Indigenous students. The TASSAIS could sit alongside other local behaviour support resources. The goal is to reduce inequities in behaviour support practices to encourage increased engagement in learning and increased time in culturally appropriate schooling for Indigenous students. Further, adoption of the strategies may act to reduce teacher stress and the inequities in frequency and severity of responses to behaviour.

The results of this study provide the impetus to increase teachers' cultural self-awareness and make connections with Indigenous children and their families, as well as teach and model behaviours that foster engagement. In this way, non-Indigenous teachers are provided the means to implement the TASSAIS strategies, proactively create supportive environments and respond to behaviours of Indigenous students in culturally appropriate ways. Individual teacher change in this way, leads to a respectful ethic of practice to support Aboriginal and Torres Strait Islander children and improve their educational outcomes in our schools. Moreover, the study makes a contribution to an as yet under discussed phenomenon in the literature; that is, culturally appropriate behaviour support in the Australian Indigenous context.

Reference List

Aitkinson, J. (2002a). *Trauma trails recreating song lines: The transgenerational effects of trauma in Indigenous Australia*. Spinifex Press.

Aitkinson, J. (2002b). Voices in the wilderness: Restoring justice to traumatised peoples. *University of New South Wales Law Journal*, *25*(1), 233-241.

American Psychological Association. (2020). *APA dictionary of psychology.* https://dictionary.apa.org/uncontrolled-variable

Anderson, G., & Arsenault, N. (1998). *Fundamentals of educational research* (2nd ed.). Falmer Press.

Anderson, M. L., Evertson, C. M., & Emmer, E. T. (1980). Dimensions in classroom management derived from recent research. *Journal of Curriculum Studies*, *12*(4), 343-362. https://doi.org/10.1080/0022027800120407

Anthony, B. J., Anthony, L. G., Morrel, T. M., & Acosta, M. (2005). Evidence for social and behavior problems in low-income, urban preschoolers: Effects of site, classroom and teacher. *Journal of Youth and Adolescence*, *43*(1), 31-39. https://doi.org/10.1007/s10964-005-1334-y

Appo, N. (1994). Providing an ideal environment for our children: A personal view. *Aboriginal Child at School*, *22*(3), 3-4. https://doi.org/10.3316/informit.507823980285003

Arthur-Kelly, M., Lyons, G., Butterfield, N., & Gordon, C. (2006). *Classroom management: Creating positive learning environments* (2nd ed.). Thomson.

Aubusson, P., Burke, P., Schuck, S., Kearney, M., & Frischknecht, B. (2014). Teachers choosing rich tasks: The moderating impact of technology on student learning, enjoyment, and preparation. *Educational Researcher*, *43*(5), 219-229.

Auditor General of Queensland. (2012). *Improving student attendance*. https://www.qao.qld.gov.au/files/file/Reports%202012/WebpdfofRTP1for2012.pdf

Australian Bureau of Statistics. (2011). *Census of population and housing: Characteristics of Aboriginal and Torres Strait Islander Australians, 2011, education*. Australian Bureau of Statistics. http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2076.0Main%20Features302

011?opendocument&tabname=Summary&prodno=2076.0&issue=2011&num=&view=

Australian Education Union. (2007). *Beginning teacher survey 2007: Results and report.* http://www.aeufederal.org.au/Publications/2008/Btsurvey07res.pdf

Australian Institute for Teaching and School Leadership. (2011a). *Australian charter for the professional learning of teachers and school leaders: A shared responsibility and commitment*. Education Services Australia for the Standing Council on School Education and Early Childhood.

Australian Institute for Teaching and School Leadership. (2011b). *Professional standards for teachers.* Education Services Australia for the Standing Council on School Education and Early Childhood.

Bain, C. (2011). Indigenous retention: What can be learned from Queensland. In N. Purdie, G. Milgate, & H. R. Bell (Eds.), *Two way teaching and learning* (pp. 71-89). ACER Press.

Bamblett, P. (1985). Koories in the classroom. *Aboriginal Child at School*, *13*(5), 34-37. https://doi.org/10.1017/S0310582200014048

Barbour, R. (2007). *Doing focus groups*. Sage. https://dx.doi.org/10.4135/9781526441836

Barkley, S. G. (2005). *Quality teaching in a culture of coaching*. Scarecrow Education.

Baydala, L., Rasmussed, C., Birch, J., Sherman, J., Charchun, J., Kennedy, M., & Bisanz, J. (2009). Self-beliefs and behavioural development as related to academic achievement in Canadian Aboriginal children. *Canadian Journal of School Psychology*, *24*(1), 19-33. https://doi.org/10.1177/0829573509332243

Bazron, B., Osher, D., & Fleischman, S. (2005). Creating culturally responsive schools. *Educational Leadership*, *63*(1). http://inclusiveclassrooms.pressible.org/files/2010/04/CreatingCulturallyResponsiveSchools.pdf

Bernstein, B. (1970). Education cannot compensate for society. *New Society 26*, 344-347.

Berry, R., & Hudson, J. (1997). *Making the jump: A resource book for teachers of Aboriginal students*. Catholic Education Office, Kimberly Region, Australia.

Bishop, R. (2003). Changing power relations in education: Kaupapa Maori messages for 'mainstream' education. *Comparative Education*, *39*(2), 221-238. https://doi.org/10.1080/0305006032000082443

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, T. (2007). *Te Kotahitanga Phase 3 Whanaungatanga: Establishing a culturally responsive pedagogy of relations in*

mainstream secondary school classrooms. Ministry of Education, New Zealand. https://www.educationcounts.govt.nz/publications/schooling/9977/9454

Bishop, R., Berryman, M., & Ricardson, C. (2002). Te Toi Huarewa: Effective teaching and learning in total immmersion Maori language educational settings. *Canadian Journal of Native Education*, *26*(1), 44-61.

Bissett, S. Z. (2012). Bala ga lili: Meeting Indigenous learners halfway. *Australian Journal of Environmental Education*, *28*(2), 78-91. https://doi.org/10.1017/aee.2013.2

Blackley, C. (2022). *Teacher decision-making: The fulcrum of a productive teaching and learning environment.* University of Southern Queensland. Toowoomba, Australia. http://eprints.usq.edu.au/id/eprint/47035

Blackley, C., Redmond, P., & Peel, K. (2021). Teacher decision-making in the classroom: The influence of cognitive load and teacher affect. *Journal of Education for Teaching*, *47*(4), 1-14. https://doi.org/10.1080/02607476.2021.1902748

Bliss, B. A. (2006). *Disciplinary power and extra-classroom public life* [Doctoral dissertation]. University of Delaware.

Bodkin-Andrews, G., O'Rourke, V., Dillon, A., Craven, R. S., & Yeung, A. S. (2012). Engaging the disengaged?: A longtitudinal analysis of the relations between indigenous and non-indigenous Australian students' academic self-concept and disengagement. *Journal of Cognitive Education and Psychology*, *11*(2), 17. https://doi.org/10.1891/1945-8959.11.2.179

Bolton, G., & Delderfield, R. (2018). *Reflective practice: Writing and professional development* (5th ed.). Sage.

Bond, H. (2004). *'We're the mob you should be listening to': Aboriginal Elders talk about community-school relationships on Mornington Island.* [Doctoral dissertation]. James Cook University. https://researchonline.jcu.edu.au/971/

Bond, H. (2010). "We're the mob you should be lisetning to": Aboriginal elders at Mornington Island speak up about productive relationships with visiting teachers. *The Australian Journal of Indigenous Education*, *39*(1), 40-53. https://doi.org/10.1375/S1326011100000909

Bond, T. G., & Fox, C. M. (2015). *Applying the Rasch model: Fundamental measurement in the human sciences*. Routledge

Bondy, E., & Ross, D. D. (2008). The teacher as warm demander. *Educational Leadership*, *66*(1), 54-58. https://www.sjsu.edu/faculty/marachi/mle/Warm%20Demander%20Article.pdf

Bondy, E., Ross, D. D., Gallingane, C., & Hambacher, E. (2007). Creating environments of success and resilience: Culturally responsive classroom managment and more. *Urban Education*, *42*(4), 326-348. https://doi.org/10.1177/0042085907303406

Boon, H. J., & Lewthwaite, B. (2015). Development of an instrument to measure a facet of quality teaching: Culturally responsive pedagogy. *International Journal of Educational Research*, *72*, 38-58. https://doi.org/10.1016/j.ijer.2015.05.002

Boone, W. J., & Noltemeyer, A. (2017). Rasch analysis: A primer for school psychology researchers and practitioners. *Cogent Education*, *4*(1), 1-13. https://doi.org/10.1080/2331186X.2017.1416898

Bostick, D. (2017, 18/12/2017). How color blindness is actually racist *The Huffington Post.* https://www.huffingtonpost.com/dani-bostick/how-colorblindness-is-act_b_10886176.html

Bottoms, T. (2013). *Conspiracy of silence: Queensland's frontier killing times*. Allen & Unwin.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. (R. Nice, Trans.) Routlege.

Bourdieu, P. (1990). *Reproduction: In education society and culture*. Sage Publications.

Bourke, S. (1986). How smaller is better: Some relationships between class size, teaching practices and student achievement. *American Educational Research Journal*, *23*(4), 558-571. https://doi.org/10.3102/00028312023004558

Bowers, C. A., & Flinders, D. J. (1990). *Responsive teaching: An ecological approach to classroom patterns of language, culture, and thought*. Teachers College Press.

Boykin, W. A. (2001). The effects of movement expressiveness in story content and learning context on the analogical reasoning performance of African American children. *Journal of Negro Education*, *70*(1), 72-83. https://www.jstor.org/stable/2696284?seq=1

Brady, L. (2009). Strategies for assessment: Student achievement in the classroom. In L. Brady, K. Kennedy, & K. J. Kennedy (Eds.), *Celebrating student achievvement: Assessment and reporting* (4th ed., pp. 43-75). Pearson Education Australia.

Brady, L., & Scully, A. (2005). *Management in practice*. Pearson Education Australia.

Brannen, J. (1992). Combining qualitative and quantitative approaches: An overview. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (pp. 3-37). Ashgate Publishing Company.

Brantlinger, E., & Danforth, S. (2006). Critical theory perspective on social class, race, gender, and classroom management. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice and contemporary issues* (pp. 157-179). Lawrence Earlbaum.

Brisbane Catholic Education. (2015). *Search Results*. Brisbane Catholic Education. http://www.bne.catholic.edu.au/search/Pages/default.aspx/Results.aspx?k=hattie&s=All%20Sites

Brown, D. (2003). Urban teachers' use of culturally responsive management strategies. *Theory Into Practice*, *42*(4), 277-282. https://doi.org/10.1177/0042085904263258

Bryman, A. (1992). Quantitative and qualitative research: Further reflections on their integration. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (pp. 57-78). Ashgate Publishing Company.

Budby, J. (1994). Aboriginal and Islander views: Aboriginal parental involvement in education. *Aboriginal Child at School*, *22*(2), 123-128. https://doi.org/10.1017/S0310582200006325

Burns, R. B. (2000). *Introduction to educational research* (4th ed.). Longman.

Byrne, B. M. (1999). The nomological nature of teacher burnout: A literature review and empirically validated model In R. Vendenberghe & A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 15-37). Cambridge University Press.

Byrne, M., & Munns, G. (2012). From the big picture to the indivdual student: The importance of classroom relationship. In Q. Beresford, G. Partington, & G. Gower (Eds.), *Reform and resistance in Aboriginal education* (pp. 304-334). UWA Publishing.

Campbell, S. (2000). *The reform agenda for vocational education and training: Implications for Indigenous Australians*. Centre for Aboriginal Economic and Policy Research: Australian National University. http://caepr.anu.edu.au/sites/default/files/Publications/DP/2000_DP202.pdf

Caracelli, V. J., & Greene, J. C. (2008a). Data analysis strategies for mixed-method evaluation designs. In V. L. Plano Clark & J. W. Cresswell (Eds.), *The mixed methods reader* (pp. 231-250). Sage Publications

Caracelli, V. J., & Greene, J. C. (2008b). Data analysis strategies in mixed methods research. In V. L. Plano Clark & R. Cresswell (Eds.), *The mixed methods reader* (pp. 229-250). Sage.

Cartledge, G., & Kourea, L. (2008). Culturally responsive classrooms for culturally diverse students with and at risk for disabilities. *Exceptional Children*, *74*(3), 351-371. https://doi.org/10.1177/001440290807400305

Cary, S. (2000). *Working with second languge learners: Answers to teachers' top ten questions*. Hinemann.

Castagno, A., & Brayboy, B. M. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, *78*(4), 941- 993. https://doi.org/10.3102/0034654308323036

Charles, C. M. (1989). *Building classroom discipline: From models to practice* (3rd ed.). Longman Inc.

Charles, C. M. (2005). *Building classroom discipline* (8th ed.). Pearson Education

Christie, M. J. (1980). Keeping the teacher happy. *Aboriginal Child at School*, *8*(4), 3-7. https://doi.org/10.1017/S0310582200011111

Christie, M. J. (1985). Aboriginal modes of behaviour in white Australia. *Aboriginal Child at School*, *13*(5). https://doi.org/10.1017/S0310582200014012

Christie, M. J. (1987a). Discipline. In M. Christie, S. Harris, & D. McClay (Eds.), *Teaching Aboriginal children: Milingimbi and beyond* (pp. 118-123). Institute of Applied Aboriginal Studies, Western Australian College of Advanced Education.

Christie, M. J. (1987b). A history of Milingimbi. In M. J. Christie, S. Harris, & D. McClay (Eds.), *Teaching Aboriginal children: Milingimbi and Beyond* (pp. 1-5). The Institute of Applied Aboriginal Studies, Western Australia College of Advanced Education.

Clarke, M. (2000). Direction and support for new non-Aboriginal teachers in remote Aboriginal community schools in the Northern Territory. *Australian Journal of Indigenous Education*, *28*(2), 1-8. https://doi.org/10.1017/S1326011100001587

Clarke, S., & Dunlap, G. (2008). A descriptive analysis of intervention research published in the Journal of Positive Behavior Interventions: 1999 through 2005. *Journal of Positive Behavior Interventions*, *10*(1), 67-71. https://doi.org/10.1177/1098300707311810

Clarke, Y. (2000). The construction of Aboriginal identity in people seperated from their families, community and culture: Pieces of a jigsaw. *Australian Psychologist*, *35*(2), 150-157. https://doi.org/10.1080/00050060008260337

ClassDojo. (2011). *ClassDojo*. https://www.classdojo.com/

Cochran-Smith, M. (1995). Color blindness and basket making are not the answers: Confronting the dilemmas of race, culture, and language diversity in teacher

education. *American Education Research Journal*, *32*(3), 493-552. https://doi.org/10.3102/00028312032003493

Cohen, R., Kincaid, D., & Childs, K. E. (2007). Measuring school-wide positive behavior support implementation. *Journal of Positive Behavior Interventions*, *9*(4), 11. https://doi.org/10.1177/10983007070090040301

Colman-Dimon, H. (2000). Relationships with the school: Listening to the voice of a remote Aboriginal community. *The Australian Journal of Indigenous Education*, *28*(1), 34-47. https://doi.org/10.1017/S1326011100001277

Cologon, K. (2014). Better together: Inclusive education in the early years. In K. Cologon (Ed.), *Inclusive education in the early years: Right from the start* (pp. 1-26). Oxford University Press.

Commonwealth Department of Education Science and Training. (2002). *An ethic of care: Effective programs for beginning teachers*. Commonwealth of Australia. http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/ethic_of_care.htm

Cope, B. (2005). *How to make a classroom management plan*. Pearson Education Australia.

Council of Australian Governments Education Council. (2019). *Alice Springs (Mparntwe) Education Declaration.* Education Services Australia. https://www.dese.gov.au/alice-springs-mparntwe-education-declaration/resources/alice-springs-mparntwe-education-declaration

Craven, R. S. (2014). The impact of professional development and Indigenous education officers on Australian teachers' Indigenous teaching and learning *Australian Journal of Teacher Education*, *39*(8), 85-108.

Craven, R. S., Bodkin-Andrews, G., & Yeung, A. S. (2007). *A model for seeding success for Aboriginal students [Paper presentation].* Australian Association for Research in Education Conference, Freemantle, 2007.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.

Creswell, J. W. (2014). *Research design: International student edition*. Sage.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Sage.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.

Crone, D. A., Horner, R. H., & Hawken, L. S. (2004). *Responding to problem behaviour in schools: The behaviour education program*. Guildford Press.

Dalal, J. (2016). Pierre Bourdieu: The sociologist of education. *Contemporary Education Dialogue*, *13*(2), 231-250. https://doi.org/https://doi.org/10.1177/0973184916640406

Davidson, M. (2002). *About the profiling program- Description of intervention program*. http://www.ieta.ash.org.au/deliver/content.asp?pid=1468

Davidson, M. (2005). *Classroom profiling training program 2005* [Training Program].

Davidson, M., & Goldman, M. (2004). *"Oh behave"...Reflecting teachers' behaviour mangement practices to teachers [Conference paper].* Australian Vocational Education and Training Research Association National Conference (7th), Canberra, Australia. http://knowledgetree.flexiblelearning.net.au/edition06/download/goldman-davidson.pdf

Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. The New Press.

Department of Education Queensland. (2021a). *2021 School opinion survey summary report*. Queensland Government. https://alt-qed.qed.qld.gov.au/our-publications/reports/statistics/Documents/2021-school-opinion-survey-summary-report.pdf

Department of Education Queensland. (2021b). *Queensland state school enrolments* Queensland Government. https://qed.qld.gov.au/our-publications/reports/statistics/Documents/enrolments-summary.pdf

Department of Education Training and Employment. (2012). *Search results*. Queensland Government. https://education.qld.gov.au/sitesearch/Pages/results.aspx?k=hattie

Department of Education Training and Employment. (2014). *Great results guarantee*. Queensland Government. https://education.qld.gov.au/Pages/PageNotFoundError.aspx?requestUrl=https://education.qld.gov.au/resultsguarantee

Department of the Prime Minister and Cabinet. (2020). *Closing the gap report 2020*. A. Government. https://ctgreport.niaa.gov.au/sites/default/files/pdf/closing-the-gap-report-2020.pdf

Department of Youth Justice. (2019). Youth justice pocket stats 2018-2019. Queensland Government. https://www.cyjma.qld.gov.au/resources/dcsyw/youth-justice/resources/pocket-stats-18-19.pdf

Dockett, S., Mason, T., & Perry, B. (2006). Successful transition to school for Australian Aboriginal children. *Childhood Education*, *82*(2), 139-144. https://doi.org/10.1080/00094056.2006.10521365

Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 392-431). Macmillan.

Dunlap, G. (2006). The applied behavior analytic heritage of PBS: A dynamic model of action-orientated research. *Journal of Positive Behavior Interventions*, *8*(1), 4. https://doi.org/10.1177/10983007060080010701

Dunlap, G., & Fox, L. (1999). A demonstration of behavioral support for young children with autism. *Journal of Positive Behavior Interventions*, *1*(2), 12. https://doi.org/10.1177/109830079900100202

Education Queensland. (2007). *The essential skills for classroom management*. Queensland Government.

Education Queensland. (2008). *Behaviour support personnel*. Queensland Government. https://education.qld.gov.au/sitesearch/Pages/results.aspx?k=behaviour%20support

Edwards-Groves, C., & Murray, C. (2008). Enabling voice: Perceptions of schooling from rural Aboriginal youth at risk of entering the juvenile justice system. *Australian Journal of Indigenous Education*, *37*, 165-177. https://doi.org/10.1017/S1326011100016203

Elmore, R. F. (2002). Hard questions about practice (school organizational and instructional practices). *Educational Leadership*, *59*(8), 22-25. https://www.studentachievement.org/wp-content/uploads/Hard_Questions_about_Practice_Elmore_2002.pdf

Emmer, E. T. (1981). *The classroom managment improvement study: An experiment in elementary school classroms*. Research and development center for teacher education, Texas University.

Emmer, E. T., Evertson, C. M., Clements, B. S., & Worsham, M., E. (1997). *Classroom management for secondary teachers* (4th ed.). Allyn & Bacon.

Evertson, C. M. (1982). Training teachers in classroom managment: An experimental study in secondary school classrooms. *Journal of Educational Research*, *79*(1), 51-58. https://doi.org/10.1080/00220671.1985.10885648

Fanshawe, J. P. (1976). Possible characteristics of an effective teacher of adolescent Aboriginals? *Aboriginal Child at School*, *12*(4), 72-98. https://doi.org/10.1017/S0310582200008403

Fanshawe, J. P. (1989). Personal characteristics of effective teachers of adolescent Aborigines. *Aboriginal Child at School*, *17*(4), 35-48. https://doi.org/10.1017/S0310582200006921

Fanshawe, J. P. (1999). Warm demandingness, and what else? A reassessment of what it takes to be an effective teacher of Aboriginal and Torres Strait Islander students. *Australian Journal of Indigenous Education*, *27*(2), 41-46. https://doi.org/10.1017/S132601110060056X

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—Principles and practices. *Health Services Research*, *48*(6), 2134-2156. https://doi.org/10.1111/1475-6773.12117

Fox, C. M., & Jones, J. A. (1998). Uses of Rasch modelling in counseling psychology research. *Journal of Counseling Psychology*, *45*(1), 30-45. https://doi.org/10.1037/0022-0167.45.1.30

Fox, L., Dunlap, G., & Chushing, L. (2002). Early intervention, positive behavioral support, and transition to school. *Journal of Emotional and Behavioral Disorders*, *10*(3), 12. https://doi.org/10.1177/10634266020100030301

Friere, P. (1970). *Pedagogy of the oppressed*. Continuum.

Garvis, S. (2006). Optimising the learning of gifted Aboriginal students. *International Journal of Pedagogies & Learning*, *2*(3), 42-51. https://doi.org/10.5172/ijpl.2.3.42

Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*. Teachers College Press.

Gay, G. (2000). Multicultural teacher education for the 21st Century. *Teacher Educator*, *36*(1), 1-16. https://doi.org/10.1080/08878730009555246

Gay, G. (2006). Connections between classroom management and culturally responsive teaching. In C. M. Evertson & C. S. Weinstein (Eds.), *Classroom Managment: Research, Practice and Contemporary Issues* (pp. 343-370).

Gillan, K. (2008). *Technologies of power: Discipline of Aboriginal students in primary school* [Doctoral dissertation]. University of Western Australia.

Giroux, H. A. (2006). Academic freedom under fire: The case for critical pedagogy. *College Literature*, *33*(4), 1-42. https://doi.org/10.1353/lit.2006.0051

Glasser, W. (1998). *The quality school: Managing students without coercion*. Harper Perennial.

Glynn, T., & Berryman, M. (2005). Understanding and responding to students' behaviour difficulties. In D. Fraser, R. Moltzen, & K. Ryba (Eds.), *Learners with special needs in Aotearoa/New Zealand* (3rd ed., pp. 294-315). Cengage Learning.

Gollan, S., & Malin, M. (2012). Teachers and families working together to build stronger futures for our children in schools. In Q. Beresford, G. Partington, & G. Gower (Eds.), *Reform and Resistance in Aboriginal Education* (pp. 149-173). UWA Publishing.

Graham, L. J., Killingly, C., Laurens, K. R., & Sweller, N. (2022). Overrepresentation of Indigenous students in school suspension, exclusion, and enrolment cancellation in Queensland: Is there a case for systemic inclusive school reform? *The Australian Educational Researcher*. https://doi.org/10.1007/s13384-021-00504-1

Griffiths, A. (2011). The components of best-practice Indigenous education: A comparative review. *Australian Journal of Indigenous Education*, *40*, 69-80. https://doi.org/10.1375/ajie.40.69

Groome, H. (1995). *Working pursposefully with Aboriginal students*. Social Science Press.

Guider, J. (1991). Curriculum, classroom management and discipline for the Aboriginal student. *Aboriginal Child at School*, *19*(4), 21-31. https://doi.org/10.1017/S0310582200007550

Hammersley, M. (1992). Deconstructing the qualitative-quantitative divide In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (pp. 39-55). Ashgate Publishing Company.

Hammersley, M. (2012). *Methodological paradigms in educational research*. British Educational Research Association on-line resource. https://www.bera.ac.uk/researchers-resources/publications/methodological-paradigms-in-educational-research

Hammond, H., Dupoux, E., & Ingalls, L. (2004). Culturally relevant classroom management strategies for American Indian students. *Rural Special Education Quarterly*, *23*(4), 3-9. https://doi.org/10.1177/875687050402300402

Harkins, J. (1990). Shame and shyness in the Aboriginal classroom: A case for 'practical semantics'. *Australian Journal of Linguistics*, *10*(2), 293-306. https://doi.org/10.1080/07268609008599445

Harris, M., & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 meta-analyses. *Psychological Bulletin*, *97*(3), 363-386. https://doi.org/10.2307/2786973

Harris, S. (1987a). Aboriginal learning styles and formal schooling. In M. J. Christie, S. Harris, & D. McClay (Eds.), *Teaching Aboriginal children: Milingimbi and Beyond*

(pp. 41-57). The Institute of Applied Aboriginal Studies, Western Australian College of Advanced Education.

Harris, S. (1987b). Have your manners. In M. J. Christie, S. Harris, & D. McClay (Eds.), *Teaching Aboriginal children: Milingimbi and Beyond* (pp. 11-25). The Institute of Applied Aboriginal Studies, Western Australian College of Advanced Education.

Harris, S., & Malin, M. (1995). Foreword. In S. Harris & M. Malin (Eds.), *Aboriginal kids in urban classrooms* (pp. v). Social Science Press.

Harrison, N. (2005). The learning is in-between: The search for a metalanguage in Indigenous education. *Educational Philosophy and Theory*, *37*(6), 14. https://doi.org/10.1111/j.1469-5812.2005.00163.x

Harrison, N. (2008). *Teaching and learning in Indigenous education*. Oxford University Press.

Harrison, N. (2011). *Teaching and learning in Aboriginal education* (2nd ed.) Oxford University Press.

Harslett, M. (1999). *Relationships, relationships, relationships: That's what sells school to Aboriginal students and parents.* Edith Cowan University

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.

Hepburn, L., & Beamish, W. (2019). Influences on proactive classroom management: Views of teachers in government secondary schools, Queensland. *The Australian Educational Researcher*, *23*(1).

Hepburn, L., Beamish, W., & Alston-Knox, C. L. (2020). Classroom management practices commonly used by secondary school teachers: Results from a Queensland survey. *The Australian Educational Researcher*. https://doi.org/10.1007/s13384-020-00402-y

Hockey, A. (2008). A new beginning: Indigenous education. *Professional Educator*, *7*(3), 34-37.

Holt, L. (2021). *Talking strong: The National Education Committee and the development of Aboriginal education policy*. Aboriginal Studies Press.

Hones, D. F. (2005). Aboriginal education at two Australian schools: Under one dream. *Multicultural Education*, *13*(1), 4. https://files.eric.ed.gov/fulltext/EJ727802.pdf

Houtson, S. (2002). Reflecting on habitus, field and capital. *Journal of Social Work*, *2*(2), 149-167. https://doi.org/10.1177/146801730200200203

Howard, D. (1995). Culturally responsive classrooms: A way to assist Aboriginal students with hearing loss in urban schools. In S. Harris & M. Malin (Eds.), *Aboriginal kids in urban classrooms* (pp. 37-50).

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277-1288. https://doi.org/10.1177/1049732305276687

Hudsmith, S. (1992). Culturally responsive pedagogy in urban classrooms. *The Aboriginal Child at School*, *20*(3), 3-12. https://doi.org/10.1007/s11256-009-0143-0

Hudspith, S. (1995). Humour as a significant factor in classroom interaction, relations and ethos. In S. Harris & M. Malin (Eds.), *Aboriginal kids in urban classrooms* (pp. 20-36).

Hudspith, S. (1996). *Learning to belong: An ethnography of urban Aboriginal schooling* [Doctoral dissertation]. Northern Territory University.

Hughes, P., More, A. J., & Williams, M. (2004). *Aboriginal ways of learning*. Paul Hughes.

Independent Schools Queensland. (2015). *Search Results*. Independent Schools Queensland. http://www.isq.qld.edu.au/search-results/?search=hattie&search-submit=

Ionn, M. A. (1995). Aborigines and Torres Strait Islanders and equitable educational outcomes: A focus on how school and society maintain misconceptions. *The Aboriginal Child at School*, *23*(4), 37-44. https://doi.org/10.1017/S1326011100002076

Jackson, C., Simincini, K., & Davidson, M. (2013). Classroom profiling training: Increasing preservice teachers' confidence and knowledge of classroom management skills. *Australian Journal of Teacher Education*, *38*(8), 18. https://doi.org/10.14221/ajte.2013v38n8.2

Jarrett, R. L. (1993). Focus group interviewing with low-income minority populations: A research experience. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 184-201). Sage.

Jeffers, K. (2008). The road less travelled. *Update 35*(5).

Johnson, L. (2002). "My eyes have been opened": White teachers and racial awareness. *Journal of Teacher Education*, *53*(2), 153-167. https://doi.org/10.1177/0022487102053002007

Johnston, A., & Ferguson, S. (2017). Same but different: A rich assessment task in two contexts. *Prime Number 32*(2), 10-11.

Jones, V., & Jones, L. (2001). *Comprehensive classroom management: Motivating and managing students* (3rd ed.). Allyn & Bacon.

Joyce, B., & Showers, B. (1990). *Staff development and student achievement*. Longman.

Keddie, A., Gowlett, C., Mills, M., Monk, S., & Renshaw, P. (2013). Beyond culturalism: Addressing issues of Indigenous disadvantage. *Australian Educational Researcher*, *40*(1), 91-108. https://doi.org/10.1007/s13384-012-0080-x

Kennedy, B. L. (2011). Teaching disaffected middle-school students: How classroom dynamics shape students' experiences *Middle School Journal*, *42*(4), 32-42. https://doi.org/10.1080/00940771.2011.11461772

Kervin, L., Vialle, W., Herrington, J., & Okley, T. (2006). *Research for educators*. Thompson.

Kidd, J., Sanchez, S. Y., & Thorp, E. K. (2007). Defining moments: Developing culturally responsive dispositions and teaching practices in early childhood preservice teachers. *Teaching and teacher education*, *24*(2), 316-329. https://doi.org/10.1016/j.tate.2007.06.003

Kirylo, J., Thirumurthy, V., Smith, M., & McLaren, P. (2010). Critical pedagogy: An overview. *Childhood Education*, *86*(5), 332-334. https://doi.org/10.1080/00094056.2010.10521420

Kleinfeld, J. S. (1975). Effective teachers of Eskimo and Indian students. *School Review*, *83*(2), 301-344. https://doi.org/10.1086/443191

Kreiger, J. D. (2002, Nov 6-8). *Teacher/student interactions in public elementary schools when class size is a factor [Conference paper].* Mid-South Educational Research Association Annual Meeting, Chattanooga, Tennessee. https://eric.ed.gov/?id=ED479874

Kuypers, L. M. (2011). *The zones of regulation: A curriculum designed to foster self-regulation and emotional control*. Think Social Publishing.

Labone, E., Cavanagh, P., & Long, J. (2014). Critical design features of pre-service education programs to enhance teacher capacity to effectively work in schools with Indigenous students. *The Australian Journal of Indigenous Education*, *43*(2), 121-133. https://doi.org/https://doi.org/10.1017/jie.2014.22

Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers for African-American children*. Jossey-Bass.

Lane, K. L., Rogers, L. A., Parks, R., Weisenbach, J. L., Mau, A. C., Merwin, M. T., & Bergman, W. A. (2007). Function-based interventions for students who are

nonresponsive to primary and secondary prevention efforts: Illustrations at the elementary and middle school levels. *Journal of Emotional and Behavioral Disorders*, *15*(3), 15. https://doi.org/10.1177/10634266070150030401

Leary, T. (1957). *An interpersonal diagnosis of personality*. Ronald Press.

LePage, P., Darling-Hammond, L., Akar, H., Gutierrez, C., Jenkins-Gunn, E., & Rosebrock, K. (2005). Classroom management. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 327-357). Wiley Imprint.

Lester, J. (2016). *Why do Aboriginal kids switch off school?* [Doctoral dissertation]. University of Newcastle.

Levin, B. (2008). *How to change 5000 schools*. Harvard Education Press.

Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children*, *31*(6), 24. https://doi.org/10.17161/foec.v31i6.6767

Lewthwaite, B., Boon, H. J., Webber, T., & Laffin, G. (2016). *What Aboriginal and Torres Strait Islander students in North Queensland say about effective teaching practices: Measuring cultural competence* [Conference paper]. American Education Research Association Annual Meeting Washington D.C.

Lewthwaite, B., & Day, C. (2014). *Application for ARC grant funding*. James Cook University and Townsville Catholic Education.

Lewthwaite, B., & McMillan, B. (2010). "She can bother me, and that's because she cares": What Inuit students say about teaching and their learning. *Canadian Journal of Education*, *33*(1), 140-176. https://www.jstor.org/stable/canajeducrevucan.33.1.140?seq=1

Lewthwaite, B., Osborne, B., Lloyd, N., Boon, H. J., Llewellyn, L., Webber, T., Laffin, G., Harrison, M., Day, C., Kemp, C., & Wills, J. (2015). Seeking a pedagogy of difference: What Aboriginal students and their parents in North Queensland say about teaching and their learning. *Australian Journal of Teacher Education*, *40*(5), 132-159. https://doi.org/10.14221/ajte.2015v40n5.8

Linacre, J. M. (2018). *A user's guide to Winsteps Rasch-Model computer programs: Program manual 4.1.0*. Winsteps.

Linkson, M. (1999). Some issues in providing culturally appropriate science curriculum support for Indigenous students. *Australian Science Teachers Journal*, *45*(1), 41-48. https://doi.org/10.3316/ielapa.990808183

Llewellyn, L., Boon, H. J., & Lewthwaite, B. (2018). Effective behaviour management strategies for Australian Aboriginal and Torres Strait Islander students: A literature review. *Australian Journal of Teacher Education*, *43*(1), 1-27. https://doi.org/10.14221/ajte.2018v43n1.1

Lowe, K. (2017). Walanbaa warramildanha: The impact of authentic Aboriginal community and school engagement on teachers' professional knowledge. *The Australian Educational Researcher*, *44*(1), 35-54. https://doi.org/10.1007/s13384-017-0229-8

MacGill, B. (2016). A paradigm shift in education: Pedagogy, standpoint and ethic of care. *International Journal of Pedagogies and Learning 11*(3), 238-247. https://doi.org/10.1080/22040552.2016.1272531

Malin, M. (1990a). The visibility and invisibility of Aboriginal students in an urban classroom. *The Australian Journal of Education*, *34*(3), 312-329. https://doi.org/10.1177/000494419003400307

Malin, M. (1990b). Why is life so hard for Aboriginal students in urban classrooms? *Aboriginal Child at School*, *18*(1), 9-29. https://doi.org/10.1017/S1326011100600261

Martin, A. J. (1999). How teachers respond to concerns about misbehavior in their classroom *Psychology in the Schools 36*(4), 347-358. https://doi.org/10.1002/(SICI)1520-6807(199907)36:4<347::AID-PITS7>3.0.CO;2-G

Marzano, R. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. Association for Supervision and Curriculum Development.

Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Association for Supervision and Curriculum Development.

Marzano, R. J., Gaddy, B. B., Foseid, M. C., Fosied, M. P., & Marzano, J. S. (2009). *A handbook for classroom management that works*. Merrill Education.

McCarthy, J., & Benally, J. (2003). Classroom managment in a Navajo middle school. *Theory Into Practice*, *42*(4), 296-304. https://doi.org/10.1207/s15430421tip4204_6

McCarty, C. (2019). *4D profiling teacher handbook* (3rd ed.). Serengetti Printing

McInerney, D. M., & McInerney, V. (2006). *Educational psychology*. Pearson Education Australia.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *The American Psychologist*, *50*(9), 741-749. https://doi.org/10.1037/0003-066X.50.9.741

Milgate, G., & Giles-Brown, B. (2013). *Creating an effective school for Aboriginal and Torres-Strait Islander students [Conference paper]* AERA Annual Conference, San

Francisco, California. http://research.acer.edu.au/cgi/viewcontent.cgi?article=1032&context=indigenous_education

Mills, M., & McGregor, G. (2014). *Re-engaging young people in education*. Routledge.

Milner, H. R. I. (2008). Disrupting deficit notions of difference: Counter-narratives of teachers and community in urban education. *Teaching and Teacher Education*, *24*(6), 1573-1598. https://doi.org/10.1016/j.tate.2008.02.011

Milner, H. R. I. (2011). Culturally relevant pedagogy in a diverse urban classroom. *The Urban Review*, *43*(1), 66-89. https://doi.org/10.1007/s11256-009-0143-0

Milner, H. R. I., & Tenore, B. (2010). Classroom management in diverse classrooms. *Urban Education*, *45*(5), 560-603. https://doi.org/10.1177/0042085910377290

Milroy, H. (2005). Preface. In S. R. Zubick, S. R. Silburn, D. M. Lawrence, E. G. Mitrou, R. B. Dalby, E. M. Blair, J. Griffin, H. Milroy, J. A. De Maio, A. Cox, & J. Li (Eds.), *The Western Australian Aboriginal child health survey: The social and emotional wellbeing of Aboriginal children and young people* (pp. xi - xx). Curtin University of Technology and Telethon Institute for Child Health Research. https://espace.curtin.edu.au/handle/20.500.11937/44850

Ministerial Advisory Committee for Educational Renewal. (2005). *Smart schools, smart behaviour: Advice to the Minister on behaviour management in Queensland schools*. Queensland Government. http://education.qld.gov.au/publication/production/reports/pdfs/2005/macer_report.pdf

Ministerial Council on Education Employment Training and Youth Affairs. (2008). *Melbourne declaration on educational goals for young Australians December 2008*. http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

Miranda, A. H., & Eschenbrenner, C. R. (2013). Behavioral issues in the classroom. In D. Shriberg, S. Y. Song, A. H. Miranda, & K. Radliff (Eds.), *School psychology and social justice: Conceptual foundations and tools for practice* (pp. 207-224). Routledge/Taylor & Francis group.

Monroe, C., R. (2006). Misbehavior or misinterpretation? *Kappa Delta Pi Record*, *42*(4), 161-165. https://doi.org/10.1080/00228958.2006.10518021

Monroe, C., R. (2009). Teachers closing the discipline gap in an urban middle school. *Urban Education*, *44*(3), 322-347. https://doi.org/10.1177/0042085908318716

Monroe, C., R., & Obidah, J. E. (2004). The influence of cultural synchronization on a teacher's perceptions of disruption: A case study of an African American middle-school classroom. *Journal of Teacher Education*, *55*(3), 256-268. https://doi.org/10.1177/0022487104263977

Morgan, H. (2010). Teaching native American students: What every teacher should know. *Education Digest: Essential Readings Condensed for Quick Review*, *75*(6), 44-47. https://search.proquest.com/openview/3a99e1cce252b7175248ce8aafe40ce5/1.pdf?pq-origsite=gscholar&cbl=25066

Munns, G., Martin, A., & Craven, R. S. (2008). To free the spirit: Motivation and engagement of Indigenous students. *Australian Journal of Indigenous Education*, *37*, 98-107. https://doi.org/10.1375/S1326011100000156

Munns, G., O'Rourke, V., & Bodkin-Andrews, G. (2013). Seeding success: Schools that work for Aboriginal students. *Australian Journal of Indigenous Education*, *42*(1), 1-11. https://doi.org/10.1017/jie.2013.6

Nakata, M. (1995a). Culture in education: A political strategy for us or for them. *Noonjook 11*, 40-61.

Nakata, M. (1995b). Cutting a better deal for Torres Strait Islanders. *Aboriginal Child at School*, *1995*(23), 3. https://doi.org/10.1017/S0310582200004892

Nakata, M. (2007a). *Disciplining the savages: Savaging the disciplines*. Aboriginal Studies Press.

Nakata, M. (2007b). An Indigenous standpoint theory. In M. Nakata (Ed.), *Disciplining the savages: Savaging the disciplines* (pp. 213-217). Aboriginal Studies Press.

Nelson, A., & Hay, P. J. (2010). "I don't want to grow up and not be smart": Urban Indigenous young people's perceptions of school. *The Australian Journal of Indigenous Education*, *39*(1), 54-64. https://doi.org/10.1375/S1326011100000910

Nelson, R. J., Martella, R. M., & Marchand- Martella, N. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders*, *10*(3), 18. https://doi.org/10.1177/106342660201000030201

Newell, M. (Director). (2020). *In my blood it runs* [Film]. Closer Productions https://inmyblooditruns.com/

Ngarritjan-Kessaris, T. (1995). Memories of a Millner kid. In S. Harris & M. Malin (Eds.), *Aboriginal kids in urban classrooms* (pp. 1-6). Social Science Press.

Nichol, R., & Robinson, J. (2010). Pedagogical challenges in making mathematics relevant for Indigenous students. *International Journal of Mathematical Education in Science and Technology*, *31*(4), 495-504. https://doi.org/10.1080/002073900412606

Noddings, N. (1996). Learning to care and to be cared for. In A. M. Hoffman (Ed.), *Schools, violence, and society.* (pp. 185-198). Praeger Publishers/Greenwood Publishing Group.

Noddings, N. (2012). The language of care ethics. *Knowledge Quest*, *40*(5), 52-56. https://search.proquest.com/openview/cb6cfdafe26d62036ef87dfade1f1f45/1?pq-origsite=gscholar&cbl=6154

Noguera, P. A. (2003). Schools, prisons, and social implications of punishment: Rethinking disciplinary practices. *Theory Into Practice*, *42*(4), 341-350. https://doi.org/10.1207/s15430421tip4204_12

Nolan, K. (2007). *Disciplining urban youth: An ethnographic study of a Bronx high school (New York City)* City University of New York.

O'Neill, R. E., Horner, R., H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook*. Thompson.

O'Rourke, V., Craven, R. S., Yeung, A. S., & Munns, G. (2008). *Closing the educational gap for Aboriginal primary students in low density schools: A multi-method longitudinal analysis elucidating impact of inclusive practices [Conference paper]* Australian Association for Research in Education International Education Conference, Brisbane. http://www.aare.edu.au/data/publications/2008/oro08798.pdf

Osborne, B. (1996). Practice into theory into practice: Culturally relevant pedagogy for students we have marginalized and normalized. *Anthropology & Education Quarterly*, *27*(3), 285-314. https://doi.org/10.1525/aeq.1996.27.3.04x0351m

Papatheodorou, T. (1998). *Management approaches employed by teachers to deal with children's behaviour problems in nursery classes [Conference paper]* 8th European Conference on Quality in Early Childhood Education, Santiago de Compostela, Spain.

Papatheodorou, T., & Ramasut, A. (1993). *The effects of nursery school environment on teachers' perceptions of children's behavioural difficulties [Conference paper].* European Conference of the Quality of Early Childhood Education, Greece.

Partington, G., & Gray, J. (2003). Classroom management and Aboriginal students: The Australian experience. In Q. Beresford & G. Partington (Eds.), *Reform and resistance in Aboriginal education*. University of Western Australia Press.

Partington, G., Waugh, R., & Forrest, S. (2001). Interpretations of classroom discipline practices by teachers and Indigenous students in a Western Australian secondary school. *Education Research and Perspectives*, *28*(2), 51-82. https://doi.org/10.3316/ielapa.200210237

Perso, T. (2003). *Improving Aboriginal numeracy: A book for education systems, school administrators, teachers and teacher educators*. Australian Association of Mathematics Teachers.

Perso, T. (2012). *Cultural responsiveness and school education with particular focus on Australia's First Peoples; A review and synthesis of the literature*. https://www.menzies.edu.au/icms_docs/312407_Cultural_Responsiveness_and_School_Education.pdf

Perso, T., Kenyon, P., & Darrough, N. (2012). *Transitioning Indigenous students to western schooling: A culturally responsive program [Conference paper]*. 17th Annual Values and Leadership Conference, Ethical Leadership: Building capacity for those moments of challenging choices, Brisbane, Australia.

Pinto, L. E. (2013). *From discipline to culturally responsive engagement: 45 classroom management strategies*. Corwin.

Porter, L. (2000). *Student behaviour: Theory and practice for teachers* (2nd ed.). Allen & Unwin.

Porter, L. (2007). *Student behaviour: Theory and practice for teachers* (3rd ed.). Allen & Unwin.

Price, K., & Hughes, P. (2009). *Stepping up: What works in pre-service teacher education*. Commonwealth of Australia.

Purdie, N., & Buckley, S. (2010). School attendance and retention of Indigenous Australian students. In *Closing the Gap Clearinghouse* (Vol. 1, pp. 1-25): Australian Institute of Health and Welfare and Australian Institute of Family Studies.

Purdie, N., Milgate, G., & Bell, H. R. (Eds.). (2011). *Two way teaching and learning: Toward culturally reflective and relevant education*. ACER Press.

Queensland Catholic Education Commission. (2012). *Aboriginal and Torres Strait Islander Education: A policy statement of the Queensland Catholic Education Commission*. Queensland Catholic Education Commission. http://www.qcec.catholic.edu.au/upload/publicsite/qcec/policyandpositions/ATSI%20Education%20Policy%2022%20Nov%202012.pdf

Queensland College of Teachers. (2019). *Attrition of Queensland Graduate Teachers: 2019 Report*. Q. C. o. Teachers. https://cdn.qct.edu.au/pdf/QCT_Qld_Graduate_Attrition_Report_2019.pdf

Queensland University of Technology. (1992). *Study materials for classroom managment: Models and practice*. Queensland University of Technology.

Rahman, K. (2010). *Indigenous student success in secondary schooling: Factors impacting on student attendance, retention and attainment in South Australia* [Doctoral dissertation]. University of South Australia.

Rahman, K. (2012). Belonging and learning to belong in school: The implications of the hidden curriculum for Indigenous students. *Discourse: Studies in the Cultural Politics of Education*, *34*(5), 660-672. https://doi.org/10.1080/01596306.2013.728362

Ralph, N., Hamaguchi, K., & Cox, M. (2006). Transgenerational trauma, suicide and healing from sexual abuse in the Kimberly Region, Australia. *Indigenous Wellbeing*, *4*(2), 118-136. http://pimatisiwin.com/uploads/386689234.pdf

Randolph, J. (2009). A guide to writing the dissertation literature review. *Practical assessment, research and evaluation*, *14*(13), 13. http://pareonline.net/pdf/v14n13.pdf

Richmond, C. (1996). *Behaviour management skill training handbook*. Queensland Department of Education

Richmond, C. (2002a). Behaviour management: A no-frills approach. *Professional Educator*, *1*(1), 6-7. https://doi.org/10.3316/aeipt.123726

Richmond, C. (2002b). *Searching for balance: A collective case study of ten secondary teachers' behaviour management language* [Doctoral dissertation]. University of New England.

Richmond, C. (2007). *Teach more, manage less: A minimalist approach to behaviour management*. Scholastic.

Richmond, C. (2009). *Lead more, manage less: Five essential behaviour management insights for school leaders*. Scholastic.

Robinson, V. M. J. (1998). Methodology and the research-practice gap. *Educational Researcher*, *27*(1), 17-26. https://doi.org/10.3102/0013189X027001017

Rogers, K. (1994). The Yolngu teacher. *Aboriginal Child at School*, *22*(2), 98-100. https://doi.org/10.1017/S0310582200009445

Rogers, W. A. (1989). *Making a discipline plan*. Nelson.

Rogers, W. A. (1990). *You know the fair rule and much more: Strategies for making the hard job of discipline and behaviour management in school easier*. ACER press.

Rogers, W. A. (1992). *Supporting teachers in the workplace*. Jacaranda.

Rogers, W. A. (1993). *The language of discipline: A practical approach to effective classroom discipline*. Northcoat House.

Rogers, W. A. (1994a). *Behaviour recovery: A whole-school program for mainstream schools*. Australian Council for Educational Research.

Rogers, W. A. (1994b). *Making a discipline plan: Developing classroommanagement skills*. Nelson.

Rogers, W. A. (1994c). *Managing behaviour: A four-part video/ DVD series on managing behaviour in schools.* Quartus Pty. Ltd. http://www.billrogers.com.au/

Rogers, W. A. (1994d). Teaching positive behaviour to 'behaviourally disordered' students in primary schools. *Support for Learning*, *9*(4), 6. https://doi.org/10.1111/j.1467-9604.1994.tb00180.x

Rogers, W. A. (1995). *Behaviour management: A whole school approach*. Scholastic.

Rogers, W. A. (1999). *Towards a model for colleague support: Matching support to needs and contexts* [Doctoral dissertation]. University of Melbourne.

Rogers, W. A. (2001). *Cracking the hard class: Strategies for managing the harder than average class*. Scholastic.

Rogers, W. A. (2002a). *Classroom behaviour: A practical guide to effective teaching, behaviour management and colleague support*. Paul Chapman.

Rogers, W. A. (2002b). Colleague support: Building a supportive ecology in schools. In W. A. Rogers (Ed.), *Teacher leadership and behaviour management* (pp. 141-155). Paul Chapman.

Rogers, W. A. (Ed.). (2002c). *Teacher Leadership and Behaviour Management*. Paul Chapman Publishing.

Rogers, W. A. (2003a). *Behaviour recovery: Practical programs for challenging behaviour* (2nd ed.). Australian Council for Educational Research Press.

Rogers, W. A. (2003b). *Effective supply teaching: Behaviour management, classroom discipline and colleague support*. Paul Chapman.

Rogers, W. A. (2007). *I get by with a little help...colleague support in schools*. Taylor & Francis.

Rogers, W. A. (2008). *Behaviour management with young children: Critical first steps with children 3-7 years*. Sage.

Rogers, W. A. (Ed.). (2010). *How to manage children's challenging behaviour* (2nd ed.). Sage.

Rogers, W. A. (2012). *Managing teacher stress* (3rd ed.). Pearson Education.

Rogers, W. A., & McPherson, E. (2009). *Critical first steps: Behaviour management in the early years*. Curriculum Corporation.

Rose, M. (2012). The 'silent apartheid' as the practitioner's blindspot. In K. Price (Ed.), *Aboriginal and Torres Strait Islander education: An introduction for the teaching profession* (pp. 3-24). Cambridge University Press

Rowe, K. (2003). *The importance of teacher quality as a key determinant of students' experiences and outcomes of schooling [Conference paper]* Improving Learning: ACER Research Conference 2003, Melbourne, Australia. https://research.acer.edu.au/research_conference_2003/1/

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, *15*(1), 85-109. https://doi.org/10.1177/1525822X02239569

Sanford, J. P., & Evertson, C. M. (2006). Classroom mangement in a low SES Junior High: Three case studies. *Journal of Teacher Education*, *32*(1), 34-38. https://doi.org/10.1177/002248718103200108

Sarra, C. (2011a). *Strong and smart-towards a pedagogy for emancipation: Education for first peoples*. Routledge.

Sarra, C. (2011b). Transforming Indigenous education. In N. Purdie, G. Milgate, & H. R. Bell (Eds.), *Two way teaching and learning* (pp. 107-117). ACER Press.

Schlosser, L. K. (1992). Teacher distance and student disengagement: School lives on the margin. *Journal of Teacher Education*, *43*(2), 128-140. https://doi.org/10.1177/0022487192043002006

Schumacher, R. E., & Linacre, J. M. (1996). Factor analysis and Rasch. *Rasch Measurement Transactions*, *9*(4), 470. https://www.rasch.org/rmt/rmt94k.htm

Scott, T. M., & Eber, L. (2003). Functional assessment and wraparound as a systemic school processes: Primary secondary and tertiary systems examples. *Journal of Positive Behavior Interventions*, *5*(3), 12. https://doi.org/10.1177/10983007030050030201

Shaw, P. (2009). *Seven seasons in Aurukun: My unforgettable time at a remote Aboriginal school*. Allen & Unwin.

Sheets, R. H., & Gay, G. (1996). Student perceptions of disciplinary conflict in ethnically diverse classrooms. *National Association of Secondary School Principals Bulletin*, *80*(580), 84-93. https://doi.org/10.1177/019263659608058011

Shipp, C. (2013). Bringing Aboriginal and Torres Strait Islander perspectives into the classroom: Why and how. *Literacy Learning: The Middle Years*, *21*(3), 24-29.

Simmonds, T., & Llewellyn, L. (2017, 15th-16th Oct). *Applying an abbreviated functional behaviour assessment to support behaviour of students in an Indigenous context [Conference paper].* Trauma Aware Schooling Conference, Brisbane.

Simpson, L., & Clancy, S. (2012). Enhancing opportunities for Australian Aboriginal literacy learners in early childhood settings. *Childhood Education*, *81*(6), 327-322. https://doi.org/10.1080/00094056.2005.10521321

Sims, M., O'Connor, M., & Forrest, M. (2003). Aboriginal families and the school system. In Q. Beresford & G. Partington (Eds.), *Reform and resistance in Aboriginal education: The Australian experience* (pp. 1-20). University of Western Australia Press.

Skiba, R., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, *34*(4), 317-342. https://doi.org/10.1023/A:1021320817372

Skiba, R., & Peterson, R. (1999a). The dark side of zero tolerance: Can punishment lead to safe schools? *Phi Delta Kappan*, *80*(5). https://doi.org/10.1002/9781118524275.ejdj0104

Skiba, R., & Peterson, R. (1999b). Zap zero tolerance. *The Education Digest*, *64*(8), 8. https://search.proquest.com/openview/26b852ddcc835bb1801cc63518c5a089/1.pdf?pq-origsite=gscholar&cbl=25066

Skiba, R. J., Horner, R. H., Chung, C.-G., Rausch, M. K., May, S. L., & Tobin, M. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review*, *40*(1), 85-107. https://doi.org/10.1080/02796015.2011.12087730

Smith, L. (2012). *Decolonizing methodologies* (2nd ed.). Zed Books.

Snook, I., O'Neill, J., Clark, J., O'Neill, A.-M., & Openshaw, R. (2009). Invisible learnings?: A commentary on John Hattie's book: Visible Learning: A synthesis of over 800 meta-analyses relating to achievement. *New Zealand Journal of Educational Studies*, *44*(1), 14. https://doi.org/10.3316/informit.467818990993648

Soodak, L. C. (1994). Teachers' thinking about difficult-to-teach students. *Journal of Educational Research*, *88*(1), 44-51. https://doi.org/10.1080/00220671.1994.9944833

Stehbens, C., Anderson, L., & Herbert, J. (1999). *"From little things, big things explode..." [Conference paper]* AARE and NZARE Joint Conference Melbourne, Australia. https://www.aare.edu.au/publications/aare-conference-papers/show/2674/from-little-things-big-things-explode

Stoldosky, S. (1988). *The subject matters: Classroom activity in math and social studies*. University of Chicago Press.

Sugai, G., Simonsen, B., & Horner, R. (2008). Schoolwide positive behavior supports: A continuum of positive behavior supports for all students. *Teaching Exceptional Children*, *40*(6), 5. https://www.proquest.com/openview/8897909afeafb96ee433c71d004ddd13/1?pq-origsite=gscholar&cbl=7737

Sullivan, A. M., Johnson, B., Owens, L., & Conway, R. (2014). Punish them or engage them? Teachers' views of unproductive student behaviours in the classroom. *Australian Journal of Teacher Education*, *39*(6), 15. https://doi.org/10.14221/ajte.2014v39n6.6

Sutton, R., Maudrey-Camino, R., & Knight, C., C. (2009). Teachers' emotional regulation and classroom management. *Theory Into Practice*, *48*(2), 130. https://doi.org/10.1080/00405840902776418

Tannock, A. (2012). Focus on teacher PD pays off at remote school. *Education Views*. http://education.qld.gov.au/projects/educationviews/best-practice/2012/jul/teacher-pd-120712.html

Tatum, B. D. (1994). Teaching white students about racism: The search for white allies and the restoration of hope. *Teachers College Record*, *95*(4), 462-476. https://doi.org/10.1177/016146819409500412

Thomas, D. R. (2006). A general inductive approach for qualitative data analysis. *American Journal of Evaluation*, *27*(2), 237-246. https://doi.org/10.1177/1098214005283748

Thomson, S., & Hillman, K. (2018). *The teaching and learning international survey 2018: Australian report Volume 1: Teachers and school leaders as lifelong learners*. Australian Council for Educational Research

Thwaite, A. (2007). Inclusive and empowering discourse in an early childhood literacy classroom with Indigenous students. *Australian Journal of Indigenous Education*, *36*, 21-27. https://doi.org/10.1017/S1326011100004385

Townsend, B. L. (2000). The disproportionate discipline of African-American learners: Reducing school suspensions and exclusions. *Exceptional Children*, *66*(3), 381-191. https://doi.org/10.1177/001440290006600308

Townsville Catholic Education. (2012). *Strategic Action Plan*.

Trent, S. C., Kea, C. D., & Oh, K. (2008). Preparing pre-service teachers for cultural diversity: How far have we come? *Exceptional Children*, *74*(3), 328-350. https://doi.org/10.1177/001440290807400304

Truscott, D. M., Swars, S., Smith, S., Thornton-Reid, F., Zhao, Y., Dooley, C., Williams, B., Hart, L., & Matthews, M. (2010). A cross-disciplinary examination of the prevalence of mixed methods in educational research: 1995-2005. *International Journal of Social Research Methodology*, *13*(4), 317-328. https://doi.org/10.1080/13645570903097950

Ullicci, K. (2009). "This has to be family": Humanizing classroom mangement in urban schools. *Journal of Classroom Interaction*, *44*(1), 13-28. https://www.jstor.org/stable/23869287?seq=1

van Tartwijk, J. (1993). *Sketches of teacher behavior: The interpersonal meaning of nonverbal teacher behavior in the classroom*. W.C.C.

Weinstein, C. S. (1998). "I want to be nice, but I have to be mean": Exploring prospective teachers' conceptions of caring and order. *Teaching and Teacher Education*, *14*(2), 153-163. http://dx.doi.org/10.1016/S0742-051X(97)00034-6

Weinstein, C. S., Curran, M., & Tomlinson-Clarke, S. (2003). Culturally responsive classroom management: Awareness into action. *Theory Into Practice*, *42*(4). https://doi.org/10.1353/tip.2003.0053

Weinstein, C. S., Tomlinson-Clarke, S., & Curran, M. (2004). Toward a conception of culturally responsive classroom management *Journal of Teacher Education*, *55*(25). https://doi.org/10.1177/0022487103259812

West, L. (1995). Cultural behaviour, conflict and resolution. In S. Harris & M. Malin (Eds.), *Aboriginal kids in urban classrooms* (pp. 7-19). Social Science Press.

Wilson, B. L., & Corbett, H. D. (2007). Students' perspectives on good teaching: Implications for adult reform behavior. In D. Thiessen & A. Cook-Sather (Eds.), *International handbook of student experience in elementary and secondary school* (pp. 283-314). Springer.

Winterton, W. A. (1977). *The effect of extended wait-time on selected verbal response characteristics of some Pueblo Indian children* [Doctoral dissertation]. University of New Mexico.

Wubbels, T., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2006). An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. In C. Evertson, M. & C. S. Weinstein (Eds.), *Handbook of Classroom Management: Research, practice and contemporary issues* (pp. 1161-1191). Lawrence Erlbaum Associates.

Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface* [Doctoral dissertation]. James Cook University.

Yunkaporta, T., & Kirby, M. (2011). Yarning up Indigenous pedagogies: A dialogue about eight Aboriginal ways of learning. In N. Purdie, G. Milgate, & H. R. Bell (Eds.), *Two Way Teaching and Learning* (pp. 205-213). ACER Press.

Yunkaporta, T., & McGinty, S. (2009). Reclaiming Aboriginal knowledge at the cultural interface. *The Australian Educational Researcher*, *36*(2), 55-72. https://doi.org/10.1007/BF03216899

Appendices

Appendix A
Writing a Classroom Behaviour Plan

Linda has provided training to teachers and teacher aides, helping them to write a plan for classroom behaviour. This training recognises that a successful plan includes more than reactive strategies in the classroom. It starts before a lesson and ends afterwards. The elements include:

- being aware of the context
- establishing expectations
- proactive strategies
- reactive strategies
- re-entry strategies
- case Management for individual students
- crisis management

This training is copyrighted.

Theme	Details or Strategies	International	Australian
1. Knowledge of self and other in the socio-historical-political context	Know self and other	Advice Pinto, 2013; Weinstein et al.,2004 Research Bishop et al., 2007 (M); Bondy, 2007 (Q); Milner, 2008 (Q); Milner & Tenore, 2010 (Q); Monroe, 2009 (Q); Schlosser, 1992 (Q); Sheets & Gay, 1996 (Q); Weinstein et al., 2003; Weinstein et al., 2004	Research Malin 1990a (Q)
	Understanding of the social/ political context	Advice Pinto, 2013; Weinstein et al., 2004 Research Bishop et al., 2007 (M); Milner, 2008 (Q); Milner & Tenore, 2010 (Q); Monroe, 2009 (Q); Schlosser, 1992 (Q); Sheets & Gay, 1996 (Q); Weinstein et al., 2003; Weinstein et al., 2004	Advice Christie, 1987b; Linkson, 1999 Research Keddie, 2013 (Q) Simpson & Clancy, 2012 (Q)
2. Knowledge of the students and their cultures without a deficit notion of difference		Research Bishop, et al., 2007 (M); Milner, 2008 (Q); Milner & Tenore, 2010 (Q); Monroe, 2009 (Q); Schlosser, 1992 (Q); Sheets & Gay, 1996 (Q); Weinstein et al., 2003; Weinstein et al., 2004	Advice Christie, 1985; Ngarritjaran-Kessaris, 1995; Bamblett, 1985; Clarke, 2000; Gilbey 1998; Groome, 1995; Harris, 1987b; Harrison, 2008; Hones, 2005; Howard, 1995; Ionn, 1995; Perso, 2012 Research Hughes et al., 2004 (Q); Yunkaporta & McGinty, 2009 (Q)
	Two-way learning		Advice Purdie et al., 2011; Harrison, 2005; Rogers 1994 Research Simpson & Clancy, 2012 (Q)
	Time can be regarded differently		Advice Ngarritjan-Kessaris, 1995; Christie, 1995 Research Hughes et al., 2004 (Q)
	Non-market economy		Research

	Hughes et al., 2004 (Q)
Giving is more important than saving	Research Hughes et al., 2004 (Q)
Children may be shared between homes; kinship is important	Research Hughes et al., 2004 (Q) Malin 1990a (Q)
Spontaneous lifestyle rather than structured	Research Hughes et al., 2004 (Q)
Caution about control of others	Advice Harrison, 2008; Linkson, 1999; Sims et al., 2003
Students nay be shy with people they do not know	Advice Harkins 1990
Parenting style less overt and controlling than Western	Advice Sims et al., 2003 Research Malin, 1990a (Q)
Equal status of children and adults	Research Hudsmith, 1992 (Q) Malin, 1990a (Q)
Aunties and Uncles can discipline children rather than parents	Advice Michie, 2014
Friendly ridicule is used by family but cannot be used by teachers	Advice Bamblett, 1985; Harrison 2008, 2011 Research Malin 1990a (Q)
Shared ownership of property	Advice Bamblett, 1985; Berry & Hudson, 1997 Research Hughes et al., 2004 (Q)

Cooperation is valued more than obedience	Advice Christie 1987a; Bamblett, 1985
Students will be motivated by relationship and community rather than work ethic or authority	Advice Bamblett, 1985; Harrison, 2008, 2011; Bamblett, 1985; Groome, 1995; Harrison, 2008; Howard, 1995; Nichol & Robinson, 2010; Perso, 2012; Berry & Hudson, 1997; Linkson, 1999; Shaw, 2009.
Students do not use please and thankyou and are used to expressing their needs directly	Advice Berry & Hudson, 1997; Harrison, 2011; Ionn, 1995; Howard, 1995
Students may avoid eye contact	Advice Bamblett, 1985; West, 1995 Research Hughes et al., 2004 (Q); Malin, 1990a (Q)
Students are emotionally and physically resilient	Research Malin, 1990a (Q); Malin, 1990b (Q)
Students do not need eye contact to listen	Advice Bamblett, 1985; Harrison, 2008 Research Thwaite, 2007 (Q)
Many people may talk at once	Research Hudsmith, 1992 (Q); Thwaite, 2007 (Q).
Students have good observation skills	Advice Bamblett, 1985; Harrison, 2008 Research Malin, 1990b (Q)
Indigenous students are used to more autonomy-	Advice

Respect students' autonomy	Howard, 1995; Bamblett, 1985; Berry & Hudson, 1997; Guider, 1991; Harris, 1987b; Harrison, 2008, 2011; Howard, 1995; Ionn, 1995; Ngarritjan-Kessaris, 1995; Christie 1987a Research Malin 1990a (Q); Malin, 1990b (Q); Hudsmith, 1992 (Q); Partington et al., 2001 (Q)
Students have self-reliance and self-regulation	Research Malin, 1990b (Q)
Students may not comply immediately	Advice Bamblett, 1985; Harrison, 2008; Howard, 1995; Ngarritjan-Kessaris, 1995; Christie 1987a Research Malin 1990a (Q); Malin 1990b (Q)
Students may not expect to initiate conversation with adults	Advice Bamblett, 1985
Students may communicate with touch as much as words	Advice Bamblett, 1985
Students may use gratuitous concurrence	Advice Harrison, 2008
In a conversation students may focus more on who and how than the content	Advice Harrison, 2008
Students may resolve their own disputes	Advice Gollan & Malin 2012
Students do not have to be still or attentive to be listening	Advice Harris, 1987b; Harrison 2008 Research

			Thwaite, 2007 (Q); Hudsmith, 1992 (Q)
	Students may use silence and only speak when it is important.		Advice Bamblett, 1985; Ionn, 1995; West, 1995 Research Hughes et al., 2004 (Q)
	'Being' is more important than 'doing'. 'Meaningful vs. productive'.		Advice Christie, 1985 Research Hughes et al., 2004 (Q)
	Immediate gratification rather than deferred gratification		Research Hughes et al., 2004 (Q)
	Holistic thinking rather than empirical thinking		Research Hughes et al., 2004 (Q)
	Indirect rather than direct questioning		Research Hudsmith, 1992 (Q); Hughes et al., 2004 (Q); Simpson & Clancy, 2012 (Q)
	Students may engage in schooling in indirect pathways		Research Nelson & Hay, 2010 (Q)
3. Qualities of the teacher Effective teachers:	Have control of own behaviour and emotions or internal locus of control	Advice Pinto, 2013 Research Kennedy, 2011 (Q); Bishop et al., 2007 (M); Sutton et al., 2009 (Q)	
	Use reflective practice	Advice Pinto, 2013 Research Lewthwaite & McMillan, 2010 (Q)	Advice Guider, 1991 Perso, 2012
	Are agentic	Research	

	Bishop et al., 2007 (M)	
Do not take behaviour personally	Research Bishop et al., 2007 (M)	Advice Berry & Hudson, 1997
Treat each child as individual, cultures differ within and across cultures.	Advice Michie, 2014; Morgan, 2010; Pinto, 2013	Advice Bissett, 2012 Research Keddie, 2013 (Q); Hughes et al. 2004 (Q)
Understand that behaviour is specific to context	Advice Pinto, 2013 Research Glynn & Berryman, 2005 (Q)	
Understand that appropriate behaviour is culturally defined	Research Monroe & Obidah, 2004 (Q)	
Listen in a culturally appropriate way	Advice Michie, 2014	
Teach about race, culture and power and school culture.	Advice Brantlinger & Danforth, 2006 Research Bliss, 2006 (Q); Milner, 2011 (Q); Ullicci, 2009 (Q); Weinstein et al., 2003	Advice Appo, 1994; Christie, 1987a; Groome, 1995; Harris, 1987b; Osborne, 1996; Sarra, 2011b Harrison 2005; Linkson, 1999 Research Hudsmith, 1992 (Q); Simpson & Clancy, 2012 (Q)
Understand that students are learning behaviour in a new context	Research Monroe, 2009 (Q); Glynn & Berryman, 2005 (Q)	
Is a warm demander	Research Bondy & Ross, 2008; Bondy, et al., 2007 (Q); Monroe and Obidah, 2004 (Q); Ullicci, 2009 (Q); Lewthwaite & McMillan, 2010 (Q); Brown, 2003 (Q)	Advice Fanshawe, 1976, 1999; Guider, 1991; Osborne, 1996

	Demonstrate caring in little ways (body language and verbal expression.)		<u>Research</u> Hughes et al., 2004 (Q)
	Have an expectation of success		<u>Advice</u> Griffiths, 2011; Hones, 2005; Sarra, 2011b <u>Research</u> Hudsmith, 1992 (Q)
	Have a sense of humour	<u>Advice</u> Morgan, 2010; <u>Research</u> Ullicci, 2009 (Q); Milner, 2008 (Q)	<u>Advice</u> Harrison, 2011; Gollan & Malin, 2012; Ngarritjan-Kessaris, 1995 <u>Research</u> Hudspith, 1995 (Q)
	Avoid bossing, sarcasm		<u>Advice</u> Harrison 2008; Howard 1995 <u>Research</u> Hudspith, 1995 (Q)
	Direct humour to the group rather than individuals		<u>Advice</u> Harrison, 2011; Ngarritjan-Kessaris, 1995 <u>Research</u> Hudspith, 1995 (Q)
	Direct humour towards self		<u>Research</u> Hudspith, 1995 (Q)
4. Positive relationships Effective teachers:	Understand the importance of relationships		<u>Advice</u> Christie, 1987a; Harrison, 2008; Howard, 1995 Linkson, 1999 <u>Research</u> Hudsmith, 1992 (Q); Partington et al. 2001 (Q); Rahman, 2010 (Q)

Understand relationship comes before expecting work		Advice Christie, 1987a; Howard, 1995; Linkson, 1999
Understand respect is earned not based on authority		Advice Bamblett, 1985; Christie, 1987a
Tell students a little about themselves	Research Kennedy, 2011 (Q); Milner, 2008 (Q), 2011 (Q), Schlosser, 1992 (Q); Sheets & Gay, 1996 (Q)	Advice Berry & Hudson, 1997; Byrne & Munns, 2012 Research Hudspith, 1995 (Q); Hudsmith, 1992 (Q)
Allow close relationships with students- less professional distance		Advice Michie, 2014 (Q) Research Hudsmith, 1992 (Q); Fanshawe, 1989 (Q)
See class as family and therefore must respect each other	Research Bondy et al., 2007 (Q); Brown, 2003 (Q); Milner, 2011 (Q); Ullicci, 2009 (Q); Weinstein et al., 2003	
Explicitly teach and insist on respectful behaviour in culturally appropriate ways/ social instruction	Advice Bazron et al., 2005 Research Bondy et al., 2007 (Q); Baydala et al., 2009 (qP)	Research Yunkaporta & McGinty, 2009 (Q)
Communicate belief in students	Research Bishop et al., 2007 (M); Bondy et al., 2007 (Q); Lewthwaite & McMillan, 2010 (Q)	
Treat students with respect, communicate in culturally appropriate ways	Research Ullicci, 2009 (Q); Bondy et al., 2007 (Q); Brown, 2003 (Q)	Advice Perso, 2012 Research Hudsmith, 1992 (Q)

Pay attention to good behaviour		Advice Harrison, 2008
Give trust and responsibility		Advice Harrison, 2008
Avoid 'shaming' or 'spotlighting' students, allow them to 'save face'		Advice Osborne, 1996; Bissett, 2012; Osborne, 1996; West, 1995 Research Malin, 1990b (Q); Thwaite, 2007 (Q)
Are cool and calm		Advice Harrison, 2008
Are fair	Research Milner 2008 (Q)	Advice Harrison, 2008; Nichol & Robinson, 2008
Give students a sense of control	Research Castagno & Brayboy, 2008; Milner, 2008 (Q)	Advice West, 1995
Speak slowly and quietly		Advice Harrison, 2008, 2011
Do not shout, demean or threaten	Research Ullicci, 2009 (Q)	Advice Harrison, 2008
Avoid confrontation with students		Advice Harrison, 2008; Osborne, 1996
Do not punish	Research Noguera, 2003 (Q)	
Recognise strengths and real-life skills		Advice Clarke & Dunlap, 2008 Dockett, Mason, & Perry, 2006; Howard, 1995; Perso, 2012; Sarra, 2011b Research Hudsmith, 1992 (Q); Hughes et al., 2004 (Q)

	Listen in a culturally appropriate way		Advice Michie, 2014
	Have interest in the lives of the children		Research Bond, 2010 (Q)
5. Culturally responsive pedagogy Effective teachers:	Relate tasks to real-life (contextualised)		Advice Harris 1987a Research Hughes et al., 2004 (Q)
	Use concrete learning rather than abstract		Research Hughes et al., 2004 (Q).
	Understand students may not want to do something new till they are confident		Advice Harrison, 2008, 2011; West, 1995; Berry & Hudson, 1997 Research Malin, 1990b (Q); Hughes et al., 2004 (Q)
	Understand students learn by storytelling, observation, imitation rather than verbal instruction		Advice Harrison 2008; Harris 1987a; West 1995; Garvis 2006; Sarra 2011a
	Understand students need big picture context		Advice Garvis, 2006; Harrison, 2008; Sarra, 2011a Research Malin, 1990b (Q); Hughes et al., 2004 (Q)
	Use group work	Advice Bazron et al., 2005; Morgan, 2010 Research Hammond et al., 2004 (Q); McCarthy & Benally, 2003 (Q)	Advice Garvis, 2006; Harris, 1987a
	Use persistence, repetition, rote, memory		Advice Garvis, 2006; Harris, 1987a

Are gentle when trying to speed things up		<u>Advice</u> Berry & Hudson, 1997; Christie, 1987a; Osborne, 1996
Do not talk, do. ‘White’ people talk too much;		<u>Advice</u> Berry & Hudson, 1997; Harris, 1987a; Christie, 1980 <u>Research</u> Hughes et al., 2004 (Q)
Avoid too many direct questions; particularly ‘why’ and ‘how’ questions.		<u>Advice</u> Berry & Hudson, 1997; Christie, 1980; Harris, 1987a, 1987b; Harrison, 2008; Ionn, 1995; Linkson, 1999; Berry & Hudson, 1997; Harrison, 2008; West, 1995. <u>Research</u> Hudsmith, 1992 (Q)
Use narration more than argument and exposition		<u>Advice</u> Harrison, 2008.
Include of some home language		<u>Advice</u> Berry and Hudson 1997; Osborne, 1996.
Use learning support and scaffolding	<u>Research</u> Bondy & Ross, 2008	<u>Advice</u> West, 1995 <u>Research</u> Thwaite, 2007 (Q)
Use storytelling	<u>Research</u> Milner, 2008 (Q)	<u>Research</u> Yunkaporta & McGinty, 2009 (Q)
Use activity-based learning	<u>Research</u> McCarthy & Benally, 2003 (Q)	<u>Research</u> Hughes, 2004 (Q)
Increase wait time	<u>Advice</u> Bazron et al., 2005; Morgan, 2010 <u>Research</u>	

		Lewthwaite & McMillan, 2010 (Q); Winterton, 1977 (Q)	
	Use explicit teaching		Research Lewthwaite et al., 2006 (Q); Rahman 2010 (Q)
	Use Indigenous learning styles, locations and content.		Research Hudsmith, 1992 (Q); Yunkaporta & McGinty 2009 (Q)
	Use fewer worksheets		Research Partington et al. 2001 (Q)
6. Proactive behaviour support strategies Effective teachers:	Create caring classrooms	Advice Weinstein et al., 2004	
	Create physical settings that value cultures	Research Brown, 2003 (Q); Ullicci, 2009 (Q); Weinstein et al., 2003	
	Give clear expectations and teaching them	Advice Weinstein et al., 2004 Research Bondy et al., 2007 (Q); Bondy & Ross, 2008; Kennedy, 2011 (Q); Lewthwaite & McMillan, 2010 (Q); McCarthy & Benally, 2003 (Q); Weinstein et al., 2003	Advice Harrison, 2011; Sarra, 2011b
	Encourage a strong sense of self		Advice Appo,1994; Garvis, 2006; Groome, 1995; Hones, 2005; Milgate & Giles-Brown, 2013; Sarra, 2011b; West, 1995 Research Hudsmith, 1992 (Q)
	Meet health needs		Advice Dockett et al., 2006;

	Meet needs for belonging and attention		Advice Harrison, 2011
	Give opportunities for movement	Advice Monroe 2006 Research Boykin, 2001 (qP)	Advice Nichol & Robinson, 2010
	Give flexibility	Advice Monroe 2006	Advice Nichol & Robinson, 2010
	Tolerate noise		Advice Nichol & Robinson, 2010
	Include Indigenous role models		Advice Dockett et al., 2006; Hones, 2005 Research Hudsmith, 1992 (Q)
	Value cultures in the class or school to raise pride		Research Hudsmith, 1992 (Q); Keddie et al., 2013 (Q)
	Avoid topics that create disharmony		Research Harrison, 2008
7. Culturally responsive reactive strategies. Effective teachers:		Advice Weinstein et al., 2004; Monroe, 2006 Research Baydala et al., 2009 (qP); Hammond, Dupoux, & Ingalls, 2004; Sheets & Gay, 1996 (Q); Weinstein et al.,2003; Weinstein et al., 2004	Advice Christie, 1987a; Guider, 1991; Christie, 1987a; Harrison, 2008
	Be willing to negotiate		Research Partington et al. 2001 (Q)
	Not take behaviour personally	Research Kennedy 2011 (Q)	
	Not make every infraction a serious offence	Research Ullicci 2009 (Q)	

Calmly deliver consequences	<u>Research</u> Bondy et al., 2007 (Q)	
Be consistent	<u>Research</u> Milner 2008 (Q).	
Not hold grudges	<u>Research</u> Milner 2008 (Q).	
Quickly and calmly defuse situations		<u>Advice</u> Christie, 1987a
Give rewards for appropriate behaviour rather than punishing hard		<u>Advice</u> Christie, 1987a; Harrison 2011
Give rewards that are consistent and short-lived		<u>Advice</u> Christie, 1987a
Use group rewards	<u>Research</u> Hammond, Dupoux & Ingalls, 2004 (Q)	<u>Advice</u> Harrison 2008, 2011
Step back, take three deep breaths, change the subject, make a joke, redirect the child back to their work, or walk away		<u>Advice</u> Harrison, 2008
Avoid escalating the conflict		<u>Advice</u> Christie, 1987a; Groome, 1995; Nichol & Robinson, 2010
Use restrained power, not 'I'm boss'		<u>Advice</u> Groome, 1995; Harrison, 2008; Christie 1987a <u>Research</u> Partington et al. 2001 (Q)
Defuse quickly, when calm, talk about responsibility to the group		<u>Advice</u> Christie 1987a <u>Research</u> Partington et al. 2001 (Q)

	Avoid the Western way of gaining justice and punish to vindicate the wronged. Punishments may not work		Advice Christie 1987a; Groome, 1995; Harrison, 2008
	Sort out as much as you can in the classroom		Advice Christie, 1987a
	Avoid suspension as students may want that		Advice Harrison, 2008
	Examine motivations, contexts and interactions		Research Partington et al. 2001 (Q)
	Understand that behaviour may be expressing a need so look behind the behaviour	Advice Miranda & Eschenbrenner, 2013. Research Milner, 2011 (Q); Kennedy, 2011 (Q)	Research Partington et al. 2001 (Q)
	Deal with an incident in isolation from previous ones		Research Partington et al. 2001 (Q)
8. Connections with families and community. Effective teachers:	Make connections with families and communities	Advice Michie, 2014; Pinto, 2013; Weinstein et al., 2004 Research Weinstein et al., 2003; Monroe 2009 (Q); Hammond, Depoux, Ingalls, 2004 (Q); Glynn & Berryman, 2005 (Q)	Advice Rogers, 1994; Shaw, 2009; Rogers, 1994 Research Keddie et al., 2013 (Q); Munns et al., 2013 (Q); Bond, 2004 (Q)
	Give community a voice in school decisions.		Research Bond, 2004 (Q)
	Understand that cultures differ in their amount of parent involvement with schools		

Appendix B Detailed

Involve community members and make friendships with families	Advice Bamblett, 1985; Budby, 1994; Clarke, 2000; Dockett et al., 2006; Guider, 1991; Milgate & Giles-Brown, 2013; Osborne, 1996; Perso, 2012 Sims et al., 2003 Research Lester, 2016 (Q)
Take the long way around when talking with parents, make connection first	Advice Harrison, 2008
Make an environment where parents feel comfortable or meet away from school	Advice Sims et al., 2003
Learn culturally appropriate communication and some language features	Advice Sims et al., 2003 Research Hudsmith, 1992 (Q); Partington et al. 2001 (Q)

Literature Review Summary Table

Table B 1

Summary Table of Themes in the Literature Review

Note. Q= qualitative research, q= quantitative research, M= mixed methods research, qP= quantitative psychological research

Appendix C

Introductory Pages to TASSAIS Survey

Introduction and Consent

This research is taking place as a partnership between James Cook University, The Diocese of [redacted] and [redacted]. We are looking at behaviour support practices that teachers use in their classes with Aboriginal and Torres- Strait Islander students. It is not used to measure teachers' performance or to compare schools. The questionnaire contains 78 items and will take approximately 20 minutes to complete.
Please respond to all of the questions by applying them to the Indigenous students in your classes.

Your responses will be confidential; we do not collect any identifying information such as your name, email address or IP address.

Your participation is voluntary. If you decide to participate in this research survey, you may withdraw at any time.

The answers will be used for research purposes only. We thank you in advance for your time and cooperation.

If you have any questions about the study, please contact – Linda Llewellyn or Brian Lewthwaite

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If you have any concerns regarding the ethical conduct of the study, please contact:
Human Ethics, Research Office
James Cook University, Townsville, Qld, 4811
Phone: (07) 4781 5011 (ethics@jcu.edu.au). This research has been reviewed according to James Cook University procedures for research involving human subjects.

By clicking on NEXT you are implying consent to participate

Survey Instructions

Part A. Actions

The statements in this questionnaire deal with the behaviour management actions or strategies of teachers that might be used in the classroom. Answer the questions based upon what degree you believe these actions or behaviours are used in your classroom. There are five answers for each strategy ranging from almost never to almost always. Please be honest and accurate in your answer. Again, it is not a test or an evaluation tool.

Almost never < 20% of the time

Once in a while 20-39% of the time

Sometimes 40-59% of the time

Frequently 60-79% of the time

Almost always ≥ 80% of the time

1. I make allowances for students having a different understanding from my own about time (more fluid and less determined by a clock)

○ Almost never

○ Once in a while

○ Sometimes

○ Frequently

○ Almost always

2. I explicitly teach my Indigenous students behaviours I would like them to use at school

○ Almost never

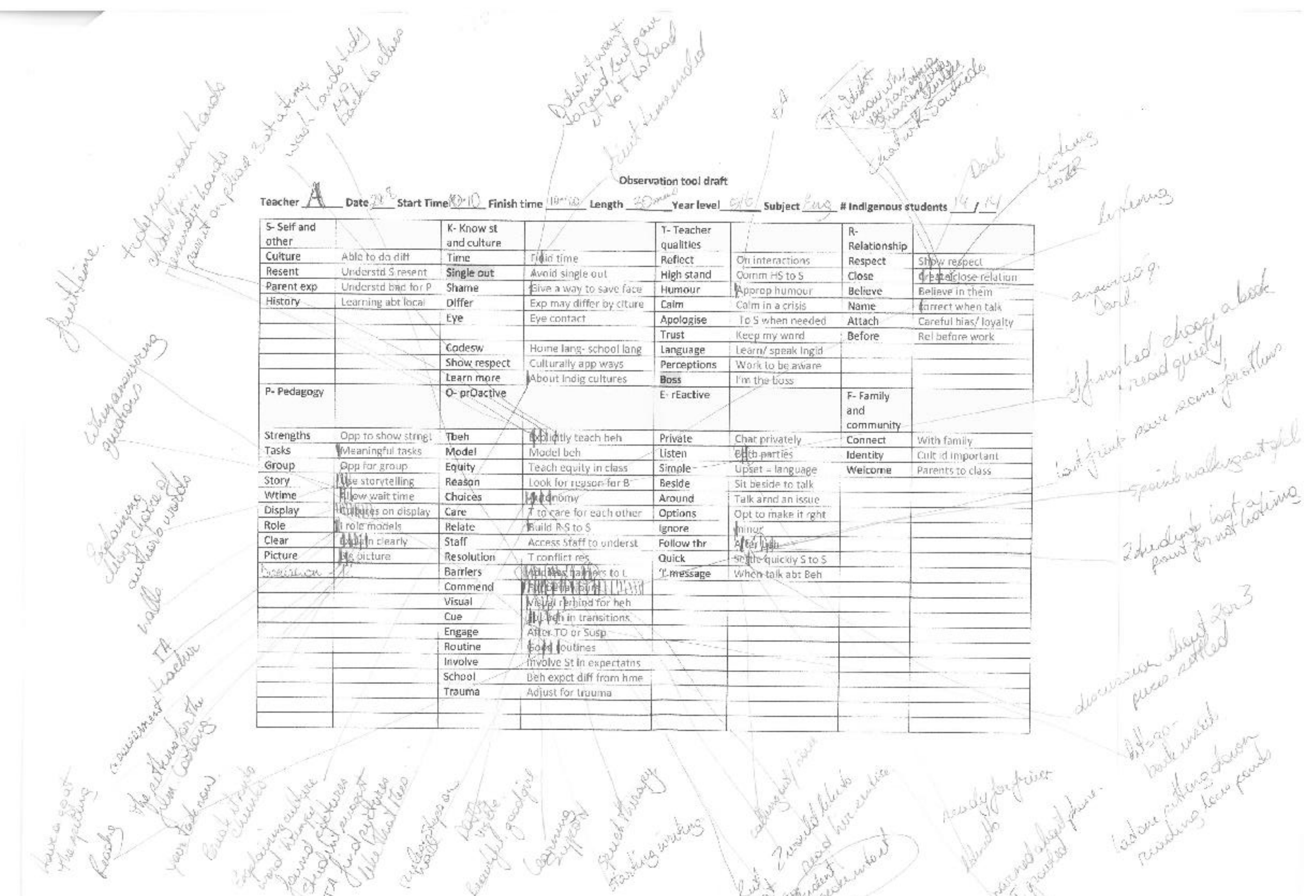
○ Once in a while

○ Sometimes

○ Frequently

○ Almost always

Appendix D
Sample Teacher Observations



Observation tool draft

Teacher A Date 28/8 Start Time 10.10 Finish time 10.40 Length 30 mins Year level 5/6 Subject Eng # Indigenous students 14 / 14

S- Self and other		K- Know st and culture		T- Teacher qualities		R- Relationship	
Culture	Able to do diff	Time	Fluid time	Reflect	On interactions	Respect	Show respect
Resent	Understd S resent	Single out	Avoid single out	High stand	Comm HS to S	Close	Create close relation
Parent exp	Understd bad for P	Shame	Give a way to save face	Humour	Approp humour	Believe	Believe in them
History	Learning abt local	Differ	Exp may differ by clture	Calm	Calm in a crisis	Name	Correct when talk
		Eye	Eye contact	Apologise	To S when needed	Attach	Careful bias/ loyalty
				Trust	Keep my word	Before	Rel before work
		Codesw	Home lang- school lang	Language	Learn/ speak Ingid		
		Show respect	Culturally app ways	Perceptions	Work to be aware		
		Learn more	About Indig cultures	Boss	I'm the boss		
P- Pedagogy		O- prOactive		E- rEactive		F- Family and community	
Strengths	Opp to show strngt	Tbeh	Explicitly teach beh	Private	Chat privately	Connect	With family
Tasks	Meaningful tasks	Model	Model beh	Listen	Both parties	Identity	Cult id important
Group	Opp for group	Equity	Teach equity in class	Simple	Upset = language	Welcome	Parents to class
Story	Use storytelling	Reason	Look for reason for B	Beside	Sit beside to talk		
Wtime	Allow wait time	Choices	Autonomy	Around	Talk arnd an issue		
Display	Cultures on display	Care	T to care for each other	Options	Opt to make it rght		
Role	I role models	Relate	Build R-S to S	Ignore	minor		
Clear	Explain clearly	Staff	Access Staff to underst	Follow thr	After [illegible]		
Picture	Big picture	Resolution	T conflict res	Quick	Settle quickly S to S		
[illegible]		Barriers	Address barriers to L	'I'-message	When talk abt Beh		
		Commend	[illegible]				
		Visual	Visual rehind for beh				
		Cue	[illegible] beh in transitions				
		Engage	After TO or Susp				
		Routine	Good routines				
		Involve	Involve St in expectatns				
		School	Beh expct diff from hme				
		Trauma	Adjust for trauma				

Appendix E

Sample Student Observations

20 second coded observations of student

Student V Class 4/5 Teacher D Date 12-10 Time 12:55
Lesson 4 Environment classroom Art Observer LL

Time	Code	Details	Time	Code	Details	Time	Code	
00:00	1 T	transition in	08:00	25 T	waiting	16:00	49 T	drawing
00:20	2 T	writing name on paper for the box	08:20	26 T	waiting	16:20	50 OP	disturbed by peer (I)
00:40	3 T	waiting	08:40	27 T	(T) giving out materials (+)	16:40	51 T	(T) engaged with group (+)
01:00	4 T	waiting	09:00	28 T	waiting	17:00	52 T	(T) " (+)
01:20	5 T	waiting	09:20	29 OP	(I) engaged with peer	17:20	53 TP	drawing – laughing with peer
01:40	6 T	changing seat	09:40	30 T	waiting	17:40	54 T	drawing
02:00	7 T	listening	10:00	31 T	getting gear	18:00	55 OP	chatting (I)
02:20	8 T	moved seat while teacher talking	10:20	32 T	"	18:20	56 TP	drawing – laughing
02:40	9 T	teaching – minimal att	10:40	33 T	"	18:40	57 T	
03:00	10 T	listening	11:00	34 T	waiting + getting gear	19:00	58 TP	(T) with peer (+)
03:20	11 T	"	11:20	35 T	painting	19:20	59 OP	laughing – chatting (I)
03:40	12 T	"	11:40	36 T	"	19:40	60 T	drawing
04:00	13 T	"	12:00	37 T	"	20:00	61	
04:20	14 T	"	12:20	38 T	"	20:20	62	
04:40	15 T	"	12:40	39 T	"	20:40	63	
05:00	16 T	"	13:00	40 T	"	21:00	64	
05:20	17 T	"	13:20	41 T	returning pencil	21:20	65	
05:40	18 T	"	13:40	42 T	painting	21:40	66	
06:00	19 T	"	14:00	43 T	"	22:00	67	
00:20	20 T	moved when asked	14:20	44 T	"	22:20	68	
00:40	21 OP	playing game with hands	14:40	45 TP	Talking + painting	22:40	69	
07:00	22 T	listening	15:00	46 T	painting	23:00	72	
07:20	23 T	"	15:20	47 T	"	23:20	71	
07:40	24 [illegible]	[illegible] not watching (I)	15:40	48 OP	laughing with peer (I)	23:40	72	

The group had been talking, girl joined their group. Talking about where she would sit

20 second coded observations of student

Student Q Class 5/6 Teacher C Date 9-11 Time 1-10 start
Lesson 4 Dig tech Environment Wb Computer room Observer U

Time	Code	Details	Time	Code	Details	Time	Code	
00:00	1 T	(T) (+) help	08:00	25 T	"	16:00	49 T	(TA) (+) "
00:20	2 T	(T) (+) "	08:20	26 T	"	16:20	50 TP	watching peer (TA) (+)
00:40	3 T	(T) (+)	08:40	27 T	"	16:40	51 TP	helping peer (TA) (+)
01:00	4 T	(T) (+)	09:00	28 T	"	17:00	52 T	(TA) (+) helping
01:20	5 OP	playing with chair (I)	09:20	29 TP	" + with peer	17:20	53 TP	(TA) (+) + help peer
01:40	6 T	moved to T (T) (+)	09:40	30 T	"	17:40	54 T	(TA) (+) help
02:00	7 O	wandering (I)	10:00	31 T	ask TA for help	18:00	55 T	(TA) (+) "
02:20	8 O	" (I)	10:20	32 T	Engaged	18:20	56 T	(TA) (+)
02:40	9 O	" (I)	10:40	33 T	"	18:40	57 T	(TA) (+)
03:00	10 O	" (I)	11:00	34 T	"	19:00	58 T	(TA) (+)
03:20	11 TP	at computer (T) (+) help	11:20	35 T	Engaged	19:20	59 T	(TA) (+)
03:40	12 —	signing in	11:40	36 O	gave up - (I)	19:40	60 T	Engaged with program
04:00	13 T	"	12:00	37 T	(TA) (+) help	20:00	61	
04:20	14 T	engaged	12:20	38 T	(TA) (+) "	20:20	62	
04:40	15 T	"	12:40	39 T	(TA) (+) "	20.40	63	
05:00	16 T	"	13:00	40 T	(TA) (+) "	21:00	64	
05:20	17 T	"	13:20	41 T	(TA) (+) "	21:20	65	
05:40	18 TP	talking + working	13:40	42 T	(TA) (+) "	21:40	66	
06:00	19 T	Engaged	14:00	43 T	(TA) (+) "	22:00	67	
00:20	20 T	"	14:20	44 T	(TA) (+) "	22:20	68	
00:40	21 T	"	14:40	45 T	(TA) (+) "	22:40	69	
07:00	22 T	"	15:00	46 T	(TA) (+) "	23:00	72	
07:20	23 T	"	15:20	47 T	(TA) (+) "	23:20	71	
07:40	24 T	"	15.40	48 T	(TA) (+) "	23:40	72	

Appendix F

Table of Items, Themes and Codes

Table F 1

Table of Themes and Codes

Theme #	Item #	Theme Coded	Code for Each Item	Item ID	Full Question
2	1	K	K1	Time	I make allowances for students having a different understanding from my own about time (more fluid and less determined by a clock)
6	2	O	O2	Tbeh	I explicitly teach my Indigenous students behaviours I would like them to use at school
6	3	O	O3	Model	I model for my students the behaviours I would like to see in my classroom
3	4	T	T4	Reflec	I reflect on my interactions with Indigenous students
3	5	T	T5	Stand	I verbally communicate high standards for my Indigenous students
6	6	O	O6	Equity	I teach my students about the importance of our classroom operating on the principles of equitable conduct
6	7	O	O7	Reason	I try to look for the reason for inappropriate behaviour
4	8	R	R8	Respec	I understand that I must show respect to students in order to be able to expect respect from them
2	9	K	K9	Single	I avoid singling out my students publicly for positive and negative reasons
7	10	E	E10	Privat	If I need to speak to a student about behaviour, I take him/her away from other students so that the talk is private
4	11	R	R11	Close	I act in a way that creates close relationships with Indigenous students
6	12	O	O12	Choice	I offer students choices, so they have some autonomy in the classroom
5	13	P	P13	Strengt	I provide opportunities for students to demonstrate their strengths
4	14	R	R14	Believ	I let students know through verbal and non-verbal cues that I believe in them
6	15	O	O15	Care	I teach students to respect and care for each other
3	16	T	T16	Sarcasm	I avoid sarcasm with my students
5	17	P	P17	Tasks	I use meaningful learning tasks for my students
5	18	P	P18	Target	I do not target individual students with repeated questions
5	19	P	P19	Groups	I provide students with opportunities for group work
5	20	P	P20	Story	I use storytelling in the classroom

5	21	P	P21	Wtime	I allow students wait time if needed when I ask them a question
5	22	P	P22	Display	My classroom displays evidence of the cultures represented by the community
5	23	P	P23	Role	I include Indigenous role models in my teaching
3	24	T	T24	Boss	I do not use an 'I'm the boss' approach
6	25	O	O25	Relate	I structure activities for students to build relationships with each other
3	26	T	T26	Calm	I react calmly in a crisis
7	27	E	E27	Listen	I listen to both parties after an incident
7	28	E	E28	Simple	When a student is upset, I use simple language when talking to him/ her
3	29	T	T29	Apolog	I apologise to students when needed
7	30	E	E30	Beside	I sit beside students to talk to them after an incident
6	31	O	O31	Staff	I use Liaison staff/ Nurse/ Guidance Counsellor to help me understand what is happening in regard to student behaviour
3	32	T	T32	Help	If my emotions are escalated, I ask for help
7	33	E	E33	Around	After an incident I do not talk directly to what happened but talk around it e.g.: sometimes these things happen and what needs to happen is this
7	34	E	E34	Option	After an event I offer the student options for help to set things right again rather than punish him/ her
6	35	O	O35	Resoln	I access school programs that teach conflict resolution skills to students
2	36	K	K36	Shame	I give students a way to 'save face' to avoid 'shame' in awkward situations
6	37	O	O37	Seatng	I use a seating plan if needed so that student combinations complement each other
7	38	E	E38	Low	I use low level behaviour management strategies like physical proximity to address inappropriate behaviour
7	39	E	E39	Ignore	I selectively ignore some minor inappropriate behaviours
6	40	O	O40	Barr	I seek to address barriers to learning arising from sensory needs, disability, tiredness, hearing and hunger
6	41	O	O41	Commen	I commend students in an appropriate way for showing behaviours that are suitable for school
6	42	O	O42	Visual	I use visual reminders in the classroom to support student behaviour
6	43	O	O43	Cue	I cue students to the behaviours required for transitions from one activity to the next
6	44	O	O44	Engage	I engage with a student after he/ she has returned from time out or suspension
4	45	R	R45	Name	I use my students' preferred names correctly when I address them
6	46	O	O46	Imessa	I use 'I' messages in conversations with students about behaviour
3	47	T	T47	Trust	I keep my word so students can learn to trust me

7	48	E	E48	Follow	I follow through with consequences after an incident
6	49	O	O49	Routin	I have well established routines
6	50	O	O50	Involv	I involve students in deciding classroom behaviour expectations
6	51	O	O51	School	I explain to students that behaviours encouraged at school might be different from their home culture
8	52	F	F52	Connect	I create connections with families and carers
6	53	O	O53	Trauma	When I suspect or know that students have experienced trauma, I adjust my behaviour strategies
4	54	R	R54	Attach	I am careful about creating attachments to one family or group of students because others may feel excluded
5	55	P	P55	Clear	I explain things clearly and in different ways so students will avoid any frustration of misunderstanding concepts
6	56	O	O56	Quick	I respond to problems between students quickly, so the problems do not become bigger
1	57	S	S57	Cultur	I am able to support the behaviour of students who have a different cultural background from myself
1	58	S	S58	Resent	I understand that students may resent being told what to do by a teacher from the mainstream culture due to their history of colonisation
1	59	S	S59	Parent	I understand that parents of my students may have bad experiences of school
2	60	K	K60	Differ	I understand that some behaviours I see from my students may be due to cultural differences rather than deliberate misbehaviour
2	61	K	K61	Eye	My students may not need eye contact when listening to someone
2	62	K	K62	Large	I understand that students may need to see the larger context before attempting a specific task
2	63	K	K63	Codesw	I understand that the communication patterns in my classroom might require my students to code-switch from home language
3	64	T	T64	Lang	I make an effort to learn some Indigenous language/s
8	65	F	F65	Ident	I understand that while most parents value education, they may reject school if it negatively impacts their child's cultural identity
4	66	R	R66	Before	I understand that students may need to make a relationship with me before they will want to work for me
8	67	F	F67	Welcom	I welcome parents into my classroom
1	68	S	S68	Histry	I commit myself to learning about the history of colonisation in my local area
2	69	K	K69	Show	I know culturally appropriate ways of showing respect
3	70	T	T70	Percep	I work to have objective perceptions about Indigenous students and families
2	71	K	K71	More	I need to learn more about Australian Indigenous cultures

Appendix G
Rasch Predictions

Figure G.1

How Teachers Generally Use the Items (Attitudes and Strategies)

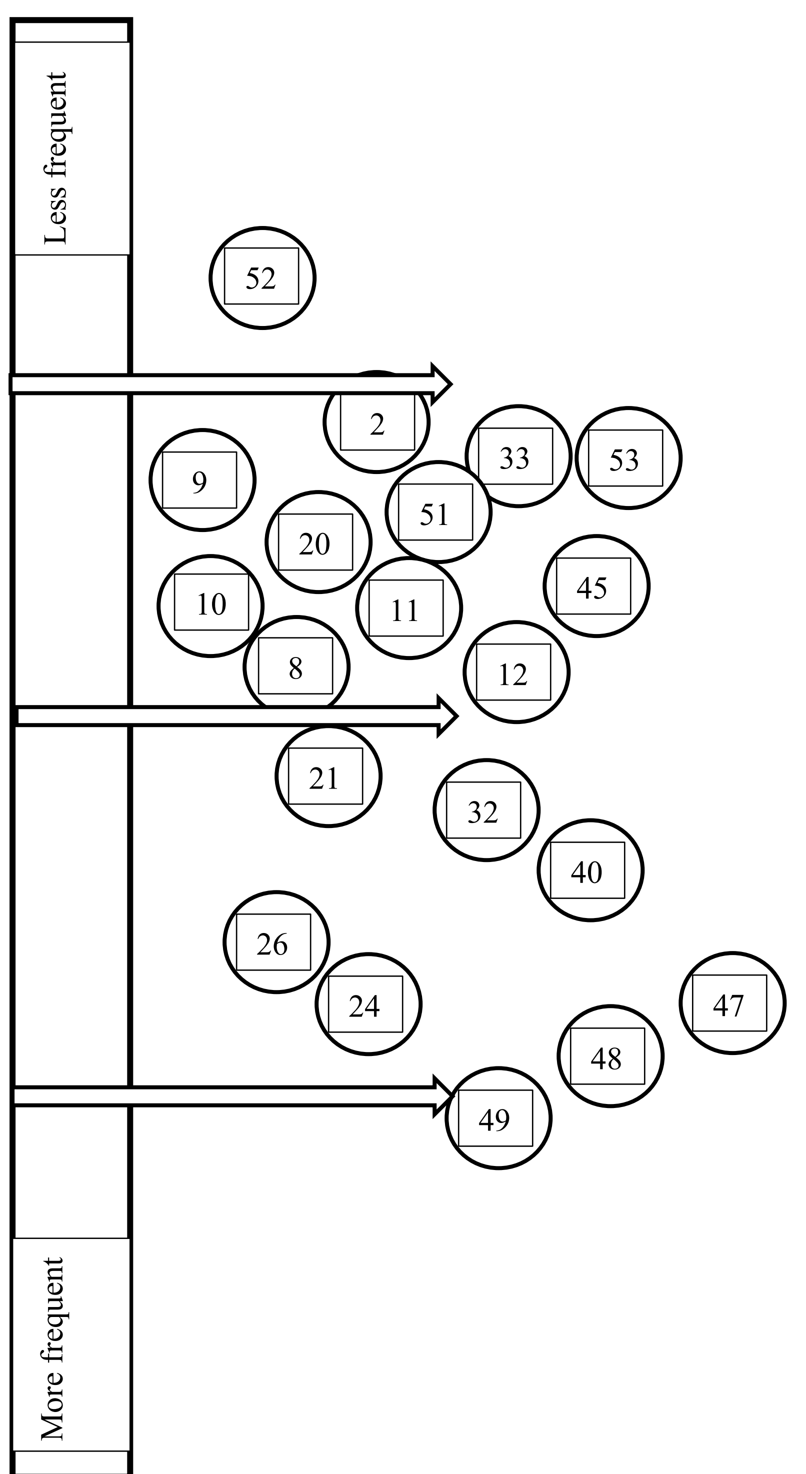


Figure G.2

How Effective Teachers Would Rate the Items (Attitudes and Strategies)

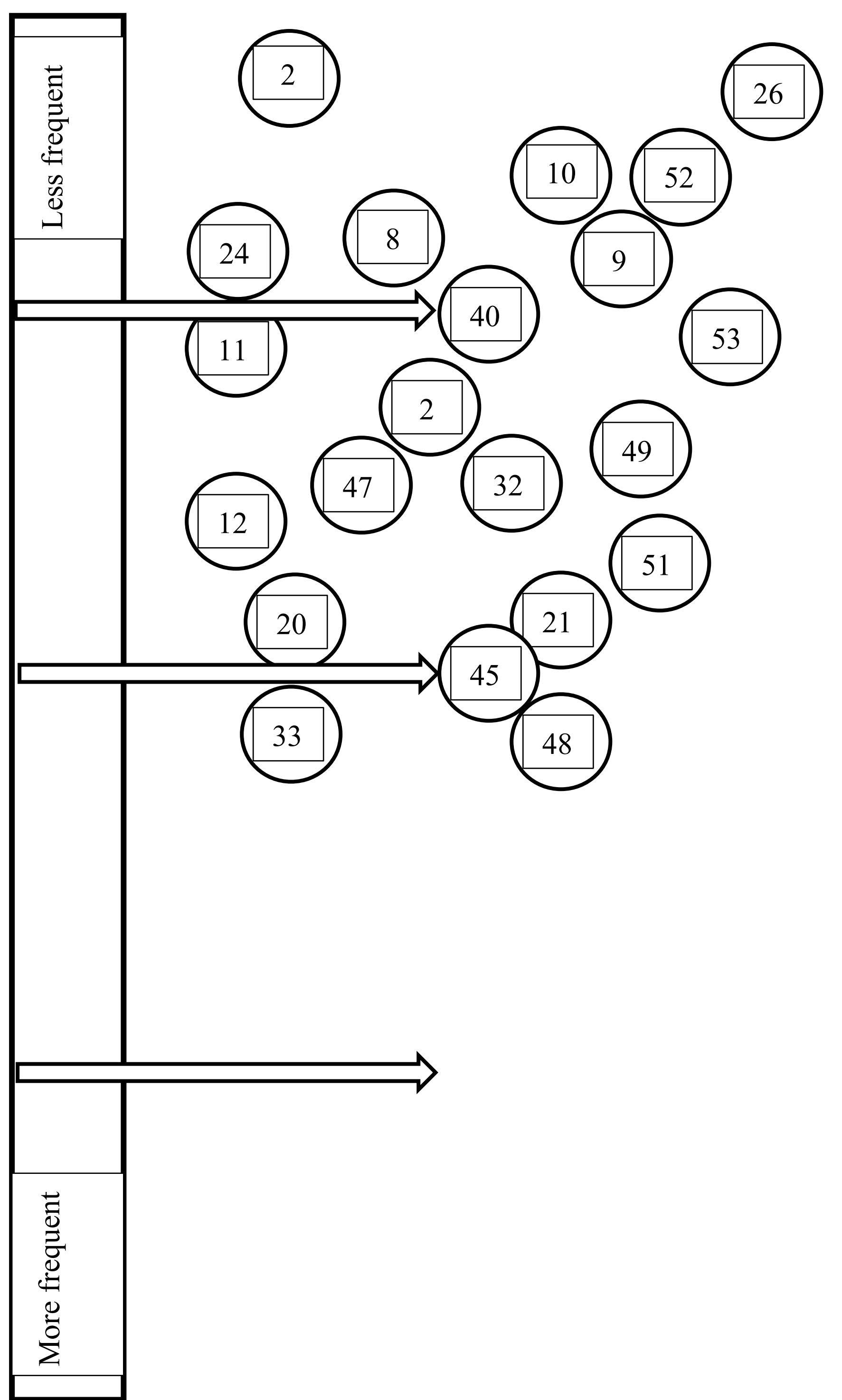


Figure G.3

How Participants Would be Grouped

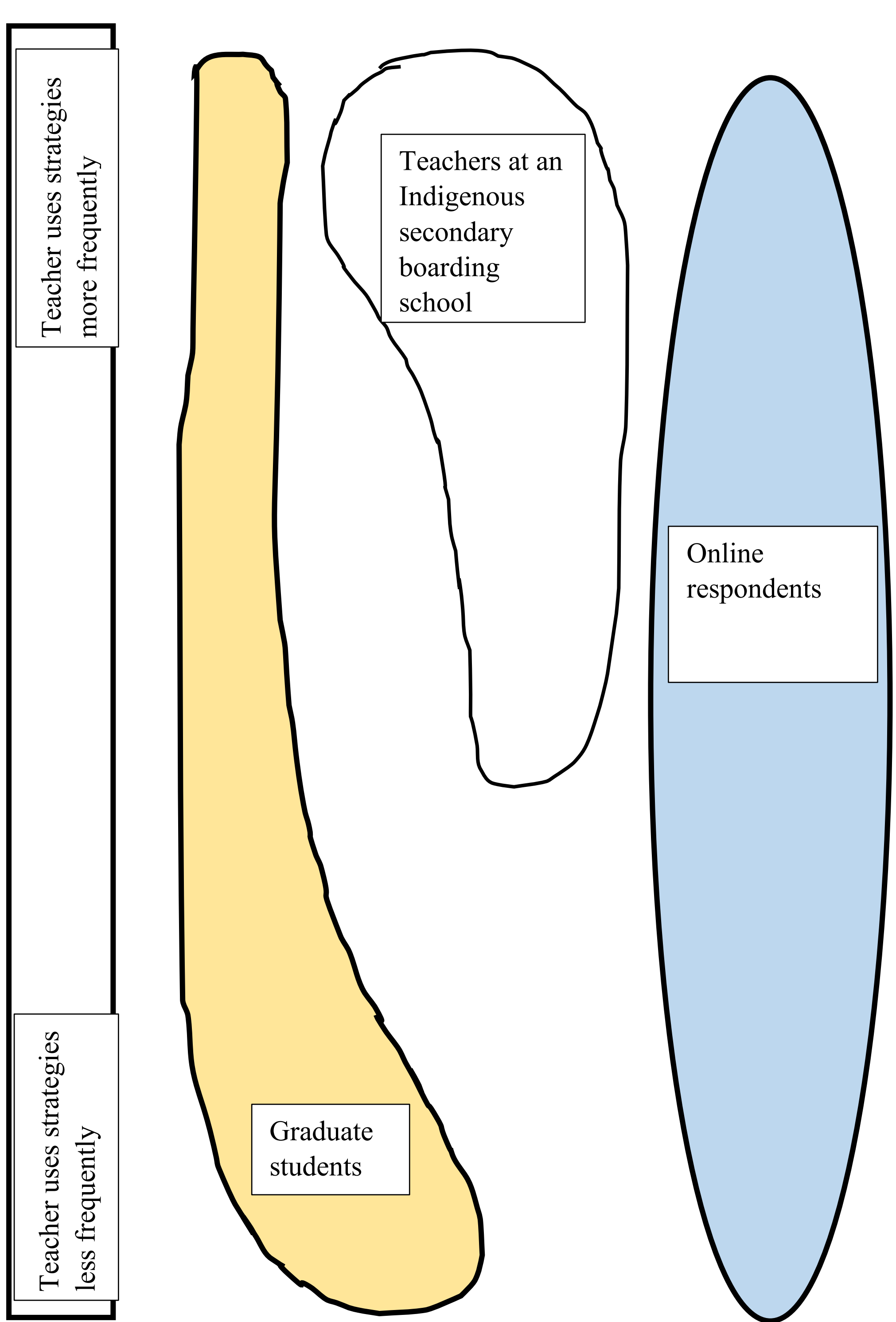


Figure G.4

Where the Themes Will Lie with Participant Responses

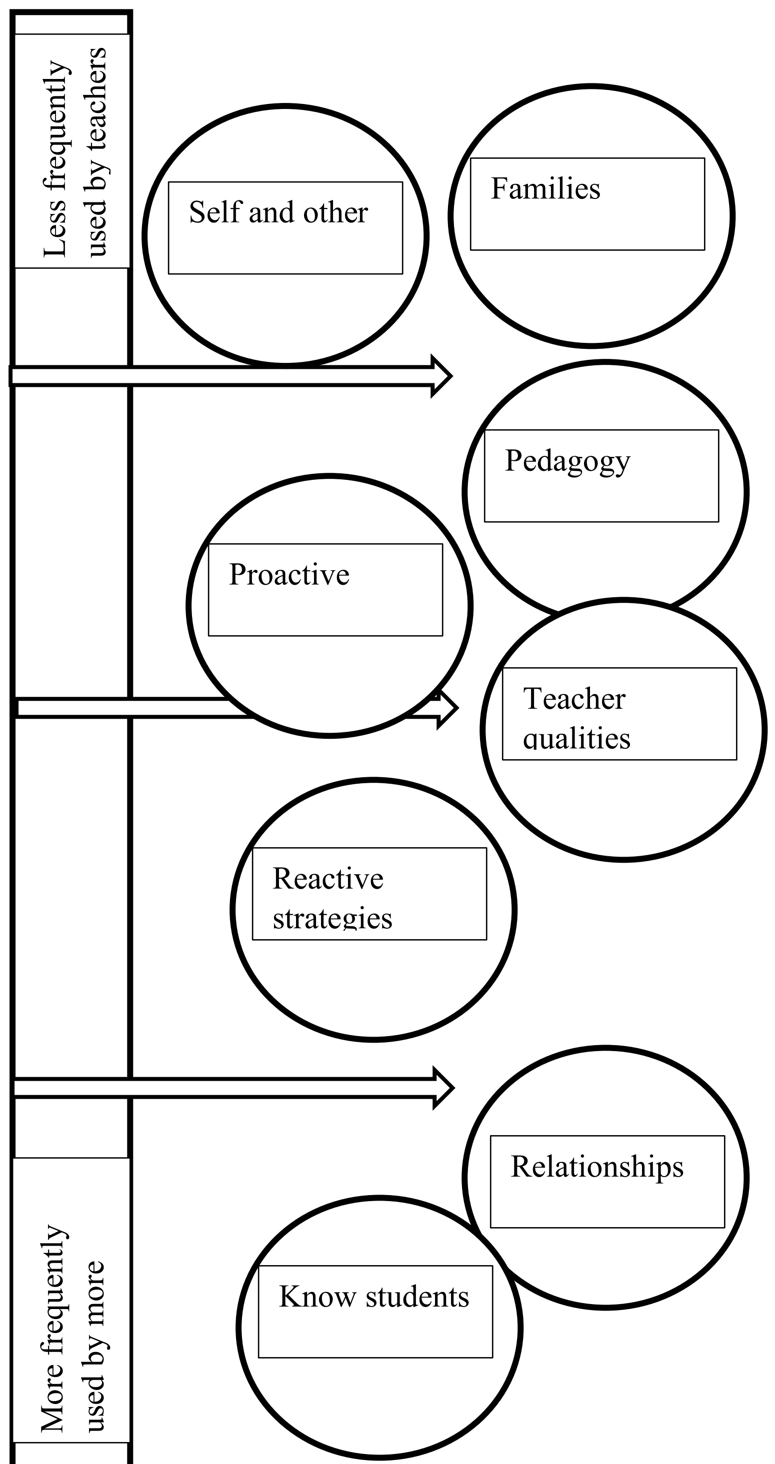
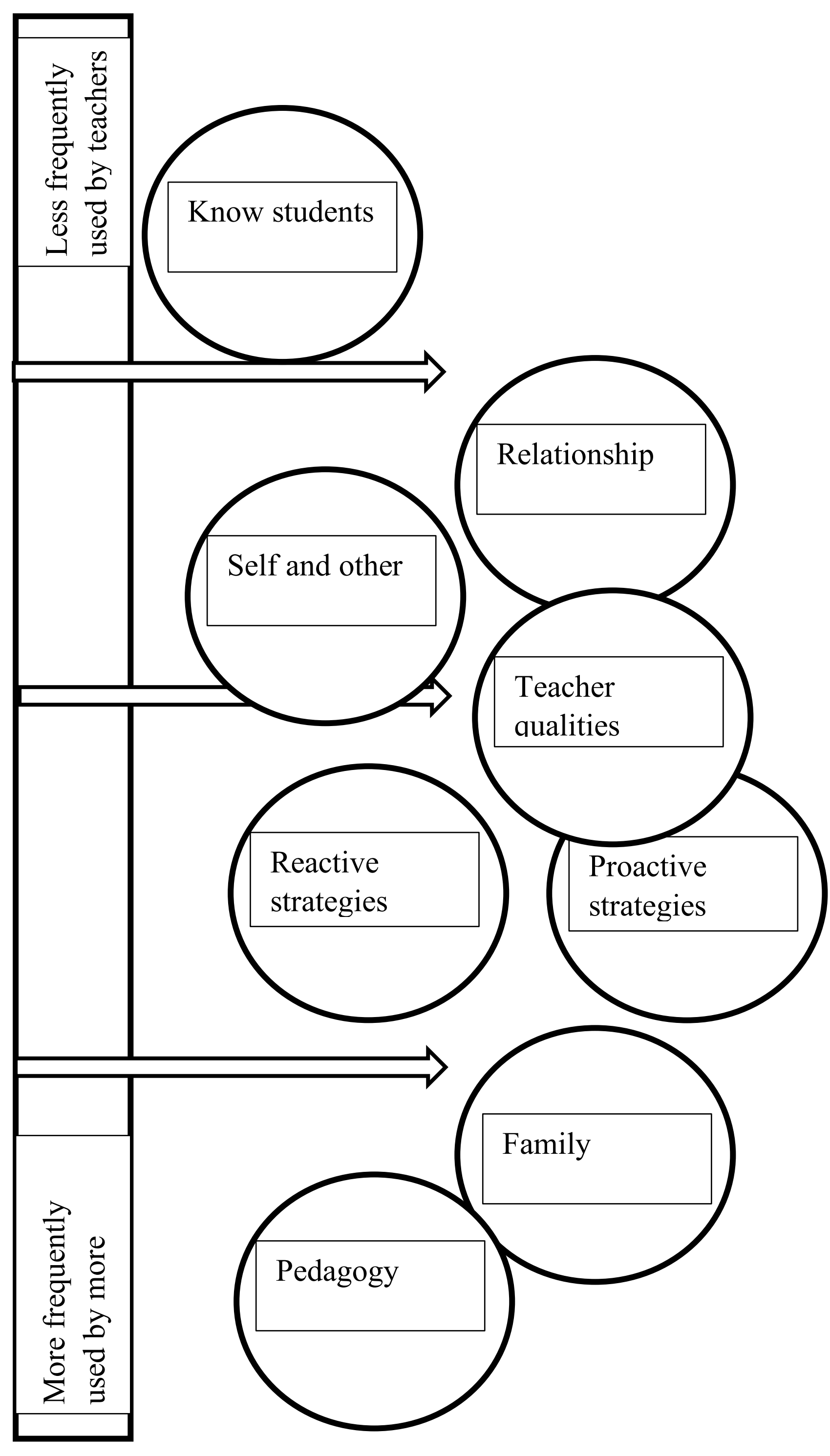


Figure G.5

Predicted Level of Importance of Themes[5]



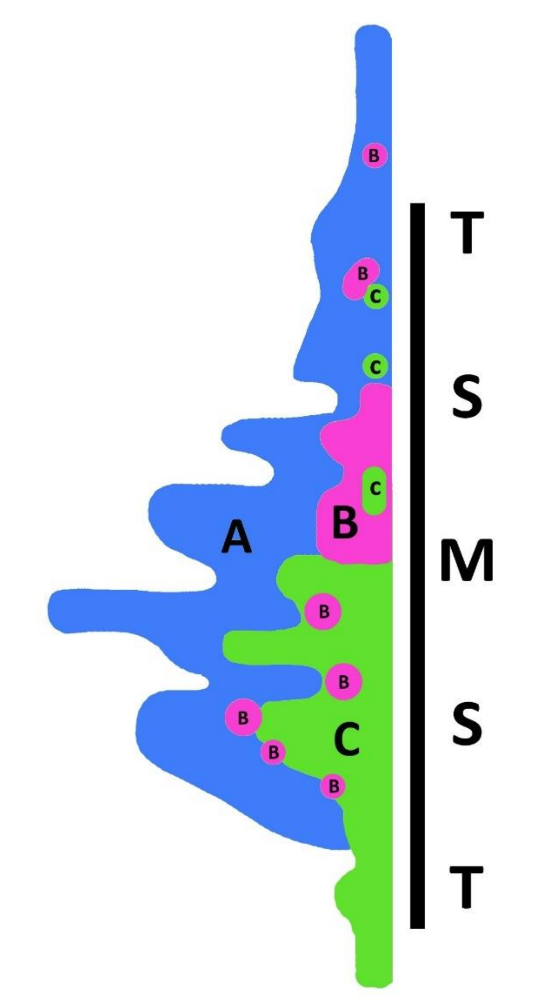
[5] With hindsight I would change the position of families.

Appendix H
Graphic of Persons in Groups on the Wright Map

The Wright map allows us to see where persons are located on the left side of the vertical line. The groups of participants are roughly indicated by the colours on the left side. Group A are my personal colleagues and contacts who are likely to be working in Indigenous education. You can observe that group A are higher, which means that they report using the items more frequently. Group B are staff working in an Indigenous boarding school. They report less frequently than group A, but more frequently than group C. Group C are Graduate Diploma students nearing the end of their studies, and as you would expect they report using the items less frequently.

Figure H.1

Graphic of Persons on the Wright Map



Appendix I

Attitudes and Strategies Separated on the Wright Map

Table I 1

TASSAIS Attitudes and Strategies Separated on the Wright Map

	Strategies	Attitudes
T	P23	
	O35	
	K1 P18 P20 P22 E33	
+1	T32	T64
S	K9 O25 O46 T24	
	T16 P19 F52	
	S68 O31 O42 O51 K36	
	O12 O50 K69 T4 R54	S58
	O37 O43 E10 E34	
M 0	P21 O2 O40 O44 O6 E39	F65
	T26 R11 P13 P17 O53 O7	F67 K71 S57
	P55 E30 E38 T5	K60 K62 T70
	O56	
	O49 E28	K61 K63
S	R14 O15 O41	S59
-1	T29 E27 E48	R66
	O3	
	T47	
T		
	R45	
-2	R8	

Appendix J

Items Separated into Themes

Table J 1

TASSAIS Themes Separated on the Wright Map

Code	S	K	T	R	P	O	E	F
Theme	Self and other	Know students and culture	Teacher qualities	Relationship	Pedagogy	Proactive	Reactive	Family and community
T					P23			
						O35		
		K1			P18		E33	
					P20			
					P22			
+1			T32					
			T64					
S		K9	T24			O25		
						O46		
			T16		P19			F52
	S68	K36				O31		
						O42		
						O51		
	S58	K69	T4	R54		O12		
						O50		
						O37	E10	
						O43	E34	
M 0					P21	O2	E39	F65
						O40		
						O44		
						O6		
	S57	K71	T26	R11	P13	O53		F67
					P17	O7		
		K60	T5		P55		E30	
		K62	T70				E38	
						O56		
		K61				O49	E28	
		K63						
S	S59			R14		O15		
						O41		
-1			T29	R66			E27	
							E48	
						O3		
			T47					
T								
				R45				
-2				R8				

Appendix K
Additional Demographic Data T4

T4 had previously taught a class in a secondary boarding school, and if incidents happened outside of the classroom, behaviour would spill over into the classroom. It could be something from home, or playground, or boarding. For example, a family member could be sent away to hospital or may have passed away. She said that she needed to know if the children would be upset when they came into the classroom. Some students would tell her, some would not. She found that if she was not told of issues in advance, that student behaviour could escalate. She was better able to support behaviour if she knew in advance when there was an issue for students. This demonstrated the strategy of finding the reasons for behaviour.

She explained that she only had one hour per week with each class and was only in the school for one day a week, so she lamented that she did not have the kind of relationships she had with her students last year. As a result, she did not know her current students as well as she had known students previously. She also explained that she did not do the follow-up for behaviour herself, that she referred this to the teacher aides or the class teachers.

She discussed her pedagogy; she had tried teaching art lessons in sequence, but found that with students missing days, it was hard to get continuity. She found it more successful to make each lesson a discreet activity in case students missed work. So, at the time of observations, each lesson was a single task, these discreet lessons built on each other but were not heavily reliant on students having completed previous lessons. She tried to find activities that students thought were meaningful and worthwhile. If students did not see the value in it, they were not likely to engage with it. The activity for most of the art observations was to design and paint on canvas for year 6 and on paper for 4/5. Students were given an outline of Australia and after input and discussion, were asked to design a painting with symbols and patterns that told of the journeys and significant places for their families in Australia. This also linked to learning about symbolism and design. Students were very engaged in this task, particularly when it came to painting. Students used symbols relevant to their families and cultures to paint their family songlines. For assessment, the teacher interviewed each student individually asking him/her questions about the painting, the experience, and the meaning they gained from it. The researcher did not have access to those conversations but was present in the room for some of them. They would have demonstrated

making links with family and cultures. This task, both practical and theory, was strongly linked to culture and family.

T4 found that developing a system for indicating behaviour/recording behaviour was challenging, only being in the school one day a week. She decided to record positive and negatives on a sheet of paper and passed that to the class teacher to be included with the class teacher's system. She was constantly reflecting on her practice to try to improve.

Although she had extensive experience working with Indigenous children, she was trying to improve her knowledge of Indigenous cultures. The previous year she took online subjects to learn about a particular Indigenous group and learn their language.

Appendix L

Chi-Squared Cross Tabulation Tables

Table L 1

Year 6 Teacher use of Strategies and Student Time on-Task Crosstabulation (N = 8)

			Student Time on-Task					
			Q	R	S	T	U	Total
Teacher	T1	Count	162	166	148	167	167	810
		Expected Count	162.5	163.9	144.5	172.1	167.0	810.0
		% within teacher	20.0%	20.5%	18.3%	20.6%	20.6%	100.0%
	T3	Count	152	145	144	169	154	764
		Expected Count	153.3	154.6	136.3	162.4	157.5	764.0
		% within teacher	19.9%	19.0%	18.8%	22.1%	20.2%	100.0%
	T4	Count	157	164	127	163	163	774
		Expected Count	155.3	156.6	138.1	164.5	159.5	774.0
		% within teacher	20.3%	21.2%	16.4%	21.1%	21.1%	100.0%
Total		Count	471	475	419	499	484	2348
		Expected Count	471.0	475.0	419.0	499.0	484.0	2348.0
		% within teacher	20.1%	20.2%	17.8%	21.3%	20.6%	100.0%

Table L 2

Year 4/5 Teacher use of Strategies and Student Time on-Task Crosstabulation (N = 7)

			Student Time on-Task				
			V	W	Y	Z	Total
Teacher	T2	Count	148	145	155	162	610
		Expected Count	148.8	136.4	141.3	183.5	610.0
		% within teacher	24.3%	23.8%	25.4%	26.6%	100.0%
	T3	Count	101	94	93	180	468
		Expected Count	114.1	104.6	108.4	140.8	468.0
		% within teacher	21.6%	20.1%	19.9%	38.5%	100.0%
	T4	Count	171	146	151	176	644
		Expected Count	157.1	144.0	149.2	193.7	644.0
		% within teacher	26.6%	22.7%	23.4%	27.3%	100.0%
Total		Count	420	385	399	518	1722
		Expected Count	420.0	385.0	399.0	518.0	1722.0
		% within teacher	24.4%	22.4%	23.2%	30.1%	100.0%

Table L 3

Teacher Use of Strategies and Student Time on-Task Crosstabulation T3 and T4 with all students (N=11)

			Students									
			Q	R	S	T	U	V	W	Y	Z	Total
Teacher	T3	Count	152	145	144	169	154	101	94	93	180	1232
		Expected Count	143.7	143.7	126.0	154.3	147.4	126.5	111.6	113.4	165.5	1232.0
		% within teacher	12.3%	11.8%	11.7%	13.7%	12.5%	8.2%	7.6%	7.5%	14.6%	100.0%
	T4	Count	157	164	127	163	163	171	146	151	176	1418
		Expected Count	165.3	165.3	145.0	177.7	169.6	145.5	128.4	130.6	190.5	1418.0
		% within teacher	11.1%	11.6%	9.0%	11.5%	11.5%	12.1%	10.3%	10.6%	12.4%	100.0%
Total		Count	309	309	271	332	317	272	240	244	356	2650
		Expected Count	309.0	309.0	271.0	332.0	317.0	272.0	240.0	244.0	356.0	2650.0
		% within teacher	11.7%	11.7%	10.2%	12.5%	12.0%	10.3%	9.1%	9.2%	13.4%	100.0%

Table L 4

Teacher and Use of Themes Cross Tabulation with Year 6 (N=11)

			Themes								
			Theme1	Theme2	Theme3	Theme4	Theme5	Theme6	Theme7	Theme8	Total
Teacher	Teacher1	Count	1	19	12	47	128	195	23	5	430
		Expected Count	4.3	12.0	15.5	45.6	131.1	174.4	36.7	10.4	430.0
	Teacher3	Count	1	6	21	56	83	152	52	1	372
		Expected Count	3.7	10.4	13.4	39.5	113.4	150.9	31.8	9.0	372.0
	Teacher4	Count	9	6	7	15	128	104	20	21	310
		Expected Count	3.1	8.6	11.2	32.9	94.5	125.7	26.5	7.5	310.0
Total		Count	11	31	40	118	339	451	95	27	1112
		Expected Count	11.0	31.0	40.0	118.0	339.0	451.0	95.0	27.0	1112.0

Table L 5

Teacher and Use of Themes Cross Tabulation with Year 4/5 (N=11)

			Theme								
			Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6	Theme 7	Theme 8	Total
Teacher	teacher 2	Count	4	14	36	70	102	195	24	13	458
		Expected Count	3.6	13.0	25.0	59.5	124.8	179.4	39.8	13.0	458.0
		% within teacher	0.9%	3.1%	7.9%	15.3%	22.3%	42.6%	5.2%	2.8%	100.0%
	teacher 3	Count	2	8	18	47	70	100	40	1	286
		Expected Count	2.2	8.1	15.6	37.1	77.9	112.0	24.9	8.1	286.0
		% within teacher	0.7%	2.8%	6.3%	16.4%	24.5%	35.0%	14.0%	0.3%	100.0%
	teacher 4	Count	2	7	2	16	107	106	25	15	280
		Expected Count	2.2	7.9	15.3	36.4	76.3	109.6	24.3	7.9	280.0
		% within teacher	0.7%	2.5%	0.7%	5.7%	38.2%	37.9%	8.9%	5.4%	100.0%
Total		Count	8	29	56	133	279	401	89	29	1024
		Expected Count	8.0	29.0	56.0	133.0	279.0	401.0	89.0	29.0	1024.0
		% within teacher	0.8%	2.8%	5.5%	13.0%	27.2%	39.2%	8.7%	2.8%	100.0%

Appendix M

Descriptive Statistics Teacher and Student Observations

Positive Reactions to Teacher and Negative Reactions to Teacher reveal how often teachers or teacher aides interacted with students, and students' positive or negative responses to those interactions. Negative reactions to staff were minimal, so were not included in this analysis, but are included here. Time on-Task with Peer counts and field notes were also recorded on the raw data student observation sheets. These raw data helped to distinguish between students who had frequent peer contact (for example, Yaran) and those who did not have frequent peer contact (for example, Solomon). It also recorded those who helped other students (for example, Uriel) and those helped by others (for example, Rebecca). Comments made during observations on the observation sheet recorded whether a student was helping others, or off-task with peers (see Appendix E). The number of times a teacher interacted with students to help them varied from teacher to teacher. It appears that both T1 and T2 made more frequent positive contact with students than did T3 or T4 in the same number of observations.

Table M 1

Student on-Task Observations, Positive or Negative Reaction to Teacher or Teacher Aide, and Time on-Task with Peers

Student		On-Task Percentage	Positive Reactions Teacher	Negative Reactions Teacher	Positive Reactions Teacher Aide	Negative Reactions Teacher Aide	ToT with Peer	Total ToT with Peer
Quinley	T1	90.0	15	1	19	0	1	
	T3	84.4	6	0	31	0	15	
	T4	87.2	15	1	32	0	4	20
Rebecca	T1	90.0	5	0	0	0	15	
	T3	86.0	9	0	12	0	29	
	T4	91.1	4	0	1	0	19	63
Solomon	T1	82.2	15	0	1	0	0	
	T3	80.0	4	0	4	0	0	
	T4	70.6	7	0	4	0	5	5
Tishona	T1	92.8	15	0	7	0	1	
	T3	93.9	40	0	1	0	1	
	T4	90.6	2	0	14	0	28	30
Uriel	T1	92.8	12	0	0	0	28	
	T3	92.8	7	0	1	0	19	
	T4	90.6	8	1	3	0	28	75
Victor	T2	82.2	8	0	4	0	12	
	T3	56.1	5	1	7	0	19	
	T4	95.0	6	0	1	0	23	36
Willliam	T2	80.6	18	0	2	0	0	
	T3	52.2	4	0	0	0	6	
	T4	81.1	10	3	0	0	40	46
Yaran	T2	86.1	24	0	0	0	26	
	T3	51.7	6	0	10	0	10	
	T4	83.9	9	0	13	0	24	76
Zena	T2	90.0	19	0	1	0	3	
	T3	100.0	5	0	2	1	0	
	T4	97.8	3	0	9	0	29	31

Appendix N
Additional Qualitative Data

While the statistical data reports accurately on counts of Teacher use of Strategies and Student Time on-Task, the field notes collected should also be included in the presentation of data. Some field notes have been used previously as evidence to support the Chi-Squared analyses, but more detail is included in this section.

T1 With Year 6

There was one negative reaction with T1. The teacher redirected Solomon by telling him to get a dictionary quickly and he frowned. This was recorded as a negative. There was also one negative reaction with the teacher aide during a lesson with T1 that was recorded, but as it was not with the teacher, it was not counted in the data in Table 6.6. Tishona wanted a sharpener and when it was given to her by another student, she got up to empty it. She returned to her seat and was sharpening the pencil. The teacher aide spoke to her about sharpening the pencil. The teacher aide said about work, “Get on with it!”. Tishona said, “Get out of my ... [not audible] and I will”. This was recorded as a negative reaction. Tishona was not happy. She started writing again then stopped and put her hands over her eyes. A peer said, “She needs another paper!”. T1 and the teacher aide came over and got her a new piece of paper. The teacher aide was then supportive and touched her on her back. She started writing again with positive affect.

Some examples of the TASSAIS strategies used by T1 included listening to both parties after a student conflict. She explained that there had been previous conflict and that she was watching a student carefully as a follow on from that. Further, T1 was not hesitant to follow through. She moved the student who was sitting next to Rebecca as they were talking too much. At times she removed points from the online behaviour record, ClassDojo (2011). She also moved students when needed.

The warmth between T1 and her students was evident, particularly when there was a reduced number of students for part of a day, and she was watching a teacher dance video on a phone. The students wanted to see and there was teasing and laughter between students and T1.

T1 demonstrated the ability to read student emotions and helped a student avoid being the centre of attention (shame) for a longer period of time. A speech pathology student came

to the door to request a boy go with her. The student was reluctant to go. The teacher aide had a chat with the student to try to convince him to go. The teacher kept teaching. The student still did not want to go. T1 came to the student and had a chat. T1 then said, “Maybe later” to the speech pathologist student. This allowed the child to avoid feeling embarrassed. Another example that she used in teaching was to give students a way out if they were stuck for ideas, “If you don’t have your own idea, you can use the one on the board”. She also allowed students to verbalise their ideas before they started writing.

T1 was observed on a few occasions removing possible barriers to learning such as hunger and tiredness. She checked to see who needed an emergency lunch or noticed that a student was tired and needed to sleep at the office.

T3 With Year 6

T3 explained her pedagogy choices after one lesson that she knew that students needed to see things to learn them but lost the time in the lesson to do the demonstration. She admitted that the students struggled to do the activity without seeing it first, relying on verbal instructions only. She said later that she repeated the same activity with another class, and it worked successfully. This conversation was an example of her reflective practice and understanding of how Indigenous students learn best.

There was a fight between two boys early in one lesson. T3 demonstrated culturally appropriate reactive strategies when dealing with the fight. T3 remained calm and dealt with the initial fight and subsequent outbursts. She said later that she was emotionally thrown by the fight but didn’t show it and had planned to demonstrate the activity to show the students what it would look like, but she lost time due to sorting out the fight.

After the fight had been dealt with, she thanked students who, “Tried to help to keep each other safe”. The class was escalated emotionally after the fight and the teacher recognised this and asked students to do some deep breathing with her to be able to focus on the task. She taught them how to do this. It took a while for students to settle but they did.

When the aggressor student returned, she checked with the teacher aide if things were calm enough to let him back in the room. After the boy returned, she engaged with him. She said, “William, come and talk to me”. She spoke quietly with him at the end of the room. She was sitting down. She said, “What are we going to do?”. She offered him a choice to engage or take some time. The boy chose not to engage for ten minutes then engaged. Another boy in

volved in the fight was taking his frustrations out on a chair. She quietly spoke to him. She did not talk directly about the issue but talked around it.

One student was being sent home for the same fight. T3 and a liaison officer spoke quietly to that student and offered for another student to accompany him to the office to prepare to go home. T3 spoke around the issue, "Sometimes we …". She also said that the teacher aide mentioned after that fight, that it had started outside the library, and she wished she had known that. She would not have had the two students sitting together in class. This demonstrated that she looked for the reasons for the behaviour and responded to them.

During an observation, T3 spoke with Tishona about Dad and transport to touch football. The teacher went out of her way to help this student, removing barriers to accessing sport. T3 was observed removing barriers to education on other occasions. When one girl said she was "literally tired". T3 gave her some choices and the student walked out cranky. Another student let the teacher know that the student was cranky. The teacher sat with her to quietly help with the task and checked on her later.

Whether in digital technology or science classes, students were given examples of how the tasks related to life, for example, buying a basketball or using data in their lives. When this class was asked to use the program 'Scatter' they were mostly engaged.

T3's reactive strategies included examples of not following through. T3 had given a final warning to Uriel on one occasion. He had been noisy several times and was noisy after that final warning. In one observation, T3 missed an opportunity to use the strategy 'Follow through'. A student had received a warning. The student repeated the behaviour and backchatted the teacher. Teacher said, "Enough backchat. Get on with your work". This was recorded as an asterix (*) in that strategy on the sheet, as an example of the strategy being used in an opposite way from the way participants in Phase 1 recommended.

T4 With Year 6

During the teacher observations, while students were listening and writing, there had been more off-task student behaviour than there was during the painting task at the time of student observations. In art, the year 6 students were working more independently than they did in digital technologies. Solomon spent 32 observation counts off-task and wandering one lesson, and 20 observation counts off-task in another. Quinley had 19 off-task counts in one lesson, Tishona flicked water at her friends and painted her head in one lesson.

The male liaison officer was in the classroom with the year 6 class and sometimes with the year 4/5. He explained that he was timetabled in those classes to help with the behaviour of the boys. Lesson observations were repeated for students whose behaviour was impacted by his presence. Due to the end of the school year approaching, one observation of Uriel while the liaison officer was in the room was included. There was no interaction with Uriel, and the liaison officer's presence did not usually change this student's behaviour. There was not time to repeat the observation.

T4 allowed barriers to learning to be taken care of, not specifically demonstrating taking care of them herself. This may be because T4 only saw each class for one hour per week. One day, one student was falling asleep. The teacher aide told him to get a drink and T3 allowed that to happen.

There were two interactions when students demonstrated a negative response. Quinley was playing, and the teacher redirected her. The student had negative expression on her face, and this was recorded as a negative reaction. The second example was when T4 put Uriel's name on the board. He argued with her about what he had been doing. He had a disappointed facial expression and negative affect. This was recorded as a negative reaction.

T2 With Year 4/5

The teacher's enjoyment of fun was evident. In one observation, there was a dance performance by students and teachers the previous night and some of the conversation centred around that. The teacher was having fun with the students; telling them she had not danced, when they were sure that she had. She also praised them for their dancing. Before students started work that day, they laughed and chatted about the performances, watched the performance videos, then played a game to settle behaviour before they started work for the day. The game 'Heads Down Thumbs Up' refocused the class. It created teamwork and a positive atmosphere before they started work. Before the game, the atmosphere was tense, afterwards it was calm. T2 also followed through with her expectations, took points from the class behaviour chart, had individual chats or required students to acknowledge their actions.

Another day, the boys returned from a fishing trip during an observation. T2 did not ask them to settle but interrupted teaching to look at the photos, laughed, joked and listened to their stories. When that was finished, she used the game, Heads Down, Thumbs Up to settle the class again before they started work.

T2 often used whole class conversations, rather than students always putting their hands up. Students called out to participate in discussion around housekeeping, tasks, and expectations. Calling out during group discussion times, was not disrespectful or interrupting at these times but demonstrated engagement in the discussion. This was the way T2 managed her class discussions. T2 was able to settle students to quiet and individual work afterwards. At times, she would set the expectations to make sure students were quiet and working individually, or make sure that they had their hands up when she asked questions. Her expectations for student engagement in class talk was made clear for each discussion/question time.

When T2 was recording which students had attended the dancing event the night before, and who they had brought with them, she demonstrated relationships with family. She had recognised some family and knew others were not there. For example, "I didn't see your Dad, but I saw your Grandad". She also displayed knowledge of, and sensitivity towards family arrangements, understanding that not all children were with their mothers or fathers.

T2 spoke to a boy and asked if he had fallen over. She turned him away from the girls and spoke to him privately to check how he was. She acquired a Band-Aid and was compassionate. During another lesson, when one boy chose not to do the class dance, the teacher spoke to boys who were teasing him. T2 had spoken quietly to a girl who had been away when a talk was due. She was encouraging her, saying, "We are all friends here" and "Don't feel bad …". She was checking that the student felt comfortable and would be able to do her oral presentation. The student reassured her about why she had been away and that she would be able to present. This was a quiet conversation in the library room, which was resumed on the way back to the classroom. T2 was checking for the reason for behaviour; the student had missed schooling. During one lesson William had come from a lesson with T3 and demonstrated several off-task times. When he returned to T2, before the observation at 11:40, the teacher redirected him. This was not recorded on my observation sheet as it was not at 11:40. She noticed that he was off-task again and set her timer. She could see by his facial expression and body language that he was jumpy. She said the class would have a break in 5 minutes. Her timer went, and the class had a break. For T2 in that lesson, Victor was off-task 9 times. For T3 in the previous lesson he was off-task 26 times and behaviours included talking, playing with the experiment equipment, and calling out. This revealed a marked difference in behaviour for the two teachers.

T2 was willing to stop and listen to issues or events before starting work for the sessions. She used the game Heads Down Thumbs Up regularly to refocus students before starting work. After a fishing trip for the boys, she managed the excitement well to re-settle the class. Before an observation of Zena, T2 listened to what happened in science the lesson before. She settled discussions and relationship difficulties between the girls. Then she set up the game before starting them on their work. I paused the observation till work started again. The game had the effect of using energy that they had brought from science, that is, being upset. It refocused them and created teamwork and a positive atmosphere before they started work. Before this, the atmosphere was tense, afterwards it was calm. At 3:40, she said, “I’m going to put a timer on, no talking”. The class settled. William was quietly working. He talked, then the teacher reminded him again. While she was helping a student, she went to William and moved him to keep him on-task. My interpretation was that she noticed his emotional state and used her relationship with him and her boundaries. T2 was watching the whole class carefully and stopping behaviour while it was low level. When William was off-task, playing with his fingers and not disturbing others, he was restless, but not taking over the class as he had done in the previous lesson.

To Yaran she said once, “Carry yourself back here and line up!”. He cooperated without visible negative affect even though the redirection had been verbally forceful. T2 also followed through with her expectations, took points from the class behaviour chart, had individual chats, or required students to acknowledge their actions. I did not see as many culturally responsive pedagogies during the observations. The ones I did see related to a family night. There was a dance performance by students and teachers the previous night and some of the conversation centred around that. The teacher was having fun with the students, telling them she had not danced, they were sure that she had. She also praised them for their dancing.

In this class the importance of using correct names was demonstrated by a girl who spoke to me and taught me how to say her name by enunciating very clearly. She had asked my name, so I asked hers. I had pronounced it incorrectly the first time and it was important to her that I pronounce it correctly.

T3 With Year 4/5

Students required frequent help from T3, perhaps due to subject matter, and grew frustrated when the teacher was not able to help immediately.

After the fight, when the (aggressor) student returned, she checked with the teacher aide if things were calm enough to let him back in the room. After the boy returned, she engaged with him. She said, “[Yaran], come and talk to me. She spoke quietly with him at the end of the room. She was sitting down. She said, “What are we going to do?”. She offered him a choice to engage or take some time. The boy chose not to engage for 10 minutes then engaged. One student was being sent home for the fight. T3 and a liaison officer spoke quietly to the student and offered for another student to accompany him to the office to prepare to go home. T3 spoke around the issue, “Sometimes we …”. In another lesson a boy was taking his frustrations out on a chair. She quietly spoke to him. She did not talk directly about the issue but talked around it

During one observation T3 had planned to demonstrate the activity to show the students what it would look like, but she lost time due to sorting out the fights. She explained afterwards that she knew that students needed to see things to learn them but lost the time in the lesson to do the demonstration. She admitted that the students struggled to do the activity without seeing it first; relying on verbal instructions only. She said later that she repeated the same activity with another class, and it worked successfully. This conversation was an example of her reflective practice and understanding of how Indigenous students learn best. She also said that the teacher aide mentioned after the fight that it had started outside the library, and she wished she had known that. She would not have had the two students sitting together in class. This demonstrated that she looked for the reasons for the behaviour and responded to them. The next lesson after the fight, the teacher met the students at the outside library door, to quickly ascertain the state of relationships in the class. She adjusted her proactive strategies to avoid the situation repeating.

There was one negative reaction from a student in her classes. Victor was at the computer again after being asked to leave them alone. The teacher redirected, and the student complained. This was recorded as a negative reaction.

T4 with year 4/5

The task in art was inherently motivating and the data for Solomon illustrated this in the different lessons. I also noted that children were more off-task during the earlier teacher observations where students were not painting.

The liaison officer had said that he was in the year 4/5 class as well as the year 6 class to help prevent behaviour incidents. The change in the boys’ behaviour was evident when the

liaison officer was present. Observations were repeated for the boys whose behaviour was influenced by his presence.

In one of the earlier observations, before students began painting, William displayed high level behaviours that disturbed others in this lesson. He was running around the room with peers, noisily teasing back and forth, chasing others with a paint brush. At the 10-minute observation the teacher put his name on the board. At the 13-minute observation she gave him a second warning. After the observation had finished, William and others argued with the teacher whether he should be sent out of the room. This was over whether he had had two or three warnings. He was not sent out.

T4 implemented some proactive strategies to focus on behaviour. She had asked William to keep others in his group quiet and he agreed. Later in the lesson, T4 said to William, "You forgot that I asked you to keep the others quiet". Later she spoke to the group about volume. "I don't mind that you are talking, but…". This was in a gentle voice. She also asked the teacher aides to record behaviour to forward to the class teachers.

There were three negative reactions recorded for William. T4 split the group and William was asked to move from the group. This resulted in negative affect visible on William's face. This was recorded as a negative. During a separate observation he argued with the teacher and then had negative affect when offered a choice later in that lesson. These two interactions were recorded as negative.

Parents had pointed out in Phase 1 interview data that it is important that teachers do not mistake one student for another. Teachers should target the correct child. During an observation of T4, Yaran was watching the video and another boy was making noises constantly. The teacher could not see who it was in the dark and spoke to both boys, including Yaran because he had turned to face the other boy when the teacher was watching. From where I was sitting, I could see that he had not made the noises and had not disrupted. His behaviour changed after he was wrongly accused. He tried to explain, then sat with a slumped posture, then began disrupting. By the end of the lesson, he was actively disrupting. T4 spent some time with him during the lesson and he settled a little. This was an example of targeting the wrong student.

T4 used reactive strategies such as redirecting students for talking too much three times. She threatened to put a student name up on the board but did not follow through. She offered one student a choice. On another occasion a group of boys were behaving

inappropriately, swearing, and interrupting learning. On another occasion T4 ignored an outburst from a student. On occasions when those students were not being observed, she added names to the list on the board, but no students observed were sent to time out or buddy class.

Appendix O

Details of Data Combinations Teacher and Use of Strategies in Themes

Table O 1

Year 6 Teachers Themes That Were Higher Than Expected, Item Number and Count of Strategies Used.

Teacher	Themes Scored Higher Than Expected	Strategies Used (Abbreviated)	Item number	Count of Strategies Used	Total for Each Theme
T1	Knowledge of Students and Their Cultures (2)	Students having a different understanding about time	1	3	
		Avoid singling students out	9	6	
		Giving students a way to avoid 'shame'	36	9	
		I know I need to learn more about Indigenous cultures	71	1	19
	Proactive Behaviour Support Strategies (6)	Explicitly teach behaviour	2	21	
		I model the behaviour I want to see	3	4	
		I look for the reason for behaviours	7	5	
		Giving choices for autonomy	12	13	
		Teach students to respect and care for each other	15	3	
		Activities for students to build relationships	25	7	
		Use other staff to help understand behaviour	31	4	
		Removing barrier to learning	39	21	
		Commending students	41	81	
		Using visual reminders for behaviour	42	11	
		Cueing for behaviour	43	10	
		Well established routines	49	14	
		I involve students in deciding classroom expectations		1	195

T3	Qualities of the Teacher (3)	Staying calm in a crisis	26	1	
		Apologising to students	29	4	
		Using humour	16	13	18
	Positive Relationships (4)	Show respect before expecting respect from them	8	1	
		Creating close relationships	11	11	
		Used correct names	45	34	
		Putting relationship before work	66	1	47
	Culturally Appropriate Reactive Behaviour Support Strategies (7)	Chatting privately	10	2	
		When student upset, I use simple language	28	3	
		I sit beside students to talk after incident	30	1	
		Talking around an issue	33	1	
		Ignoring minor behaviours	39	25	
		Using 'I' messages when talking about behaviour	46	2	
		Following through	48	5	
		Quickly settling problems	56	1	40
T4	Knowledge of Self and Other (1)	Understanding the behaviour of students from different cultures	57	3	
		Demonstrating local historical knowledge	68	6	9
	Culturally Responsive Pedagogy (5)	Opportunities to show strengths	13	4	
		Meaningful tasks	17	16	
		Opportunities for group work	19	2	
		Storytelling	20	9	
		Allow wait time after asking questions	21	1	
		Cultural visuals, videos and images of Indigenous people	22	50	

	and her task was centred around family and culture			
	Indigenous role models	23	12	
	Explaining tasks clearly	55	29	
	Students need to see the larger picture	62	5	128
Connections with Family and Community (8)	Connections with family (song lines in their paintings)	52	9	
	Value cultural identity	65	12	21

Table O 2

Year 4/5 Teachers Themes That Were Higher Than Expected, Item Number and Count of Strategies Used.

Teacher	Themes scored higher than expected	Strategy	Item Number	Count of Strategies Used	Total for Each Theme
T2	Qualities of the Teacher (3)	High standards for students	5	4	
		Used humour and her face was very expressive as she had fun with students	16	24	
		Staying calm	26	1	
		She apologised to students when needed	29	5	
		Not an I'm the boss approach	24	2	36
	Positive Relationships (4)	Show respect before expecting respect	8	3	
		Create close relationships	11	36	
		She also believed in students	14	3	
		Used current names	45	27	
		Understood that relationship came before work	66	1	70
	Proactive Behaviour Support Strategies (6)	Explicitly teach behaviour	2	13	
		Model expected behaviours	3	2	
		Look for reason for behaviours	7	3	
		Giving choices for autonomy	12	16	
		Teach students to care for each other	15	8	
		Building student to student relationships	25	15	
		Use other staff to help understand behaviour	31	1	
		Addressing barriers to learning	40	11	
		Commending students	41	90	

		Visual reminders for behaviour	42	10	
		Cue for behaviour	43	13	
		Engage with student after time out	44	1	
		Well established routines	49	12	195
T3	Positive Relationships (4)	Create close relationships	11	7	
		Believe in students	14	1	
		Using student correct names	45	48	56
	Culturally Appropriate Reactive Behaviour Support Strategies (7)	Chat privately with students	10	2	
		Using simple language when talking through an incident with students	28	1	
		Sitting beside students to talk	30	2	
		Talking around an issue	33	5	
		Giving options	34	1	
		Ignoring minor behaviours	39	25	
		Following through	48	6	
		Using 'I' messages as she talked with students	46	2	
		Settling difficulties between students quickly	56	8	52
T4	Culturally Responsive Pedagogy (5)	Opportunities for strengths	13	4	
		Having meaningful tasks	17	7	
		Use storytelling	20	5	
		Give wait time after asking questions	21	1	
		Culturally relevant visuals on display	22	47	
		Using Indigenous role models	23	14	
		Explain tasks clearly	55	28	
		Students need to see the larger picture	62	1	107

Connections with Family and Community (8)	Using dream time stories valuing culture	52	4	
	Value Cultural Identity	65	11	15

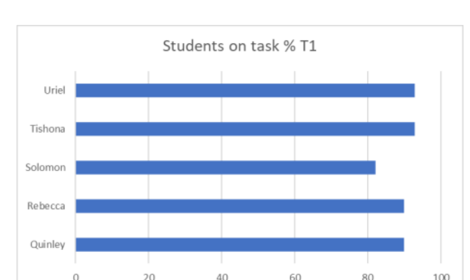
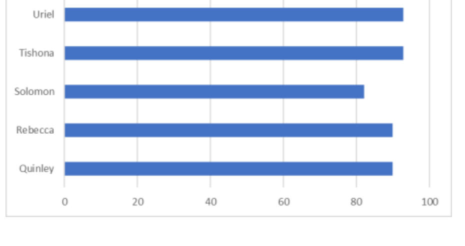
Appendix P
Overall Results Tables

These data tables share the data sets in a way that allows a visual comparison. The first column contains the teacher number. The second column contains the total number of strategies used and the rate of teacher use of strategies in themes observed in the classroom (Dataset 1). The total score for each theme was divided by the number of strategies in that theme to gain an average score. Below the graph is the use of strategies in themes as a number which allows comparison with other teachers who teach the same class. This gives comparisons about how the strategies were used by each teacher. Each teacher used the strategies differently, according to their strengths, for example, higher on the themes of pedagogy or relationships. The third column shows the average rating for each teacher in their self-reported use of the strategies (Dataset 4). This came from their results on the TASSAIS survey and Rasch analysis as described in section 6.4. The fourth column shows the percentage of observed on-task time for each of the participant students and the number of positive and negative student reactions to teacher interactions. Positive student reactions are green and negative reactions are red (Dataset 2). The fifth and last column briefly records some of the field notes taken about that teacher with the class (Dataset 3).

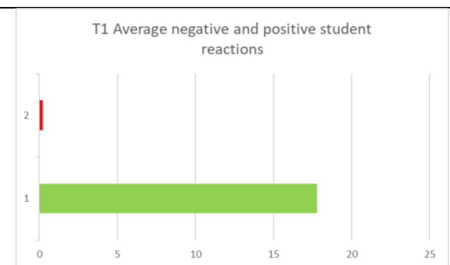
Graphs of teacher observed use of strategies in themes (column 3) and the self-report use of strategies (column 4) cannot be compared horizontally. They may be compared vertically, that is, the teachers can be compared with each other. T1 can be compared with T3 and T4. When teacher use of the strategies in themes is compared vertically, patterns of use become evident.

Table P 1

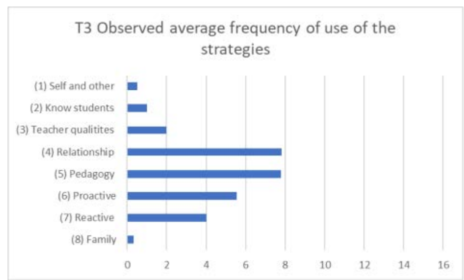
Comparison of Teachers with the Year 6 Class

Teacher	Observed teacher average use of strategies	Teacher self-reported average frequency of use of strategies	Students on-task	Observations of levels of behaviour, anecdotal and comparison data
T1	Total 430 strategies implemented Average observed in themes *(1)* Self and other observed .25 *(2)* Know students observed 2.4 *(3)* Teacher qualities observed 1.3 *(4)* Relationship observed 7.8 *(5)* Pedagogy observed 14.2 *(6)* Proactive observed 10.8 *(7)* Reactive observed 2.3 *(8)* Family and community observed 1.7 Comparisons *(2)* Scored double the other teachers in Know students and culture *(3)* High in pedagogy *(4)* High in relationship	*(1)* Self and other self-rated 4.5 *(2)* Know students self-rated 4.3 *(3)* Teacher qualities self-rated 4.1 *(4)* Relationship self-rated 4.7 *(5)* Pedagogy self-rated 3.9 *(6)* Proactive self-rated 4.2 *(7)* Reactive self-rated 4.4 *(8)* Family and community self-rated 4.7	  Quinley 90% Rebecca 90% Solomon 82.2% Tishona 92.8% Uriel 92.8% High number of positive responses to interactions with adults- average 17.8 One negative reaction from Solomon	• ***Warmth evident in interactions with girls.*** • ***Read student emotions and prevented escalation and shame.*** • ***Talked proactively with liaison officer about behaviour.*** • ***Was aware of previous conflict and was watching carefully.*** • ***Removed barriers to learning.*** • ***Not hesitant to follow through.***

(6) High for proactive
(8) Mid for family and community

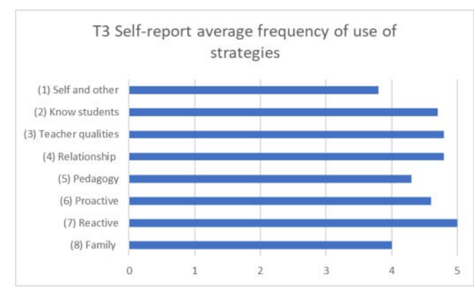


T3 Total 286 strategies implemented

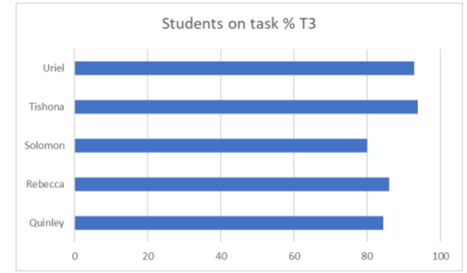


Average observed in themes
(1) Self and other observed 0.5
(2) Know students observed 1.0
(3) Teacher qualities observed 2
(4) Relationship observed 7.8
(5) Pedagogy observed 8.6
(6) Proactive observed 5.5
(7) Reactive observed 4.0
(8) Family and community observed 0.3

Comparisons
(6) Half the number of proactive strategies than T1 and T4.



Self-reported as the highest user.
(1) Self and other self-rated 3.8
(2) Know students self-rated 4.7
(3) Teacher qualities self-rated 4.8
(4) Relationship self-rated 4.8
(5) Pedagogy self-rated 4.3
(6) Proactive self-rated 4.6
(7) Reactive self-rated 5
(8) Family and community self-rated 4

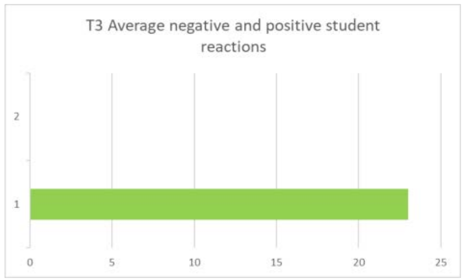


Quinley 84.4%
Rebecca 86%
Solomon 80%
Tishona 93.9%
Uriel 92.8%

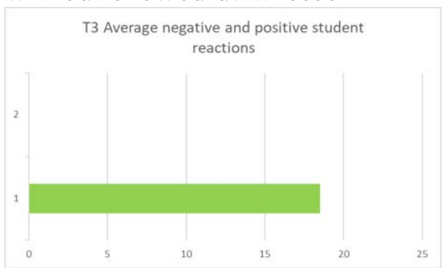
Number of positive responses to interactions- average 23 (skewed)
No negative reactions

- ***Three students responded better to teacher aide directions than to T3***
- ***Missed opportunities to follow through***
- ***Coped well with student in yellow zone and relationship evident in a student hug***
- ***Tishona reaction to interaction data skewed as she missed assessment and teacher was one-on-one for the last lesson of term.***

(3) Demonstrated reflective practice
(5) Almost half the others for pedagogy
(6) Almost double the others for reactive
(8) Very low for family and community

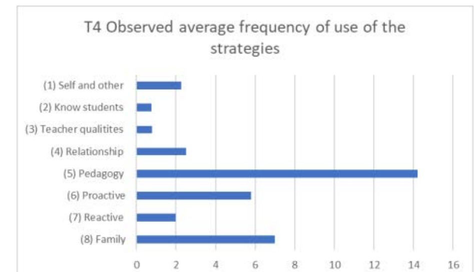


Number of positive responses to interactions- average (18.5) without skewed data lesson



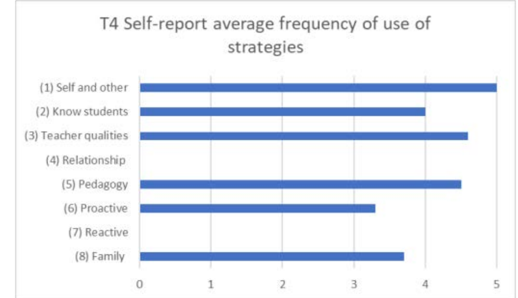
T4

Total 310 strategies implemented

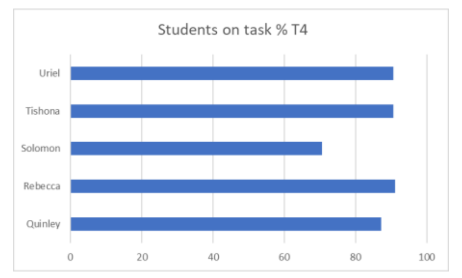


Average observed in themes
(1) Self and other observed 2.3
(2) Know students observed 0.8
(3) Teacher qualities observed 0.7

Incomplete responses as she saw herself as one day a week.

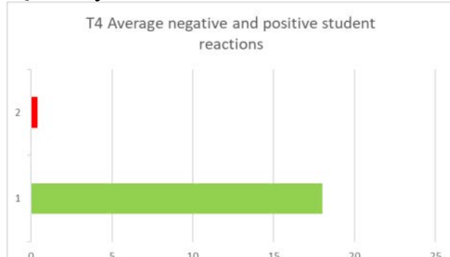


(1) Self and other self-rated 5.
(2) Know students self-rated 4
(3) Teacher qualities self-rated 4.6
(4) Relationship not rated



Quinley 87.2%
Rebecca 91.1%
Solomon 70.6%
Tishona 90.6%

- ***Conversation provided information for theme 1, including independent professional learning.***
- ***Lamented not having good relationships due to one hour a week.***
- ***Conscious choices about effective pedagogy task and***

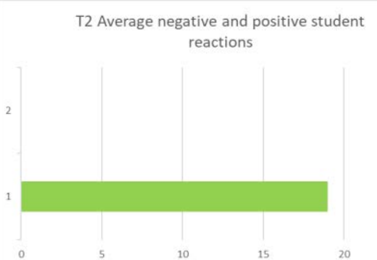
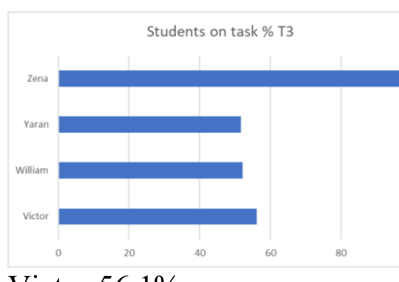
(4) Relationship observed 2.5 *(5)* Pedagogy observed 14.2 *(6)* Proactive observed 5.8 *(7)* Reactive observed 5.2 *(8)* Family and community observed 0.3 Comparisons *(1)* Due to a conversation scored high on theme *(4)* Scored lower than the other two in relationship *(5)* Scored high for pedagogy due to task and visuals *(8)* High for family and community due to task	*(5)* Pedagogy self-rated 4.5 *(6)* Proactive self-rated 3.3 *(7)* Reactive not rated *(8)* Family and community self-rated 3.7	Uriel 90.6% Number of positive responses to interactions with adults- average 18 One negative reaction each from Quinley and Uriel 	***resultant high score on connections to family and community.*** • ***Did not do follow through due to limited time, this was passed on to teachers.*** • ***High score for pedagogy was partly due to many visuals on the walls.*** • ***Students were motivated by painting more than they had been by writing and other activities.*** • ***Two negative responses to interactions.***

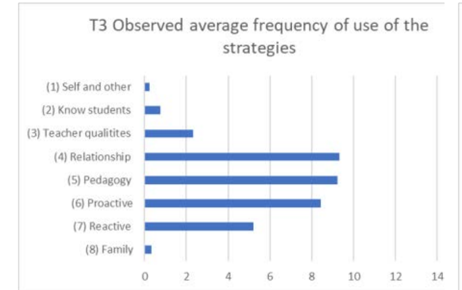
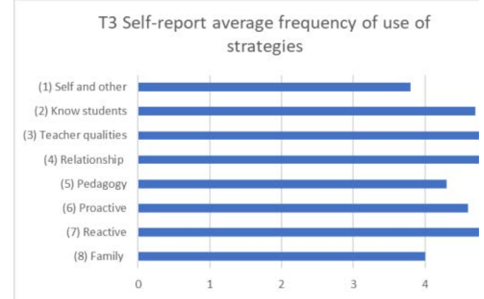
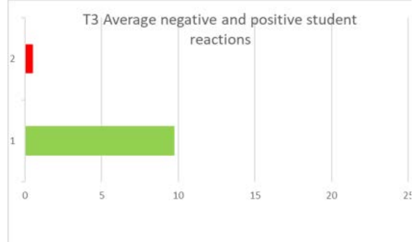
Note. The ratio is the number of on-task observations in relation to the total number of TASSAIS strategies used by the teacher.

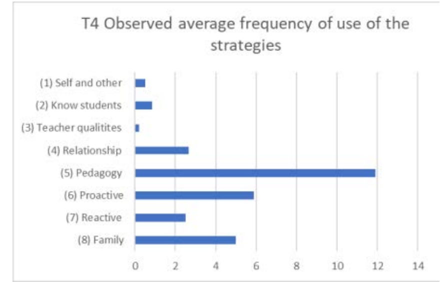
Table P 2

Comparison of Teachers with the Year 4/5 Class

Teacher	Observed teacher average use of strategies	Teacher self-reported average frequency of use of strategies	Students on-task	Observations of levels of behaviour, anecdotal and comparison data
T2	Total 458 strategies implemented T2 Observed average frequency of use of the strategies Average observed in themes *(1)* Self and other observed 1.0 *(2)* Know students observed 1.8 *(3)* Teacher qualities observed 4.0 *(4)* Relationship observed 6.6 *(5)* Pedagogy observed 11.3 *(6)* Proactive observed 10.8 *(7)* Reactive observed 2.4 *(8)* Family and community observed 4.3 Comparisons *(1)* Double the others for self and other	T2 Self-report average frequency of use of the strategies Rated herself lowest of the teachers *(1)* Self and other self-rated 3.8 *(2)* Know students self-rated 3.7 *(3)* Teacher qualities self-rated 3.9 *(4)* Relationship self-rated 4.3 *(5)* Pedagogy self-rated 3.9 *(6)* Proactive self-rated 3.9 *(7)* Reactive self-rated 3.8 *(8)* Family and community self-rated 3.3	Students on task % T2 Victor 82.2% William 80.6% Yaran 86.1 % Zena 90% High number of positive responses to interactions- average 19 No negative reactions to interactions	• ***Was able to settle two students after lesson with T3- see section 6.3.*** • ***Growled students with no visible neg affect.*** • ***Set clear boundaries about what was acceptable, particularly for Victor and Yaran.*** • ***Low level behaviours observed, off-task, daydreaming, not disturbing others.***

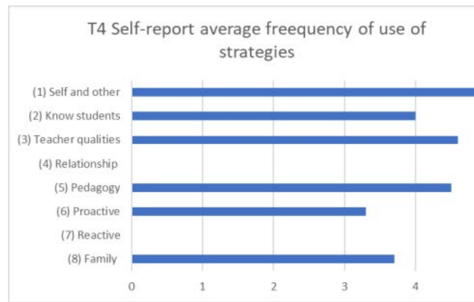
	(2) Double the others for know students *(3)* Much higher than T4 and 1/3 higher than T3 for teacher qualities *(4)* 1/3 higher than T3 and much higher than T4 for relationship *(5)* Equal to T4 and slightly higher than T3 for pedagogy *(6)* Double the others for proactive		• ***Zena was uncharacteristically off-task one lesson during NAPLAN practice, playing with her shoe.*** • ***Close relationships with students, with entertainment, facial expressions, and humour.*** • ***Good at judging student moods and giving a break then refocusing them*** • ***Displayed knowledge of family and community***
T3	Total 372 strategies implemented	 Victor 56.1%	• ***High level behaviours displayed by the students being observed e.g.: faking kicking teacher, disturbing the***

	 Average observed in themes *(1)* Self and other observed 0.3 *(2)* Know students observed 0.8 *(3)* Teacher qualities observed 2.3 *(4)* Relationship observed 9.3 *(5)* Pedagogy observed 9.2 *(6)* Proactive observed 8.4 *(7)* Reactive observed 5.2 *(8)* Family and community observed 0.3 Comparisons *(7)* Coped well with fight in the room, used reactive strategies well	 Self-reported as the highest user. *(1)* Self and other self-rated 3.8 *(2)* Know students self-rated 4.7 *(3)* Teacher qualities self-rated 4.8 *(4)* Relationship self-rated 4.8 *(5)* Pedagogy self-rated 4.3 *(6)* Proactive self-rated 4.6 *(7)* Reactive self-rated 5 *(8)* Family and community self-rated 4	William 52.2% Yaran 51.7% Zena 100% Number of positive responses to interactions- average 9.8 One negative reaction to interaction each from Victor and Zena 	***class, throwing food, hiding in shelves.*** • ***Boys had low on-task percentages.*** • ***Some boys returned to class teacher upset after the lesson with T3***
T4	Total 280 strategies implemented	Incomplete responses as she saw herself as one day a week.		• ***The task allowed the teacher to make connections with family and culture***

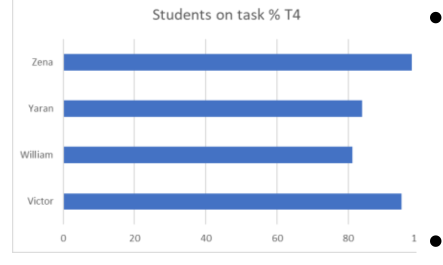


Average observed in themes
(1) Self and other observed 0.5
(2) Know students observed 0.9
(3) Teacher qualities observed 0.2
(4) Relationship observed 2.7
(5) Pedagogy observed 11.9
(6) Proactive observed 5.9
(7) Reactive observed 2.5
(8) Family and community observed 5.0

Comparisons
(3) Low for teacher qualities
(4) Low for relationship
(5) Equal to T1 and slightly higher than T3 for pedagogy

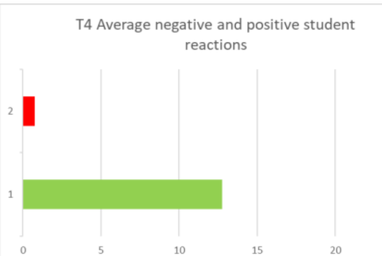


(1) Self and other self-rated 5.
(2) Know students self-rated 4
(3) Teacher qualities self-rated 4.6
(4) Relationship not rated
(5) Pedagogy self-rated 4.5
(6) Proactive self-rated 3.3
(7) Reactive not rated
(8) Family and community self-rated 3.7



Victor 95%
William 81.1%
Yaran 83.9%
Zena 97.8%

Number of positive responses to interactions- average 12.8
3 negative reactions to interactions from William



- ***Liaison officer was often present in the class due to previous behaviour***
- ***Class teacher T2 attended some classes to support behaviour, which changed when she left the room***
- ***The task made a difference to students e.g.: Solomon***
- ***The task made a difference to all children (anecdotal notes)***
- ***Before the class started the painting task, William had run around the room, chasing others. He was given two warnings,***

argued with the teacher and not followed through

- ***3 negative reactions to interactions recorded for William***
- ***Targeted the wrong student for one incident, which led to him having a bad mood and disengaged***
- ***Missed opportunities to follow through, names on the board, but not sent to buddy class.***

Note. The ratio is the number of on-task observations in relation to the total number of TASSAIS strategies used by the teacher.

Appendix Q
Evaluation of the TASSAIS List

The TASSAIS were suggested by Aboriginal and Torres Strait Islander students, staff, and families in Phase 1 of this study, and reported in Chapter 4. The list was refined in Phase 2 through a survey and Rasch analysis and reported in Chapter 5. The TASSAIS list was then used as an observation tool in classrooms in Phase 3, with the results reported in Chapter 6. This Appendix provides an evaluation and suggestions for future use of the TASSAIS list. The evaluations will include items not observed in Phase 3 and a rationale for these items remaining in the list; a list of the items that all teachers indicated that they used in the survey instrument; and a suggestion for two items to be added following classroom observations in Phase 3.

The four strategies not observed during Phase 3 of this study were: (Codes from the TASSAIS observation form in brackets):

- I am careful about creating attachments to one family or group of students because others may feel excluded (Attach).
- I teach my students about the importance of our classroom operating on the principles of equitable conduct (Equity).
- I explain to students that behaviours encouraged at school might be different from their home culture (School).
- I keep my word so students can learn to trust me (Trust).

The six attitudes not observed were:

- I understand that students may resent being told what to do by a teacher from the mainstream culture due to their history of colonisation (Resent).
- I understand that parents of my students may have bad experiences of school (Parent expec).
- I understand that some behaviours I see from my students may be due to cultural differences rather than deliberate misbehaviour (Differ).
- I understand that the communication patterns in my classroom might require my students to code-switch from home language (Codesw).
- I work to have objective perceptions about Indigenous students and families (Perceptions).

- I welcome parents into my classroom (Welcome).

The observations for Phase 3 were conducted at the end of a school year with experienced teachers, when some of the attitudes and strategies might not have been evident. These may be practices that are required to set up an appropriate classroom environment. I recommend further research at the beginning of a school year with teachers who are new to an Indigenous context, as these items may be evident at that time. These items were found to be relevant in praxis in my day-to-day work at the start of a school year with non-Indigenous teachers who were new to an Indigenous context.

Some items were identified as used by most respondents. In the Wright Map (Figure 6.6) most teachers reported using some of the strategies. Table P 1 lists these items.

Table Q 1

Items Used by all Respondents in Phase 2

Code on the Wright Map	Attitude/ Strategy	Full name
O56	S	I respond to problems between students quickly so the problems do not become bigger
E28	S	When a student is upset I use simple language when talking to him/her
K61	A	My students may not need eye contact when listening to someone
K63	A	I understand that the communication patterns in my classroom might require my students to code-switch from home language
O49	S	I have well established routines
O15	S	I teach students to respect and care for each other
O41	S	I commend students in an appropriate way for showing behaviours that are suitable for school
R14	S	I let students know through verbal and non-verbal cues that I believe in them
S59	A	I understand that parents of my students may have bad experiences of school
E27	S	I listen to both parties after an incident
E48	S	I follow through with consequences after an incident
R66	A	I understand that students may need to make a relationship with me before they will want to work for me
T29	S	I apologise to students when needed
O3	S	I model for students the behaviours I would like to see in my classroom
T47	S	I keep my word so students can learn to trust me
R45	S	I use my students' preferred names correctly when I address them
R8	S	I understand that I must show respect to students in order to be able to expect respect from them

Outcomes for Indigenous students would be improved if all teachers implemented the strategies outlined in Table Q 1. In future iterations of the TASSAIS list, if some of the attitudes and strategies need to be removed, it could be those strategies that all teachers self-report they use frequently. Given some variability in observed and self-report data (see section 6.4.2) I recommend investigating observed data further before any TASSAIS strategies are removed from the list.

I recommend that two strategies be added to the TASSAIS. The first is 'Teacher helped individuals', as this was important to the behaviour of Indigenous students. During observations this was recorded as a positive interactions in student observations. Helping students when they need help was a key factor in interviews and had an impact on student engagement. Table 6.8 showed that T1 and T2 interacted with students who needed support more frequently and proactively.

The second strategy I would add is 'Teacher actions that implement boundaries'. Strategies such as moving a student before behaviour begins, reminding students of the boundaries or offering a choice are not examples of follow through but are examples of the teacher reminding students of boundaries or expectations before a follow though action is required by the teacher.

Detailed training of observers will be required to ensure consistent identification of strategies, such as that which is undertaken by 4 Dimensions Classroom Observations. The format of the tool will evolve with use. I recommend that teachers undertake the survey, then receive training in the TASSAIS list, with time to implement the TASSAIS list in the classroom in an active, agentic way. This should be followed by observations from trained observers. Using a coaching method, teachers can improve their understanding and practice.

Appendix R
Relevant Teacher Professional Standards

1.4 Strategies for teaching Aboriginal and Torres Strait Islander students. Design and implement effective teaching strategies that are responsive to the local community and cultural setting, linguistic background and histories of Aboriginal and Torres Strait Islander students.

2.4 Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians. Provide opportunities for students to develop understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures and languages.

3.7 Engage parents/carers in the educative process. Plan for appropriate and contextually relevant opportunities for parents/carers to be involved in their children's learning.

4.3 Manage challenging behaviour. Manage challenging behaviour by establishing and negotiating clear expectations with students and address discipline issues promptly, fairly and respectfully.

6.4 Apply professional learning and improve student learning. Undertake professional learning programs designed to address identified student learning needs.

7.3 Engage with the parents/carers. Establish and maintain respectful collaborative relationships with parents/ carers regarding their children's learning and wellbeing

Appendix S
Possible Directions for Future Research

Table S 1

Possible Directions for Future Research

Method in Phase 3	Possible solution
Context was 100% Indigenous students	High school mainstream setting.
All teachers culturally aware	A wider spread of teacher participants.
One observer	2 observers.
Teacher and student observations at different times	Students observed, teacher video recorded.
Potential differences between teachers with mainstream classes not investigated	A mainstream class with a few Indigenous children and a 4 Dimensions Classroom Observation.