Road Testing Robinson et al (2009) - Does the “theory” work in practice?

A study of school performance against the instructional leadership behaviours of Robinson et al. (2009) Best Evidence Synthesis - School Leadership and Student Outcomes.

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Doctor of Education

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Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

(Signed)___________________________

Griffith University Supervisory Panel:

• Dr Helen Klieve
• Associate Professor Howard Middleton
• Associate Professor Sue Thomas
• Emeritus Professor Neil Dempster
Acknowledgements

All journeys of note, take time. Often it is not until the destination is reached that we realise that we have changed during our travel. I am grateful to Gillian who makes all things possible, and without whose blessing, love, support, patience, kindness, and unselfish acts this research would not have taken place.

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Finally, I would like to express my appreciation to the participants of this study. Without their willingness to respond and provide input the success of this study could not have happened.
Dedication

I dedicate this dissertation primarily to my father William Vance Avenell whose love of learning lit also the candle of my own flame. And as is fitting across generations, I dedicate this also to Jhanda, Katchia and Richard in the hope that they too shall always cherish that light in themselves.
Presentations in support of this thesis

Findings from this research were presented at a national and an international conference:


Findings from this research have in part been published via:


Abstract

In theory there is no difference between theory and practice, in practice there is.

School leaders matter for school success. Recognition of the importance of school leadership has led to increased emphasis on instructional leadership, however, while broad agreement exists on the importance, there is less consensus on what aspects of instructional leadership maximise best opportunity for student learning.

Several researchers in the last decade have distilled a summary of optimum leadership behaviours from research, across which there is much similarity. The most significant of these distillations is that of Robinson, Hohepa, and Lloyd (2009) who conducted the Best Evidence Synthesis (BES).

This study is unique in that whilst the leadership behaviours of the BES are pre-eminent in research theory, they had not been previously tested in practice. There is abundant theory, but does the theory work in practice?

Using the lens of Robinson et al. (2009) and six leadership dimensions drawn from their BES, this study across 127 schools and 1,612 teaching staff in a Catholic Education system located in Queensland used a mixed methods approach to examine the relationship between these leadership behaviours and school performance.

This study identified the presence of these leadership behaviours and established a direct relationship with student outcomes. Further, this research significantly elaborates on the specific instructional leadership behaviours for school leaders to successfully enhance student learning outcomes and identifies contemporary specific actions school leaders may employ to maximise student learning through teacher efficacy.

This research indicates the instructional leadership dimensions, drawn from Robinson et al.’s (2009) BES meta-analysis of direct evidence from 27 international quantitative studies, are applicable within the Australian Catholic context despite no Australian instructional leadership studies being included in that analysis.
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<th>Full Form</th>
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<td>ANOVA</td>
<td>Analysis of Variance</td>
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<td>BCE</td>
<td>Brisbane Catholic Education</td>
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<td>BES</td>
<td>Best Evidence Synthesis</td>
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<td>Chi Sq</td>
<td>Chi Square</td>
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<td>df</td>
<td>degrees of freedom</td>
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<td>ELP</td>
<td>Educational Leadership Practices Survey</td>
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<td>ICSEA</td>
<td>Index of Community Socio-Educational Advantage</td>
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<td>MANOVA</td>
<td>Multivariate Analysis of Variance</td>
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<td>MYCEEDYA</td>
<td>Ministerial Council for Education, Early Childhood Development and Youth Affairs</td>
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<td>NAPLAN</td>
<td>National Assessment Program of Literacy and Numeracy</td>
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<td>NZCER</td>
<td>New Zealand Council for Educational Research</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<tr>
<td>OLP</td>
<td>Overall Leadership Practice</td>
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<td>P</td>
<td>principal</td>
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<td>professional learning</td>
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<td>Respondent</td>
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<td>SPSS TAS</td>
<td>SPSS Text Analytics for Surveys</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences (software)</td>
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<td>T</td>
<td>teacher</td>
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Introduction

*Learning and leadership are indispensable to each other.*

John F. Kennedy, 1963

Thomas and Watson (2011) have advised that quality has been a policy focus in Australian education for over 20 years as exemplified through a series of “Quality of Education Reviews”, Senate or Parliamentary Inquiry Committees and new national bodies for the profession, all of which “heralded the onset of an intense national policy focus on the quality of teachers and subsequently school leaders” (Thomas & Watson, 2011, p. 192). Similarly, Dinham (2013) has noted that there has been a major and growing international and national focus on improving school, teacher and student performance for decades and that in Australia, there has been, on average, one major state or national inquiry into teacher education every year for the past 30 years (Dinham, 2006, 2008).

A greater focus on student learning outcomes and school performance has required educational leaders, teachers, parents, students and community leaders to re-examine traditional practices of schooling (Duggan, 2009; Horn, 2009) and to discern those practices substantial to the achievement of students. Therefore, an explicit theory and understanding of what represents good instructional leadership practices is needed to enhance patterns of performance in schools (Elmore, 2003; Hallinger, 2003; Marzano, 2006; Murphy, Elliott, Goldring, & Porter, 2007).

Further, because leaders have the ability to use their leadership behaviours to enable teachers to teach more effectively (Darling-Hammond & Ducommun, 2010), it is imperative to be able to optimise school outcomes, to discern the specific instructional leadership practices that prove most beneficial in supporting teachers and hence student learning.

This research seeks through the framework of the Best Evidence Synthesis (BES) of Robinson, Hohepa, and Lloyd (2009) to confirm within an entire schooling system the perceived importance of the specific instructional leadership practices, identified in the BES, that enable teachers to optimise student learning outcomes, and then secondly, to validate the efficacy of these practices across an entire schooling system.

1.1 Statement of the Problem

There is a broad agreement that principals’ leadership practices play a pivotal role in ensuring high learner achievements (Bush, Joubert, Kiggandu, & van Rooyen, 2010; du Plessis 2013; Castle & Mitchell, 2005; Sim 2011). To maintain high levels of learner achievements, principals...
need to be effective leaders and should function as instructional leaders (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Robinson, Lloyd, & Rowe, 2008; Sofo, Fitzgerald & Jawas, 2012) and in doing so, endeavour to enhance the instructional practices of teachers (Fink, Markholt, & Bransford, 2011).

Teacher effectiveness is viewed by many as the single most important school-related contributor to student achievement (Dempster, 2011; Dinham, 2013; Hattie, 2009). Similarly, for several decades now, empirical studies have testified to the significant role that school principals’ leadership style and professional conduct play in explaining the effectiveness of school processes and outcomes (Fullan & Watson, 2000; Leithwood, Anderson, Mascall, & Straus, 2010; Silins & Mulford, 2004). Also it is recognised that school leaders are the biggest single influence on teacher effectiveness (Qian & Walker, 2011; Robinson, 2011).

There are many researchers and theorists who have contributed to the understanding of leadership and particularly instructional leadership. Although there is much research depth and integrity, the described instructional leadership practices in the Best Evidence Synthesis (BES) by Robinson et al. (2009) are suggested as the most likely to produce the required outcome of best influencing teachers to maximise student achievement. However, having discerned such instructional leadership practices in theory, what in practice, is the relationship of the presence of these practices in schools to student outcomes?

1.2 Purpose of the study

The purpose of this study is to inquire into the relationship between the most significant distillation of optimum leadership behaviours of the BES of Robinson et al. (2009) and school performance. In essence, this study is to determine if the Dimensions of the Best Evidence Synthesis work in practice. If there is a high presence of the BES leadership behaviours in a school, is it likely to be a high performing school? Similarly if there is a low presence of the BES leadership behaviours in a school, is it likely to be a low performing school? Further, are there particular practices within each of the leadership behaviours that teachers attribute as evidence?

In examining this relationship of leadership behaviours and school performance, the research also examines the relationship between teacher and principal perceptions and whether there are any significant demographic variables, such as teacher experience, that may assist in future leadership of schools on behalf of student learning.
1.3 BES Leadership Dimensions

The BES has five leadership dimensions. In this research the 3rd Dimension – Planning, Coordinating and Evaluating Teaching and the Curriculum, has been addressed through its two component parts, leading to the following six dimensions of:

1. Establishing Goals and Expectations (Goals and Expectations)
2. Strategic Resourcing (Strategic Resourcing)
3. Planning, Coordinating and Evaluating the Curriculum (Curriculum Quality)
4. Planning, Coordinating and Evaluating Teaching (Quality Teaching)
5. Promoting and Participating in Teacher Learning and Development (Promoting Professional Learning)
6. Ensuring an Orderly and Supportive Environment (Safe Orderly Environment)

The origins and explication of these leadership dimensions will be examined in the literature review.

1.4 The Research Questions

This study will, within schools in a Queensland Catholic education system, explore the relationship between the presence of leadership behaviours and school performance.

Specifically, this study will use the lens of Robinson et al. (2009) and the leadership behaviours drawn from their BES to explore the following research questions:

1. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and school performance?
2. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours?
3. In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?
4. Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years supervised by current principal?

1.5 Significance of the Study

According to the National Association of Elementary School Principals (2008) and Kaster (2010), schools have changed so that principals can no longer focus only on the organisational functions of the school but must also be instructional leaders placing student learning as their
first priority. However, MacBeath and Dempster (2009) have observed that all principals struggle to put authentic learning first.

Until this century there had been limited research on the specific leadership practices that actually influenced student achievement (Hallinger & Heck, 1996; Supovitz & Christman, 2003). With this in mind, several researchers in the last decade have distilled a summary of optimum leadership behaviours from research. Examples of these are Elmore and Burney (2000), Leithwood (2003), Witziers et al. (2003), Darling-Hammond, Davis, LaPointe, and Meyerson (2005), Marzano (2006), Chin (2007), Hallinger (2007), Scheerens, Luyten, Steen and Luyten-de Thouars (2007), Zammit, Sinclair, Cole, Singh, Costley, Brown and Rushton (2007), Creemers and Kyriakides (2008), MacBeath and Dempster (2009), Louis, Leithwood, Wahlstrom, & Anderson (2010), Robinson et al. (2009) and Crowther (2010). There is much similarity across these leadership characteristics (Dempster, 2009).

Significant among these distillations is that of Robinson et al. (2009) who conducted a “high quality meta-analysis of published research” (Fullan & Levin, 2009, p. 14), which examined the direct and indirect links between the leadership of Principals and student outcomes. The BES of Robinson et al. (2009) utilised effect size to identify the specific instructional leadership practices that make most difference for students’ learning outcomes.

Given that there is very little Australian research utilised within the Robinson et al. (2009) study and that there is little contemporary Australian research that directly links school leadership with student outcomes; the question is raised as to whether the leadership dimensions that emerged from the their analyses are applicable in the Australian context.

Additionally, whilst the leadership behaviours of the BES are pre-eminent in research theory, they have not been tested in practice. In particular, no study has ever been conducted to determine teacher perceptions of the presence of the Robinson et al. (2009) BES behaviours, practices and actions within Queensland and/or Catholic schools, or the perception of the behaviours, practices and actions that teachers value most. Further, no research has attempted to establish a relationship between these perceptions and that of the school leader’s behaviours or against student achievement in schools.

It is not enough to know that “leadership matters” and to make leadership development a key priority, it is also important to know more about what aspects of school leadership are more or less effective (Halasz, 2011). Therefore, a study that attempts to move beyond models of leadership and initiates examination of aspects of principal behaviours and actions has merit. The study could reveal the extent to which principals engage in research-based leadership behaviours and practices as reported by principals and teachers. Second, the study could
reveal if principals' engagement in the practices as reported by principals and teachers can be used to predict the likelihood that the school will enhance student performance outcomes. The results of the study may lead to further investigation of specific principal behaviours and actions that impact school conditions which lead to increased student academic success. In addition, the findings could also be used for the purpose of redesigning principal professional development programs and restructuring the principal's role in schools.

The strengths of this BES lie in its potential to be used by school leaders as a formative tool. The BES focuses specifically on the kind of leadership that principals can use to most effectively facilitate student learning. With an impressive evidence base, the BES identifies the dimensions of leadership that have the most impact on student learning. As a consequence, existing leadership practices could be adapted so they are better aligned to the overall goal of instructional improvement (Robinson, 2006). This research is premised on such a desire so that leadership development programs, which reflect these leadership dimensions, could be used as a background to best optimise student learning.

Chapter Two locates this field of study via a review of contemporary national and international research and documentary evidence relating to leadership, leadership behaviours, teacher perceptions, school performance and student outcomes. This includes published texts, doctoral dissertations, online research associations and government information, conference papers and research reports as well as printed and electronic journals.

Chapter Three describes the methodology of this study and then in Chapter Four the data is analysed to articulate findings with regard to the respective research questions before being integrated in Chapter Five as discussion and conclusions summarised by both quantitative and qualitative research phases. Chapter Six locates the research in the contemporary context, advises of potential limitations and makes recommendations for future research and for future policy implications.
Literature Review

*We have not found a single documented case of a school improving its student achievement record in the absence of talented leadership.*
Leithwood and Louis, 2012, p. 3

2.1 Structure

To locate this field of study, the literature initially examines the importance of teachers and the effects of school leadership, then the origins of instructional leadership through the generations of leadership theory and then reviews instructional leadership literature relevant to leadership, leadership behaviours, teacher perceptions, school performance and student outcomes. This chapter also examines the research associated with instructional leadership and profiles the types of studies and research design and methodologies involved. Finally, the chapter identifies the gaps in contemporary knowledge relevant to instructional leadership and then enunciates the purpose of this study and its value to the field.

Many terms such as school climate, school culture, and school capability are utilised in this research literature review and are taken at their presumed face value. Similarly, because such are not the focus of this research, their meaning is inferred from customary practice.

2.1.1 The Importance of Teachers

Studies on learning indicate sufficient evidence that careful and sustained attention to the quality of instruction and the conditions of learning are conducive to higher quality of instruction and better learning (Al-Barwani, 2011; Resnick & Gleman, 2002).

Effective schools are seen as those whose students’ learning is optimised (Mulford, 2013) and it is teachers who make the most substantial in-school difference to the achievement of students (Dinham 2013; Hattie, 2009; Mulford, 2006; Rowe, 2003). Substantial research in Australia (Clarke & Wildy, 2011; Cuttance, 1998; Dinham, 2008; Mulford, 2006; Rowe, 2003), and internationally (Hattie, 2009; Marzano, Waters, & McNulty, 2005; Muijs & Reynolds, 2001; Nye, Konstantopoulos & Hedges, 2004; Robinson, 2006; Robinson et al., 2009) corroborates that despite all other factors, the quality of student’s learning inside the classroom is inextricably linked to the quality of teacher’s teaching.

As Danielson (2002) has put it, teacher effectiveness is the single most important school-related contributor to student achievement and that once children enter school, teachers exercise more influence on students’ academic growth than any other single factor (Ball & Rowan, 2004). Alton-Lee (2003, p. 2) puts this figure “up to 59%, or even more, of the variance in student scores” whilst Hattie (2009) more conservatively in Figure 1 captures...
diagrammatically the levels of influence on student achievement as discerned from his own research.

Despite the landmark 1966 Coleman Report, which established that schools had less an influence on student achievement than family background and home environment, detailing a study of over 600,000 students enrolled at over 4,000 schools (Coleman et al., 1966), research over the past 45 years has shifted the responsibility and control for student achievement from the home to the school (Brookover et al., 1979; Lezotte, 1991; Muijs et al., 2004; Olsen, 2013; Resnick, 1999; Rutter et al., 1979).

**Figure 1 - Sources of Achievement Variance**


### 2.1.2 The Effect of School Leadership.

Compelling research evidence shows that quality leadership makes a difference to children’s learning and achievement no matter the context (Bishop, 2011; Day, Hanson, Maltby, Proctor, & Wood., 2010; Hallinger, 2011; Leithwood, Day, Sammons, Harris, & Hopkins, 2006; Lovett, Dempster, & Fluckiger, 2014; MacBeath & Dempster, 2009; Masters, 2009; OECD, 2008; Robinson, 2011). Even taking into account the complexity of the impact-mechanisms, the impact of school leadership on pupil learning outcomes seems now to be proved by strong research evidence (Halasz, 2011).

Whilst principals are not the only leaders in a school (Gurr & Drysdale, 2013), and Wahlstrom et al. (2010) have described ways in which leadership may be dispersed, nevertheless principal leadership research remains prevalent because of the importance of this role to school improvement (Gurr & Drysdale, 2013; Ylimaki & Jacobson, 2013).
Of the variables that a school can control, school leadership has a significant influence on student outcomes, second only to classroom teaching (Bamburg & Andrews, 1991; Day et al., 2010; Leithwood et al., 2006; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Qian & Walker, 2011; Sammons et al., 2014; Waters, Marzano, & McNulty, 2003;) and this is because school leaders are the biggest single influence on teacher effectiveness (Bass, 1990; Brown & Anfara, 2002; Bryman, 1996; Cotton, 2003; Dinham, 2009; DuFour, DuFour, & Eaker, 2008; Korkmaz, 2007; Leithwood et al., 2004; Marzano, 2006; Masters, 2003; Robinson 2011).

Research findings have revealed the powerful impact of leadership on school effectiveness and improvement (Harris, Day, & Hadfield, 2003) and student learning (Creemers & Reetzig, 1996; Hattie, 2009; Marzano, Waters & McNulty, 2005; Robinson et al., 2008; Robinson et al., 2009) through enhancing the capacity of teachers. Schools that are effective and have the capacity to improve, have leaders who make a significant and measurable contribution to the effectiveness of their staff (Giffing, 2010). Effective school leadership therefore means creating the conditions under which teachers can perform effectively in schools (Kemmis et al., 2014; Lingard, Hayes, Mills, & Christie, 2003; Muijs, 2006).

Educational leadership is a key influence on the quality of teaching and learning and the learning climate (Darling-Hammond, 1996; Dinham, 2007; DuFour, DuFour & Eaker, 2008; Earley et al., 2012; Fullan, 2006; Schechler, 2008; Schechler & Feldman, 2010). This link is both direct and indirect (Dinham, 2008; Earley & Evans, 2004; Hallinger & Heck, 2003; Hattie, 2009; Mumford & Sihls, 2003; Robinson et al., 2009; Witziers, Bosker, & Kruger, 2003).

Research by Robinson (2007) and meta-analysis by Robinson et al. (2009) has shown that the leadership of schools where students perform above expected levels looks very different from that in otherwise similar schools, where students perform below expected levels. Lovett, Dempster and Flückiger (2014) in researching within the Australian indigenous leadership context reached the same conclusion that the difference of student outcomes is attributable to the way in which school leaders behave with teachers and the concomitant climate of the school which mitigates teacher involvement and productivity.

It is clear from research that school leaders are in a strong position to make a difference to children’s lives, second only to classroom teaching (Masters, 2008). As Marzano et al. (2005, p. 47) stated, “An effective leader builds a culture that positively influences teachers, who, in turn positively influence students”.

Similarly, Darling-Hammond et al. (2005) and Clarke and Wildy (2011) have asserted that principals play a significant role in affecting student achievement because teachers’ perceptions of principals’ instructional leadership capabilities are significant determiners on
principals’ influence in changing instructional practices. This aspect of teacher perceptions of school leadership is a critical element of this proposed research. Blase and Kirby (2009, p. 126) have agreed that: “If teacher behaviours carry primary weight and leaders’ secondary, then the behaviours of leaders to motivate teachers for school improvement are doubly important”.

Sergiovanni (2007), and also Fuglestad and Lillejord (2002) have signalled that leadership is crucial to the development and maintenance of school culture whilst Lumby and Foskett (2011) have indicated the need for research that enables a better understanding of what role leadership plays in this process. Schein (2004, p. 2) has gone further to state that “whilst leadership and culture are two sides of the same coin; the role of leadership is underemphasised in research”.

While research is clear on the impact of teachers on student achievements (Nye, Konstantopoulos & Hedges, 2004; Rivkin, Steven, Hanushek, & Kain. 2005; Rockoff, 2004), it is less clear as to the extent differences in the level of instructional support provided outside the classroom explains differences in observed instructional quality and outcomes across schools (Smith et al., 2012).

Whilst Barber, Whelan, and Clark (2010) and also Goldring, Porter, Murphy, Elliott, and Cravens, (2009) note there is a growing consensus among practitioners and researchers around the “essential components” of successful schooling that have emerged from years of research, far less is known about the ways in which educators develop, implement, integrate, and sustain them (Smith et al., 2012).

Premised on the assumption that school leaders normally seek positive results centred on student academic improvement (Darling-Hammond, 1993; Dufour and Eaker, 1992; Fiske, 1992; Fullan, 2003; Goleman, 2000; Marsh, 2000), the implication for future research is how the behaviours of leaders which directly influence school climate and teacher motivation, also influences student learning.

2.1.2.1 School Leadership Effects Research.

School leadership is one of the most observed and least understood educational phenomenon (Burns, 1978) but nevertheless there is a ‘critical connection’ recognised between the principal and other formal leaders, with the classroom teachers, who have the most direct form of instructional leadership in their immediate contact with student learners (Earley et al., 2012; Leithwood & Louis, 2012).
A study of the research on the effects of leadership indicates that subthemes consistently emerge along the lines of (a) Teacher self-efficacy, (b) Culture of learning, (c) Work environment, (d) Organisational climate, and (e) Student learning. Indicative research has been selected to examine and explore these concepts.

Charf (2009), in examining how teachers perceptions of leadership shaped their sense of self-efficacy, used an exploratory approach to research self-efficacy in Nebraskan middle school teachers and ascertain what principals may have done to build this. She found that teachers had definite perceptions of leadership behaviours and that these perceptions were critical in shaping their sense of self-efficacy. In suggesting further exploration in different socioeconomic areas, she also recommended that researchers utilise a set of specific leadership behaviours on which teachers could indicate frequency of application, with a further link to correlations with teacher self-efficacy. Schechter and Feldman (2010), having also researched and acknowledged self-efficacy in the context of teachers’ levels of commitment, also suggest similar future research.

Williams (2009) whilst also researching self-efficacy considered the situation of leaders deliberately attempting to enhance teachers’ skills. She utilised a case study approach to find that effective leaders were those who possessed the skills to shape a culture of learning through engaging teacher perceptions around their personal self-efficacy. Essential to teacher self-efficacy was how they perceived their leader perceived them. In acknowledging the single case study limitations of her research, she recommended, however, further exploration of what leadership practices might impact on teacher perceptions and the influence of these leadership practices on student achievement.

Similarly Ngcobo (2010), in ethnographically studying leadership associated with good academic performance, found that leadership in good schools responded to the perceived needs of the school staff. In acknowledging the exploratory and qualitative nature of her study in South African secondary schools, Ngcobo (2010) suggested the need for further research to explore more deeply in a comparative way, leadership and teacher perceptions and particularly to determine whether perceptions of teachers’ needs in good schools were aligned with leadership perceptions of teachers’ needs.

Also investigating the role of principals in establishing positive work environments, Maynor (2010) used descriptive interviews with 2 principals and 10 teachers across two Carolina elementary schools. He utilised perceptual input from these people to determine that principals played a significant role in developing and maintaining the school work environment and that both principals and teachers perceived the school’s work environment to have an
impact on student learning. Productive environments were seen to impact favourably on student learning. He recommended future research utilising a common set of leadership behaviours as a background for frequency of occurrence of discussions and to also contrast this with teacher perceptions of the value of these behaviours in contributing to the quality of the work environment, also referred to as organisational climate.

Whilst not an educational study, other organisational climate research across 300 Australian businesses in 2008 by Larson and Poirrot for the Hay Group cited the critical influence of leadership on both individual learning and organisational learning. Their research and that of others found that leadership behaviours generally were 70% responsible for the perceived quality of the work environment, which in turn had significant impact on whether workers were willing to learn or take risks, individually or collectively (De Cremer, 2002; Dinh, Lord, & Hoffman, 2013; Hay Group, 2008; Hoy & Miskel, 2013; MacBeath & Cheng, 2008). The quality of the work environment was evidenced as a key determinant of job satisfaction such that leadership in the workplace was acknowledged as important for creating and sustaining the conditions for climate, productivity and innovation (Braun, Peus, Weisweiler, & Frey, 2013; Dinh et al., 2013; Gerstner & Day, 1997; Hmieleski, Cole, & Baron, 2012; Jackson & Johnston, 2012; Leroy, Palanski, & Simons, 2012; Orazi et al., 2014; Peterson, Galvin, & Lange, 2012; Schyns & Croon, 2006; Wang, Sui, Luthans, Wang, & Wu., 2012; Wilderom, van den Berg, & Wiersma, 2012; Zacher & Jimmieson, 2013).

In exploring this theme in the educational context, De Nobile (2010) found that nearly 1,000 staff across 110 Catholic primary schools in New South Wales, Australian Capital Territory and Queensland rated the quality of the work environment, indicated by openness of communication, as positively linked to their job satisfaction and negatively linked to their occupational stress. The issue of openness of communication was intricately linked to trust. The findings reported that openness of communication provided an opportunity for staff to be heard on issues, offer support and air concerns which in turn facilitated positive working relationships and a collegial climate. Obversely, lack of openness was counterproductive to staff morale so that apathy and reduced commitment was evident. Although not explored in the De Nobile (2010) study, there is the corollary that openness of communication therefore mitigates student learning potential.

Similarly, Alimo-Metcalfe and Alban-Metcalfe (2005), in citing empirical evidence drawn from over 800 health and local government organisations, indicated that engagement of staff is predicated on collaboration and quality relationships especially with leaders, and is a subject
that is under-researched (Wasonga & Murphy, 2010) with respect to employee performance. In the school context this could be student learning outcomes.

In seeking to extend the research on how leadership behaviours impact on student learning outcomes through staff engagement, Jackson and Bezzina (2010) drew from staff surveys and interview data with four special school principals identified by the New South Wales education system as being successful in providing for the needs of students with disabilities. In the process of this exploration, descriptions of the ways in which principals chose to engage with staff showed a range of contrasts. Although expressed in different ways, staff and principals’ perceptions in the Jackson and Bezzina (2010) study showed that in at least one high performing special school, staff and principals often had low opinion of principal presence and engagement. To date, prior research has indicated that teacher perception in high performing schools has consistently been positive regarding principals’ presence and engagement. Jackson and Bezzina (2010) recommended wider research across other school sectors as well as utilising a broader database to determine teacher perceptions of leadership.

Further, over the past two decades there have been many examinations of the relationship between the leadership behaviour of school principals and the enhancement of organisational performance (Orr, 2006). Indicative of this research was a 5-year study finalised in 2010 which confirmed that school leadership was from the school perspective, the second most important influence on student learning, ranking closely behind classroom instruction. Commissioned by the Wallace Foundation and produced by the Universities of Minnesota and Toronto the study examined, via a survey of 8,000 teachers and administrators, the characteristics of effective school principals and student achievement. Whilst concluding that the research findings validated the link between leadership and learning, the study commented on decision-making structures, shared leadership and leadership behaviours but did not comment on teacher perceptions of the relationships between all involved (Louis, Leithwood, Wahlstrom, & Anderson, 2010).

Herrera (2010) however, did comment on teacher perceptions of the relationships between leadership behaviours and learning. In a large scale study, Herrera (2010) sought to determine if there was a link between principals’ level of engagement in leadership practices and whether accountability measures were met. Using 1999 meta-analysis data from USA national education census data sets, drawn from nearly 10,000 principals and 56,000 teachers, he used logistic regression analysis to determine principal and teacher perceptions of levels of engagement in leadership practices. In finding perceptual differences across principal and teacher groups as to which responsibilities were predictors of success, he also concluded principal and teacher perspectives could be used to predict whether a school would meet
minimum accountability requirements. In doing so Herrera (2010) recommended a further examination between principal perceptions of their own leadership practices and teacher perceptions of their principal’s leadership behaviours utilising more recent data sourced through an alternative methodology that was more contextually sensitive, and more qualitatively illustrative.

The conclusion drawn from this research is that effective leaders are those who possess the skills to shape a culture of learning and that principals play a significant role in the development of positive school work environments, which in turn impact favourably on student learning. In summary, there is a considerable amount of work in the area of educational leadership, but relatively little that examines the impact of leadership on student attainment (Whitty & Whitty, 2011) with authors such as Leithwood et al., (2004) identifying the need for further consideration of this.

2.1.3 Leadership knowledge and skills that raise school capability

Leadership is important in sustaining and promoting growth and improvement and leadership characteristics impact on student’s performance (Drysdale, Goode, & Gurr, 2011).

Despite the multitude of ways in which leadership might be conceptualised, Northouse (2012) identified the following components as central to the phenomenon: (a) leadership is a process, (b) leadership involves influence, (c) leadership occurs in groups, and (d) leadership involves common goals. Therefore, leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2012), in this case, teacher efficacy.

Given that the core business of school leadership is enhancing student learning and that this is primarily achieved through teacher effectiveness (Hattie, 2009; Robinson et al., 2008) school leaders not surprisingly now work concertedly at enhancing teacher’s classroom capacity. Where this is the case, it is often known as pedagogical or instructional leadership (DuFour et al., 2008; Elmore, 2004; Hallinger, 2005; Robinson et al., 2009; Silins & Mulford, 2002).

Whilst leadership for learning is made up of certain core actions, despite the diversity of the parties involved and their roles (Ezzaki, 2011), some leadership practices in instructional leadership contribute directly to student success and some contribute indirectly to student success (Reitzug & West, 2011). Direct contribution is through helping teachers engage students (Stewart, 2006), by having an active role with instructional practices (Mark & Printy, 2003), and helping teachers implement quality instruction (Bottoms & O’Neill, 2001; Kaster, 2010). Whilst principals do have a small direct influence on student learning (Supovitz, Sirinides & May, 2010), they exert most influence on student outcomes indirectly through
teachers (Robinson, 2011) because these influences are mediated through other factors (Leithwood et al., 2010; Leithwood & Jantzi, 2008; Nir & Hameiri, 2014; Witziers et al., 2003).

Particularly, researchers propose that successful leaders influence student academic achievement through developing and supporting effective teachers (Darling-Hammond et al., 2005; Kaster, 2010; Leithwood & Reihl, 2003) and creating an environment that focuses on learning (Protheroe, 2006).

According to Castleberry and Wald, (2000) and Lambert (2003), the capacity of principals to act as instructional leaders is the most critical factor in school improvement because teacher behaviours are influenced by principals’ behaviour and therefore developing human relation skills, building trust, making sound decisions, resolving conflicts, and fostering collegial working conditions are what successful principals do to influence instruction (Bulach, Boothe, & Pickett, 2006).

It is impossible to improve school performance in the absence of a skilled and knowledgeable leader because the principal plays a critical role in a school’s success (Gorton, Alston, & Snowden, 2007; Leithwood, Jantzi, Silins, & Dart, 1992; Leithwood et al., 2004; Thomas, 1997). They must develop the culture, structure and processes to support, facilitate and lead vibrant learning communities (Mitchell & Sackney, 2000). In schools that had made an organisational shift to improved student outcomes, the principal acted as the ‘catalyst’ (Leithwood et al., 2004) or ‘key’ (Gurr, 1997) to improved teacher performance because they controlled the climate of instruction within the school through their actions and behaviours. As Sammons et al. (2014) note, “ultimately the argument returns to the relationship between school leadership and student outcomes” (p. 566).

Only this century has there been rigorous research on leadership practices that actually influenced student achievement (Supovitz & Christman, 2003). Such studies of schools, where achievement on measures of accountability is high, have identified specific instructional leadership practices that mitigate the influence of demographic characteristics (Elmore & Burney, 2000; Leithwood & Steinbach, 2003; Darling-Hammond et al., 2005; Hallinger, 2007; Robinson et al., 2009).

2.1.3.1 Leadership skills and school capability research

In a process of discovering attributable leadership behaviours in schools seen as effective, Crowther (2010) used descriptive data from teachers and principals of eight Victorian government primary and secondary schools identified as successful through student achievement data and synthesised these descriptors into leadership constructs. Working from
perceptions to traits he identified that “the principal was primarily the linchpin in mobilising the whole school revitalisation process” (p 29) and that this behaviour was seen as generalisable across all schools.

Reimer (2010) also did the same in Minnesota in backward mapping leadership practices of principals in four high poverty schools that were “beating the odds” in reading. She identified principals’ actions conducive to the establishment of professional learning communities and in doing so noted the positive impact that leaders had on classrooms. Reimer (2010) recommended further research of a broader geographical nature with a larger sample size. Both Crowther (2010) and Reimer (2010) supposed that principals who replicated these behaviours would have successful schools. At the same time Bennett (2010) in North Carolina utilised elementary teachers’ perceptions to show consistency in their beliefs of the leadership strategies they perceived would be effective in sustaining their schools.

Similarly, in seeking to research whether principals’ instructional leadership behaviours effect classroom instruction, Kaster (2010) also sought to discern whether teachers perceived a common set of instructional leadership behaviours of which they approved. Wisconsin elementary teachers consistently agreed that principals made a difference to classroom instruction and that relational skills were the core of desired behaviours. Whilst Kaster recommended a replication of the study with a different population sample to determine if consistency of teacher perception is transferable and whether more quantifiable comment could be made as to the difference in student learning outcomes, no comparison has been made as to the sets of behaviours arrived at either deductively (Crowther, 2010; Reimer, 2010) or inductively (Bennett, 2010; Kaster, 2010).

In a more finely-focused sequential exploratory study across 72 teachers in two Texas high schools, Alexander (2010) examined teachers’ perceived leadership style of principals. Not only was the style of the principal important in determining teacher retention, teachers’ perceptions as to why teachers stayed teaching or left the profession were directly attributed to leadership behaviour. In finding that high teacher attrition detrimentally affected student performance, Alexander (2010) recommended further research that measured and compared teachers and principals perceptions and suggested that this be backrounded with “good retention” behaviours and a correlation to student performance.

From the perspective of principals commenting on principals, Jewett-Ramirez (2009) investigated principals’ perceptions of professional learning helpful in addressing their own leadership challenges. In attempting to summarise best practice so as to design future learning
for other principals, Jewett-Ramirez (2009) also noted that principals’ leadership quality is dependent on their being observant of the impact of their behaviour on others and subsequently modifying this to maximise the quality of interactions between teachers and themselves. Further research could examine whether such leaders were aware of and responsive to the perceptions of teachers’ preferred behaviours of their school leadership.

In the only example available of the utilisation of a standardised state-produced audit of principal effectiveness, with teachers from six blue-ribbon (high-achieving) schools and six non-blue ribbon schools in Pennsylvania, Giffing (2010) compared and contrasted the data sets from the two groups to examine teacher perceptions of the most effective practices of principals. He found that all teachers in both school groups perceived their principals to be effective. This outcome is provocative if it is assumed that a non-blue ribbon schools is a low achieving school by virtue of the fact that they did not have blue ribbon status. He recommended further research to expand on the correlation between principal and teacher perceptions and school effectiveness.

From one-hour “conversations” with 10 middle school principals from Virginia, Sanzo, Sherman, and Clayton (2011) synthesised four “common themes of practice”. As the rationale of the study they cited the lack of research and the necessity to find successful practices to improve student achievement. They also advocated replication of this small scale non-generalisable context-bound research on a larger and more robust scale.

From a review of journal articles, studies and professional literature, Dumas (2010) identified nine elements which principals must know in order to create a culture of collaboration. He then developed a web-based Likert-scale self-assessment survey for 92 high school principals in Nebraska to measure the extent of these in practice. The overarching research question for this study aimed at discovering, “Do principals know what they must do to create a collaborative workplace environment for teachers?” (Dumas, 2010, p. 3). This study found that principals thought they knew what they had to do to be successful school leaders. Dumas (2010) then raised questions for future research, as to why this is true, as well as the need for investigating correlations with other groups of educators and their comparative assessment in similar areas.

Key points emerging from this indicative range of research pertinent to leadership behaviours is that many studies have explored leadership as a ‘micro concept’– investigating leaders themselves or the immediate environments in which they work, rather than viewing leadership as a collective way of working. The research also indicates that principals think they know what they have to do to be successful school leaders.
Across Australia, schools are grappling with the twin notions of accountability and instructional leadership. The National Assessment Program of Literacy and Numeracy (NAPLAN), has required educational leaders, teachers, parents, students and community leaders to re-examine traditional practices of schooling (Horn, 2009). According to the National Association of Elementary School Principals (NAESP; 2008) and Kaster (2010), schools have changed so that principals can no longer focus only on the organisational functions of the school but must also be instructional leaders placing student learning as the first priority. However, MacBeath and Dempster (2009) have observed that all principals struggle to put authentic learning first because of managerialist and performativity agendas.

In assisting teachers, principals should be aware of teachers’ needs, wants and perceptions (Blase & Blase, 2004; Kaster, 2010; Mohammed, 2006) because if teachers believe principals are only managers, their actions and behaviours will reflect that perception (Berube, Gaston, & Stephans, 2004; Hallinger & Leithwood, 1998). A number of research findings found that the indirect influence of principals was through teachers’ perceptions of principals’ professional conduct and leadership style (Bogler, 2001; Crum, Sherman, & Myran, 2009; Leithwood & Wahlstrom, 2008, Nir & Hameiri, 2014).

For this reason, research that intends to comment on leadership behaviours through the perceptions of teachers should prove the consistency of teacher perceptions about leadership behaviours, (Arocha-Gill, 2010; Lowe, 2010) and that those perceptions are reliable across teachers (Hannaford, 2010).

2.1.4 Teacher Perceptions

Given that principals exert most influence on student outcomes indirectly through teachers (Day et al, 2011; Hallinger, 2011; Klar & Brewer, 2014; Robinson, 2011) and those indirect contributions are based on what teachers think of the principal’s practices (Combs et al., 1999; Weast, 2008), an important aspect of research is the value teachers see in these leadership practices.

Reality is not ‘out there’, rather reality is ‘in there’, that is, defined and sustained within humans working in organisations (Bottoms & English, 2010). Very relevant to this are the emotions of leadership (Beatty, 2005) wherein a teacher’s perceptions are his or her reality and therefore shape his or her outlook and individual and collective behaviour. The efficacy of leadership will depend on the extent to which leadership is perceived (Duignan, 2006; Harris, 2003) because perceived leadership behaviours also contribute directly to teacher self-efficacy which involves a teacher’s belief that he or she has the skills necessary to positively impact
student learning (Charf, 2009). Teachers with a high sense of efficacy communicate high expectations for performance to students, put greater emphasis on instruction and learning with students, are aware of student accomplishments, are less likely to give up on low achieving students, and are more likely to work harder on their behalf (Chase, Germundsen, Brownstein, & Distad, 2001).

Whilst it is accepted that emotions in forming our perspectives are central to the work of school leaders (Hargreaves, 2001; Leithwood & Beatty, 2008; McKenzie et al., 2008), and that perspective is their reality, there is a lack of attention to emotions or perceptions in educational organisations (Wallace, 2010). As Solomon (2002) has pointed out, leaders need to know how to build alliances to engage staff and to do that they need to know what staff are thinking and feeling.

Leaders also need to be learners themselves, open to the input of staff perceptions and able to adjust their practices to suit (Clarke & Wildy, 2011). As discussed, student learning is most affected by teacher quality which in turn is most affected by how teachers perceive leadership to be working, and this is noted at the individual and collective or cultural level. In summary, leadership capacity and consequently, vicariously, student learning, would expect to be enhanced through leadership knowledge of those behaviours that staff perceive as positive practices and skills that raise school capability.

### 2.1.4.1 Teacher Perceptions Research

As demonstrated by Frawley, Fasoli, D’Arbon, and Ober (2010), the use of perceptions as ascribed in either Likert-style quantitatively analysed questionnaires, or as personal narratives synthesised by software such as Leximancer, or as simple text rendering, is widely used in educational research.

Researchers have utilised perceptual data as either inductive or evaluative methodology. Lowe (2010) used teacher perceptions to judge leadership practices in successful schools in high poverty settings in Alabama. In a Likert scale quantitative survey to a representational sample of 33 elementary teachers in the same school, he researched teachers’ perceptions of their principal’s leadership practices (school climate) and also whether there was consistency of teacher perception of the principal’s leadership practices based on teacher demographic factors, such as age, gender, race, education level, years of teaching experience, and number of years supervised by current principal. He found that whilst there were small differences associated with gender and number of years supervised by current principal, the variables were nevertheless not statistically significant. That is, all teachers irrespective of individual...
differences were generally consistent in their perceptions and therefore deemed reliable as a research tool. This consistency of perception across teachers irrespective of variables was replicated by Arocha-Gill (2010), who found that responses were homogenous at the group level regardless of the educative activity and that there were no significant perceptual differences found across 413 respondents drawn proportionately from elementary special education teachers, middle school special education teachers, and high school special education teachers. Like Lowe (2010), there was consistent perceptual agreement across teachers about what they considered to be best practice, irrespective of how long they had been teaching or whether they were based in primary or secondary schools.

Whilst Arocha-Gill (2010) and Lowe (2010) proved the consistency of teacher perceptions about leadership behaviours, Hannaford (2010) also found that perceptions were reliable across teachers when mapping school climate. He discerned that the perception of teachers can influence how they teach thus affecting students and teachers alike. Hannaford (2010) also found perception to not only be consistent across teachers but also reliable so as to be corroborated through observation. A recommendation from his research was to compare teacher’s perceptions of their work environment and academic outcomes of their students.

Fisher (2010), in one of very few quantitative research studies regarding teacher perceptions, examined morale in six Californian child care centres and also examined and compared the perceptions of teachers with those of centre administrators. She found that where there was consistency of teacher and leader perceptions of behaviours there was open communication between teachers and leaders and high morale within the centres. Fisher (2010) recommended broadening the scope of research beyond a small number of child care centres to see if correlation between leadership best practices and teacher perceptions was maintained.

Building on Fisher’s (2010) work, Cardno (2010) in an action research approach utilised an open ended questionnaire with 20 teachers from a New Zealand primary school to determine teacher expectations of leaders as problem solvers. In essence, the teachers expected principals to be particularly aware of and respond to problems of practice. Whilst admitting the limitations of the study via single instance, school size, and researcher personal involvement, Cardno brought to the fore the understanding that teachers have clear expectations that are generally consistent across staff.

A review of the literature evidences that perceptions of teachers have been well researched over the last 10 years. Whilst acknowledging individual variations, Harris and Willower (1998),
Louden et al. (2006), Frawley et al. (2010) and Heldsinger and Humphry (2010; 2013), have noted that there is general accuracy of perception in teacher judgments and that teachers’ judgements are the primary source of information used in educational decision-making (Bates & Nettelbeck, 2001). Such research into the accuracy of teachers’ judgements about student learning has been positively and significantly correlated (Heldsinger & Humphrey, 2013; Hopkins, George, & Williams, 1985; Wright & Wiese, 1988).

Beckett (2008), in developing a “rigorous conceptual analysis” (p. 21) of what it is to make competent practical judgements in context-specific and accountable ways, said the ‘know how’ of people in real work situations should be taken seriously. Teachers have accuracy of perception in relation to judgments of effectiveness (Harris & Willower, 1998).

As an essential element of the mix, teachers have consistent opinions about what they consider to be best practices and this perception of teachers can influence how they teach. Teachers also consistently agree that principals make a difference to classroom instruction and that the perceived leadership style of principals by teachers is important in determining teacher retention.

In this vein, whilst Darling-Hammond et al. (2005) asserted that principals play a significant role in affecting student achievement; Clarke and Wildy (2011) have indicated this is because teachers’ perceptions of principals’ capabilities are significant determiners of principals’ capacity to influence instructional practices.

Whilst several studies in the last decade have touched in part on aspects of the issues of teacher perceptions, leadership practices and school effectiveness, none has addressed all three either in the Australian or international context. Much of this cited work recommends in part the continuation of further research within these themes. As well, whilst mainly qualitative and occasionally quantitative, there seems little evidence of mixed methodology utilising deep analysis of teacher perceptions.

Additionally, aside from Fisher (2010) and Herrera (2010), a gap also exists in the research in the comparison of perceptions of teachers with the perceptions of school leaders. Given that teacher perceptions of leaders’ behaviours are important in shaping the quality of productivity, it is important therefore to understand how school performance might be effected.

2.1.5 Measuring School Performance

This growing interest in school performance and school leadership can be understood against the background of increasing expectations of schools in the context of a knowledge society,
more autonomy for schools and school leaders but also greater accountability and the idea that school leaders can make a difference for students (Verbiest, 2011).

Drawing on cross-national analysis, Gurr, Drysdale, Ylimaki and Moos, (2011) have suggested that contemporary principals find themselves in a crossfire of conflicting expectations associated with curriculum and accountability policies which are having profound effects on classroom and school practices so that Australian principals now note the strain of increased accountability pressures on school improvement. Chen (2010) and Sahlberg (2011) in describing education reform movements across the globe noted that this was in part a demand from the public for guaranteed outcomes and the accountability movement in schools.

Such accountability in school systems around the globe has been of interest for some time (Labov, 2003) and the Australian government’s school accountability policy replicates attributes shared by other Organization for Economic Cooperation and Development (OECD) countries (Duggan, 2009; Earl, 2005; Gurr, 2007). There is a focus in OECD countries on outcomes rather than inputs (Hanushek, 2005) and this reflects the nature of accountability in Queensland government and nongovernment schools where there is considerable interest amongst policymakers and school system authorities in the quality of school performance.

Schools are under more pressure than ever before to produce improved academic results (Olsen, 2013) and principals are faced with a continuous impetus to improve teaching and learning outcomes at their schools (Andrews & Soder, 1987; Leithwood et al., 2004). These expectations of schools reflect cultural, relational, communication, and educational needs, as well as a demand for systematically increasing achievement for all students (Darling-Hammond, 1993; Deal & Peterson, 1999; Economy, 2006; Friedman, 2005).

Eurydice (2009) has contended that the greater incidence of school autonomy has coincided with the need to regulate the monitoring of education systems and hence the widespread implementation of national tests. Duggan (2009), however, has suggested that the emphasis on standardised testing has coincided with an emphasis on data, measuring progress and achieving standards.

Nevertheless, much of this interest stems from the view that some schools are doing a much better job than others at increasing student achievement and producing superior student outcomes (Lamb et al., 2004). Student achievement is commonly utilised as an objective indicator of school effectiveness (Jacobson, 2011; Kondakci & Sivri, 2014; Robinson et al., 2011; Sammons et al., 2011) and one way to address the question of school performance is to
compare mean school scores on student achievement against a state or national average to assess the effectiveness of each school (Lamb et al., 2004).

Although Schwartz et al. (2011) have pointed out that there is no consensus regarding the process of measuring school performance, Bendikson et al. (2011) have noted that despite substantial challenges involved in assessing and categorising levels of school performance, it is possible to make a consistent and reliable broad classification. Similarly, Hattie (2002) and Masters et al. (2011) have argued that there is sufficient comparable data and expertise available to identify schools performing unusually well or unusually poorly given their circumstances.

2.1.5.1 The National Assessment Program of Literacy and Numeracy (NAPLAN)

There are researchers such as Adams (2003); Amrein and Berliner (2002); McCaffrey et al. (2005) and Wu (2010a) who pursue technical argument against standardised or high stakes testing and believe that standardised tests do not necessarily provide reliable information about individual students once measurement errors are taken into account. However other researchers argue these tests to be an effective measure of academic performance (Bishop, 1998; Braun, 2004; Crumrine, 2009; Deno, 2003; Hempenstall, 2009; Samy & Cook, 2009; Urshel, 2006). Further, others researchers in advocating for such testing, seriously criticise the integrity and validity of research employed by those opposed to standardised testing (Braun, 2004; Carmody & Loeb, 2003; Hannushek & Raymond, 2003; Rosenshine, 2003). The data standardised tests provide are generally seen as valuable in determining student proficiency and school effectiveness (Crumrine, 2009).

Similarly, in researching specific curriculum areas, Foegen and Deno (2001) and Thurber et al. (2002) found significant correlations between classroom mathematical competencies and performance in state achievement tests; and Goode et al. (2001), Crawford et al. (2001) and Hempenstall (2009) showed that classroom reading rate predicted student performance on state-wide achievement tests.

With respect to particular schools, Adams (2003) and Hempenstall (2009) noted that state-wide broad-scale achievement tests as point-in-time devices can provide accurate information about systems and schools. Samy and Cook (2009) also noted that quantifying or measuring school effectiveness is an arduous task but that standardised testing is one way a school can measure its performance.

However, the narrow focus on success at a limited curriculum has attracted considerable comment and criticism. One of the most frequently raised concerns regarding high-stakes
testing policies is that theyoblige schools to focus on subjects for which they are held accountable to the detriment of the unexamined subject areas and higher thinking processes. (Groves 2002; Gunzenhauser 2003; Patterson 2002; Jones et al., 1999; McNeil 2000; Murillo & Flores 2002; Nichols & Berliner 2007; Winter, Greene, & Trivitt, 2008).

Whilst, Luke and Woods (2007), Heldsinger and Humphry (2010) and Hout and Elliott (2011) advise that the use of standardised tests has little or no effect on student achievement, there is also a body of international research that suggests that high-stakes literacy and numeracy tests often result in unintended consequences (Champion, 2007; Dinham & Scott, 2012; Hempenstall, 2009; Hout & Elliott, 2011) such as: (a) a narrowed curriculum by focusing on the areas and grades tested at the expense of other areas (Au, 2007; Chudowsky & Pellegrino, 2003; Gregory & Clarke, 2003; Groves, 2002; McTigue & Brown, 2005; Moon, Callahan, & Tomlinson, 2003; Reid, 2009; Wills & Sandholtz, 2009); (b) skewing results through test preparation and cheating (Cankoy & Tut, 2005; Shepard, 2003; Resnick, 2006; Thrupp, 2005); (c) testing primarily providing normative information and rarely diagnostic information (Koretz, 2008; Sloane & Kelly, 2003); (d) causing undue stress on students and teachers (Gregory & Clarke, 2003; Madaus et al., 2009; Mitka, 2001); (e) a return to teacher-centred instruction and a decrease in teaching higher level thinking skills (Barksdale-Ladd & Thomas, 2000; Barret, 2009; Figlio, 2006; Harlen & Crick, 2003; McNeil, 2000; Polesel, Dulfer, & Turnbull, 2012; Rex, 2003; Riffert, 2005); (f) a decrease in teacher and student motivation (Kelleghan, Madaus & Raczek, 1996; Ryan & Wesinstein, 2009; Sheldon & Biddle, 1998); (g) marginalisation of teachers’ professional expertise, knowledge and understanding of each student (Klenowski, 2011); (h) reduction of specialist class time to address testing needs (Collins, Reiss, & Stobart, 2010; Comber, 2012); and (i) significant impacts on parental choice, teacher and principal job security (Keating & Lamb, 2004; Lingard, 2010; Lobascher, 2011; Mortimore, 2006; Polesel, Dulfer & Turnbull, 2012).

Gunzenhauser (2003), Rice (2007), Champion (2007) and Hout and Elliott (2011) also note that standardised tests do not adequately measure education performance of important learning characteristics such as creativity, curiosity, persistence, values, collaboration, emotional intelligence and socialisation.

In a 2004 policy brief premised on a broad and comprehensive range of contemporary research, the New York State Education Department (NYSED, 2004) concluded that high-stakes exams have been associated with: overall academic achievement gains; dropout rate increasing as well as decreasing; both positive and negative effects on students’ motivation; mixed effects on teacher behaviour in terms of change in curriculum and instruction; and
significant cost increases to develop and administer tests, while also preparing teachers and students to teach and take them. Dempster (2011, p. 91) has summarised it best in noting that: “The irony in the use of a strategy to improve student achievement, such as a national test, is that this strategy may well narrow children’s learning experiences and ultimately their achievements”.

Madaus, Russell and Higgins (2009) define high-stakes testing as state-mandated tests that have “high-stake consequences attached to the results” (p. 2) and NAPLAN is considered as such, because the results, and subsequent publication, enables comparison between schools (Griffin & Care, 2012; Thompson & Harbaugh, 2012). As such, these tests have proved to be a divisive issue for Australian education; with some stakeholders arguing NAPLAN brings a raft of negative consequences to the education experience of young people. Supporters argue that NAPLAN promotes accountability and transparency, measures the basic skills that should be taught, and the publication of results equips parents with the information required to make decisions about their children’s education (Thompson & Harbaugh, 2012).

The NAPLAN as a system of standardised testing commenced in 2008 and serves the same purpose at both state and national levels (Duggan, 2009). Every year, all students in Years 3, 5, 7 and 9 in both government and nongovernment school sectors, are assessed on the same days using national tests in Reading, Writing, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy. There are also three-yearly sample assessments in science literacy, civics and citizenship, and information and communication technology literacy (ACARA, 2011).

Agreed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) to monitor progress towards the Educational Goals for Young Australians and to support ongoing evaluation of the national education system, NAPLAN tests are developed collaboratively by the states and territories, the Australian Government, and representatives of the Catholic and Independent school sectors (Santiago, Donaldson, Herman, & Shewbridge, 2011).

NAPLAN assessment results are reported on scales which demonstrate how students have performed compared to established standards. Assessment scales also allow achievement to be mapped as students’ progress through schooling so that given scale scores can be compared across school year levels and over time. For example, a score of 500 in Reading for Year 3 in 2008 means the same as a score of 500 for Year 5 in 2008 and will also mean the same in future testing years (Daraganova et al., 2013).
Results of the tests for the National Assessment Program are reported as individual student reports, and as a compilation for each school. Because the NAPLAN assessment process is performed using a national common reporting format by the test administration authorities and the reporting scales are a standardised measure, researchers are able to compare child and school performances over time and also to monitor performance at jurisdictional and national levels (Daraganova et al., 2013; Griffin & Care, 2012; Santiago et al., 2011).

Significantly, and controversially, NAPLAN currently serves as the principle source of data for the My School website launched in 2010 to provide the public with information on school performance (Gable & Lingard, 2013; Jensen, 2010). It is positioned as an important source of information for schools, teachers and parents to assist in school capacity building (Gable & Lingard, 2013) and as a communicative device (Broadfoot & Black, 2004) from which to direct school reform (Gable & Lingard, 2013) for the public good (Redden & Low, 2012; Vandenberg, 2012).

In addition to yearly NAPLAN results, the My School website provides contextual information on individual schools via the Index of Community Socio-Educational Advantage (ICSEA). Given that schools serve different populations of students and that the variations in concentrations of students from different social backgrounds are likely to affect their performance, it is important when comparing schools to take into account the context of the kinds of students attending each institution. This type of “value-added” approach has received considerable support among researchers examining school effectiveness (Jesson, 2000; Lamb et al., 2004).

If there is an accent only on gross productivity and no weighting is put on the context of schooling, the gross productivity reveals little about a school’s real performance (Bendikson et al., 2010), although it does provide parents with an assessment of the chances of their child succeeding in any given school (Gibson & Asthana, 1998; Goldstein & Leckie, 2008). Value-added modelling however, takes into account the levels of prior achievement of students and their socioeconomic setting (Bendikson et al., 2010; Jensen, 2010).

In school effectiveness research, value added measures, particularly contextual value added measures, are widely recognised (Sammons, Thomas, & Mortimore, 1997; Teddlie & Reynolds, 2000) as providing fairer measures of school performance because they take into account differences between schools in the characteristics of the pupil intakes they serve that have been shown to affect attainment (Day et al., 2009).

Using the overall ICSEA percentage distribution of students within the bottom, top and middle quartiles as a basis to group “schools-of-similar-type” (Bendikson et al., 2011) or “like schools”
(Masters et al., 2011), it is possible to make comparisons only amongst schools with similarities in size, location, socioeconomic background and ethnicity (Hattie, 2002; Masters et al., 2011). Thus, a school could be either doing better, worse or similarly to other schools of a comparable category.

In arriving at socioeconomic data, some studies also use indicators of attendance and mobility (Heck, 2000; Verona & Young, 2001), or levels of parent education (Luyten et al., 2009), or percentage of minority students and students with English as a second language (Salganik, 1994), or parents’ occupation, education and number of siblings (Willms & Kerckhoff, 1995). Nevertheless, it is commonly agreed that it is more valid to take into account socioeconomic factors (Ammar et al., 2000; Goldstein, 1997; Masters 2012) when making comparisons across schools.

This enables more nuanced school comparison of NAPLAN across Australia in light of the influence of family backgrounds on student outcomes. Schools are placed on a numerical scale from 500 to 1,300 based on their comparative social and educational advantage. The ICSEA score subsequently forms the basis on which a single school is linked to 60 statistically similar schools across Australia via the My School website (Jensen, 2010). Thus, My School serves as a reporting system on a national dataset of information on Australian schools where areas of disadvantage can be identified for further assistance and resourcing (Zanderigo, Dowd, & Turner, 2012).

Ladwig (2010) expressed sympathy for those charged with analysing and reporting NAPLAN data, and suggested that “intelligent public debate is hampered by a lack of public reporting of the technical characteristics of NAPLAN and a lack of public education on how to understand such data” (p. 39). Wu (2010a) in opposition to the use of NAPLAN for school comparisons, noted potential difficulties associated with margins of error, whilst McCaffrey et al. (2005) indicated the possibility of biased results in low socioeconomic areas.

Whilst there has been considerable debate about NAPLAN as a process and whether the results are indicative of individual or school performance (Eveleigh, 2010), the efficacy of NAPLAN was investigated via the 2011 OECD report which reviewed evaluation and assessment in education in Australia and noted:

The NAPLAN 2008 Central Analysis Technical Report (ACER, 2008) documents the technical quality of the assessments through reliability, discrimination, item fit, and differential item functioning indices which generally suggest that the measures are technically correct. Vertical and year-to-year equating and scales are well and carefully constructed, as are proficiency estimates and relevant cut off points. It is clear that NAPLAN draws upon good
expertise in designing and reviewing the test, excellent knowledge and technical expertise in developing the achievement scale and world-class psychometric methods in analysing and reporting the results in a meaningful way. (Santiago et al., 2011, p. 56)

With respect to research reliability, the NAPLAN average score for a school is a good indication of school performance (National Assessment Program, 2011) and allows comparison of effectiveness in spelling, grammar, punctuation and numeracy (Eveleigh, 2010). Masters et al. (2011), the developers of NAPLAN, have noted that NAPLAN data allow the monitoring of school performance and enable identification of schools performing unusually well or unusually poorly given their circumstances and “is adequate for making direct comparisons across schools” (p. 12). Most stakeholders find NAPLAN results a credible source of evidence (Santiago et al., 2011).

In an Australian perceptual study regarding the viability of standardised testing, Pierce and Chick (2010) reported that teachers see NAPLAN data as useful and that it has emerged as an important instrument in education policy, used for measuring and monitoring the performance of individual pupils, schools and education systems (Eurydice, 2009).

In discussing the use of standardised tests, Stoll and Riley (1999) suggested that institutions should be judged not by a single ‘cohort’ of students, but rather on their performance over time. In line with this thinking, Goldstein (1997) and Hoyle and Robinson (2002) mathematically proved the single year unreliability of league tables as a method of comparing school effectiveness because of year to year cohort variation; however, they also confirmed that standardised tests over time provided an accurate indication of individual student and school performance in the specific areas tested. It seems that whilst the use of standardised testing does not enhance student achievement (Heldsinger & Humphry, 2010; Hout & Elliott, 2011; Luke & Woods, 2007); it is an accurate way of gauging relative student and school performance if utilised longitudinally.

It is therefore defensible in research to utilise NAPLAN as an indication of school performance, but not an exact specification (Klenowski & Wyatt-Smith, 2010). Thus NAPLAN data may be used as a broad comparative tool to identify schools performing above or below general expectations, rather than a measure of absolute performance and within this, the critical aspect is to discern expectations relevant to performance by fair comparison to similar schools.
2.1.5.2 Expert Judgement

A method of making a consistent and reliable broad classification is required to identify schools performing unusually well or unusually poorly, given their circumstances (Bendikson et al., 2010). Whilst, Thomas et al. (2007) and Ammar et al. (2000) argued for the use of upper and lower quartiles to categorise relatively high and low performance, Ammar et al. (2000) also suggested that expert judgements could be built in to reduce the risk of an unreliable result and ensure accuracy, especially for schools at the margins of performance groups.

Expert judgment is a term that refers specifically to a technique in which judgment is made based upon a specific set of criteria and/or expertise that has been acquired in a specific knowledge area, or product area or particular discipline (AIPM, 2010). Expert judgement can be defined as an expression of opinion, based on knowledge and experience that is made in response to problems (Keeney et al., 2001). Having expert judgement requires the expert to have a good level of both substantive experience, that is, the expert must have a suitable level of knowledge of the problem domain and normative experience, that is, it must be possible for the expert to translate this knowledge explicitly into probabilities (Humphreys, 1995).

Because school contextual information ascribed by ICSEA cannot capture all the factors that have an impact on school performance (Wu, 2010b), Powell (2003) and Jairath and Weinstein (1994) proposed the use of experts chosen for their work in the appropriate area and credibility with the target audience to make accurate judgements, while remaining relatively impartial to the findings. Meyer and Booker (1991), Keeney et al. (2001) and Burgman et al. (2006) also suggested the use of expert judgement from people with an appropriate level of detail, and who are capable of communicating their knowledge. Meyer et al. (2002) and Masters (2012) recommended expert judgement as a method of adding rigour and defensibility of judgements that take into account context, performance and new information over time. Particularly, personal expertise provides justification especially in those areas with a practical orientation (Creswell, 2008).

This research will therefore in chapter three, combine the utilisation of expert judgement against longitudinal NAPLAN data to broadly identify levels of school performance. Given that leadership is a critical influence on school outcomes, it is important also to understand the evolution of successive generations of leadership theory and the origins of instructional leadership as related to the achievement of students.
2.2 Generations of leadership theory

The concept of leadership has been studied throughout all disciplines: government and politics, business, industry, health care, and education. Leadership has been defined in many ways and researched throughout history, though there has been no one-agreed-upon definition or theory that fully describes what is best or acceptable (Ardichvili & Manderscheid, 2008; Chance & Chance, 2002, Chemers, 1993; Grossman & Valiga, 2009; Huber, 2010; Northouse, 2010; Stogdill, 1974).

It is agreed that leadership is complex and dependent on the involvement of leaders and followers and the relationship that exists between them (Bass, 1998; Burns, 1978; Hollander, 1993; Kouzes and Posner, 2007; Ramsden, 1998). It is further suggested that leaders and followers interact and influence one another (Northouse, 2010) and that the role that a leader plays within this relationship is paramount to the success of the system being impacted (DeLong, 2010).

More than 45 years ago Katz and Kahn (1966, p. 301) described leadership as a “slippery concept” that defied definition and that many different views about what constituted effective leadership had been identified in the literature. More recently, Ingvarson, Anderson, Gronn, and Jackson (2006) noted that leadership lacks a universally agreed upon and accepted definition and remains an essentially contested concept amongst scholars and practitioners.

Leithwood and Duke (1999), Hallinger (2003) and Townsend and MacBeath (2011a) have noted myriad proliferation of “adjectives” of leadership and that there are “as many definitions as there are people who have attempted to define it” (Stogdill, 1984, p. 259). Similarly there is a wide variety of different theoretical approaches to explain the complexities of the leadership process (Northouse, 2012; Bryman et al., 2011; Day & Antononakis, 2012; Hickman, 2009; Mumford, 2006).

Nevertheless, in the leadership literature of the last 80 years despite there being no one form of leader or leadership theory that is universally accepted (Grossman & Valiga, 2009; DeLong, 2010) or as van Maurik (2001, p. 3) points out, none of which is mutually exclusive or totally time-bound, there have been four main ‘generations’ of leadership theory:

- Trait theories
- Behavioural theories
- Contingency theories (transactional/managerial)
- Transformational theories (Doyle & Smith, 1999).
Fifty years ago, management or administration was the key concept associated with running an organisation such as a school (Townsend & MacBeath, 2011b). Then, during the late 1980s and 90s, at the height of the managerial approach, the interest in leadership began to gather momentum (Townsend & MacBeath, 2011a) so that school leaders were encouraged to learn and apply the leadership skills of business (Pollitt, 1990; Whitley, 1989). There was little emphasis on updating and expanding their knowledge of curriculum, assessment and pedagogy (Stein & Nelson, 2003). It was assumed that, as experienced teachers, principals had sufficient knowledge of teaching and learning, and that much of the work of instructional leadership would be delegated to senior staff. Principals’ priorities were to get on with being good generic managers, through the development of a vision, excellent communication with all stakeholders as well as wise use of resources (Robinson, 2006).

Whilst the early decades saw a focus on “excessive managerialism” and the “pursuit of profits, prestige and outcomes” (Bhindi & Duignan, 1997 p. 118), increasingly in later years there was a shift away from this purely scientific, rational and hierarchical control model of management to more transformative styles that valued leadership as a non-rational and human-centred enterprise (Ehrich & Knight, 1998).

Cherry (2012) has described such transformational theories as “Relationship” theories, because they focus upon the connections formed between leaders and followers. Transformational leadership, includes building a clear vision, establishing commitment to agreed goals, encouraging high expectations, being highly visible to reinforce expectations while developing a conception of leadership that is “neither linked to status nor embodied in the actions of any single individual, but rather dispersed or shared throughout the school” (Earley et al., 2012, p. 80).

Transformational leadership theory is based on the leader working along with the followers for the purpose of achieving a shared goal through mutual attainment that is inspired by the leader that provides for a sense of purpose that is important to the group in order to contribute and make a difference (Bass, 1998; Grossman & Valiga, 2009; Knight & Trowler, 2001;Muijs, Harris, Lumby, Morrison, & Sood, 2006; Northouse, 2010; Ramsden, 1998; Reinhardt, 2004). The leader–follower relationship of transformational leadership “involves change, innovation, growth, and empowerment of self and others” (Goertz-Koerner & Schmidt-Bunkers, 1992, p. 1). A distinguishing feature of transformational leadership is that the leader has a strong value system and is able to motivate followers for the benefit of the group and not for their own self-interests (Barker, 1990; Grossman & Valiga, 2009; Northouse, 2010).
Drawn from this transformational genesis, “school leadership” was consolidated as recently as the early-1990s (Grace, 1995) so that educational leadership is now a recognised subcomponent of the general field of leadership. Whilst the conceptualisations for instructional and transformational leadership have distinguishing characteristics (Hallinger, 2003), they also have substantive similarities (Olsen, 2013).

Early literature on instructional leadership evidenced ‘narrow’ and ‘broad’ conceptions of instructional leadership (Bush & Glover, 2003; Sheppard 1996; Verbiest, 2011).

The narrow definition focuses on those actions that are directly related to teaching and learning, whereas the latter involves variables, such as school culture, which may have important consequences for teacher behaviour. In the broad view, instructional leadership entails all leadership activities that affect student learning. (Verbiest, 2011, p. 3)

Subsequently, instructional leadership overcame this conceptual vagueness (Kelchtermans & Pilot, 2010; Leithwood & Duke, 1999; Verbiest, 2011) and separated itself from its parent – transformational leadership (Hallinger, 2003).

Instructional leadership as an important subset of transformational leadership focuses specifically on teaching and learning and the behaviour of teachers in working with students (Bush & Glover, 2003; Verbiest, 2011).

Critically, whilst transformational leadership is a necessary pre-condition of instructional leadership (Hallinger, 2003; Hargreaves, 2003; Hopkins, 2001; Kelchtermans & Pilot, 2010; Marks & Printy, 2003), transformational leadership on its own is insufficient to establish high-quality instruction (Barnett, McCormick & Conners, 2001; Olsen, 2013; Verbiest, 2011).

Within this approach, the challenge for leadership was in the development of the human side of the enterprise (Ehrich & Hansford, 2006) so that after years of focus on the effective management of schools, the emphasis in the research literature had moved to leadership of teaching and learning (Elmore, 2004; Firestone & Riehl, 2005) and is dependent on the situation and current needs of individual organisations (Blanchard, 2007; Grossman & Valiga, 2009; Milburn, 2010; Northouse, 2010) and the relationship that exists among its members to ensure growth and sustainability for the future (Blanchard, 2007; Grossman & Valiga, 2009; DeLong, 2010).

Whilst historically the field of educational leadership studies has been constrained by a lack of longevity of research foci (Leithwood and Jantzi, 2005; Keung and Rockinson-Szapkiw, 2013), since the middle of the 2000s the development of school leadership has become a key
strategic community goal in the field of school education (Halasz, 2011) and considerable research has progressed to determine the qualities desired of leaders of educational organisations (Al-Barwani, 2011; Halford, 2009; Johnson, 1998). Much of the research interest looks at the role of school leaders in leading learning and the actions especially of principals, in supporting student achievement (Dempster Robson, & Gaffney, 2011).

Interestingly, there is a difference in focus between different leadership forms. Although transformational leadership is the most commonly used definition of effective leadership in recent school empirical literature, instructional leadership, because of its influence on student achievement, has been shown to be the most effective form of leadership when studying schools (Bass & Riggio, 2006; Hallinger, 2003; Northouse, 2010; Keung & Rockinson-Szapkiw, 2013).

Such leadership, which takes as its focus the central tasks of schools, namely teaching and learning and assumes responsibility for the professional development of teachers, the learning outcomes of the students and the deployment of resources associated with the realisation of these goals (Benson, 2002; Bush & Glover, 2003; Leithwood et al., 2006) may be known as instructional, pedagogical or educative leadership (Earley et al., 2012; Hallinger, 2005; Robinson et al., 2009; Silins & Mulford, 2002).

Whilst it is noted that the variant “instructional leadership” is unique to education (Townsend & MacBeath, 2011a, p. 5), its intention appears to redress the emphasis on compliance of the last two decades which has drawn the attention of school leaders away from teaching and learning (Clarke & Wildy, 2011; Dempster et al., 2011). This included a focus on the behaviours of staff that affect the quality of teaching and learning. For leaders it included action both on organisation matters (e.g., to control constraints on the amount of time students spend learning) and crucially on promoting and developing schools as learning-centred or professional learning communities acting as lead learners (Earley et al., 2012).

Weigel (2012) notes that instructional leadership, like leadership in general, is hard to define and too often presumed to be understood and most writers acknowledge there is no single definition of instructional leadership or specific guidelines or direction as to what an instructional leader does (Elmore, 2000; Flath, 1989). Specifically, Townsend and MacBeath (2011a, p. 5) have commented that the term “enjoys a large degree of conceptual elasticity”, whilst Fallon and Paquette (2014) have noted that such leadership has generated a seemingly endless variety of definitions in terms of traits, behaviours, role relationships, interaction and learning patterns.
Elmore (2004, p. 13) defined such leadership as the “guidance and direction of instructional improvement”; whereas DuFour et al. (2008, p. 35) defined instructional leaders as those who “lead learning communities, an educational environment where teachers and administrators work collaboratively to diagnose and solve problems related to student learning”. In defining effective instructional leadership, the literature consistently emphasises the leader’s ability to clearly discern what is happening and what should be happening within the classroom (Usdan, McCloud, & Podmostko, 2000; Petrides & Jimes, 2014).

This thesis in subsuming the intentionality of these definitions will utilise the definition of instructional leadership per Reitzug and West (2011, p. 167) as “the way principals make a difference in learning, achievement, and instruction in their schools”.

### 2.3 Instructional Leadership

It is useful to examine the evolution of the instructional leadership model, because irrespective of the nomenclature, such leadership is a key influence on both the quality of teaching and learning and on the learning climate (Darling-Hammond, 1996; Dufour & Eaker, 1998; Fullan, 2006; Dinham, 2007; Schechter, 2007; Schechter & Feldman, 2010).

It is teachers who make a substantial difference to the achievement of students and it is the individual teacher who has most influence on student achievement (Hattie, 2009; Mulford, 2006; Rowe, 2003). Making most difference to pupils once they are inside the school gate rests on the quality of the learning experiences teachers are able to develop and implement (Dempster, 2011).

Just as teachers have the most significant influence on student learning, it is instructional leadership that is the most significant influence on the teacher (Bass, 1990; Bryman, 1996; Leithwood et al., 2004). Research findings have revealed the powerful impact of instructional leadership on school effectiveness and improvement (Harris et al., 2003) through enhancing the capacity of teachers. Schools that are effective, have leaders who make a significant and measurable contribution to the effectiveness of their staff (Giffing, 2010). Heck and Hallinger (2014) indicate that a large body of international research has accumulated which supports the view that both quality of school leadership and teaching can have a significant impact on student learning outcomes. Therefore, effective instructional leadership means creating the conditions under which teachers can perform effectively in schools (Fouts, 2003; Muijs, 2006).

Subsequently, educational leadership research increasingly has focused on the role that school leaders play in the improvement of teaching and learning and on the relationship between various types of leadership and student outcomes. In accordance with this stance, Robinson et
al. (2009, p. 70) argued that “educational leadership is leadership that causes others to do things that can be expected to improve educational outcomes for students”.

The goal was no longer to just develop a cohesive culture, have strong communication channels with staff and students and monitor and evaluate instruction. The new goal required leaders to do all of these things in a highly relational manner that focused on teachers’ capacity to improve teaching and learning (Robinson, 2006).

2.3.1 The Origins of Instructional Leadership

Among the educational trends that emerged during the 1980s, few have been more significant or widespread than the continuing focus on principal effectiveness (Hallinger, 2008). Prior to 1980, validated models did not exist for studying educational leadership (Olsen, 2013). Then as instructional leadership models emerged in the early 1980s from early research on effective schools (Verbiest, 2011), educational policymakers came to view school principals as key agents in the reform of schools and classrooms. The notion that principal leadership and student achievement might be empirically linked was a key turning point in its implications for improving teaching and learning in schools (Andrews & Soder, 1987; Glasman, 1984). School leadership subsequently become a priority in the international education policy agenda (Pont, Nusche, & Moorman, 2008; Verbiest, 2011).

Studies about instructional leadership emerged from the effective schools research as it became evident that the extent of instructional leadership is a factor that differentiates high from low achieving schools (Heck et al., 1991; Murphy & Hallinger, 1992; Ylimaki & Jacobson, 2013).

Research on school effectiveness and school improvement reinforced this perspective on the importance of principals in policy implementation (Edmonds, 1982; Purkey & Smith, 1983). These bodies of research identified principal instructional leadership as a key factor in successful schools and refocused the attention of scholars on school principals (Bossert, Dwyer, Rowan, & Lee, 1982; Leithwood & Montgomery, 1982; Murphy, Hallinger, & Mitman, 1983). Bossert et al. (1982) posed two critical questions about school leaders. The first questioned how principals guide school processes, the second inquired how principals became effective (Olsen, 2013).

In a review of literature on principal leadership effects conducted more than a decade ago, Hallinger and Heck (1996a) noted that instructional leadership had been the most prevalent perspective adopted by researchers studying principal leadership between 1982 and 1995. Hallinger and Heck (1996b; 2003) also asserted that the first important studies on school
leadership were conducted by Bridges (1982) and Bossert et al. (1982). These researchers claim that school administrator research conducted prior to 1982 had little effect upon the field of education (Hallinger & Heck, 1996b; Heck & Hallinger, 2005). Austin (1979) disagreed with this position. He synthesised the research from this period by searching for exemplary schools and the reasons for their effectiveness. His findings indicated that there were significant advances in discovering trends underlying effective leadership although these may not have had an immediate impact upon schools and learning.

Bridges (1982), Leithwood and Montgomery (1982) and Cuban (1988) independently articulated that the development of a clear understanding of how principals contributed to school effectiveness and improvement was impeded by:

- Lack of theoretical models that articulated how this role influenced student learning;
- Lack of clearly explicated conceptual frameworks for studying relevant constructs;
- Lack of valid and reliable instrumentation for exploring the role empirically; and
- Reliance on studies poorly designed to test for causal effects.

In response, several international efforts were undertaken to develop stronger methodologies for studying principal leadership. This included the development of new conceptual frameworks as well as instrumentation. Notably, these early efforts focused primarily on the role of the principal as an instructional leader (Hallinger, 2008).

In 1982, in the same issue of *Educational Administration Quarterly*, Bossert et al. (1982) and Bridges (1982) both advocated the need to shift educational research. As a result, the new field of instructional leadership emerged (Du Pont, 2009). Whilst Bridges (1982, p. 25) reviewed studies in education administration from 1967-1980 to find “no compelling evidence that a major theoretical issue or practical problem relating to school administrators has been resolved since 1967”, Bossert (1982) looked ahead to the new field of instructional leadership as a solution. He explored the need to shift research away from descriptions of a principal being an educational manager toward how the results of their actions and behaviours effected and impacted student learning. In 1983, Hallinger divided instructional leadership into three main dimensions (a) define the mission, (b) manage curriculum and instruction, and (c) promote school culture.

In the first available research specifically on instructional leadership, Dwyer (1984) spoke extensively about multiple observations of 42 American principals across small and large schools from urban and rural communities. He deduced similar elements which he believed helped them to be successful in that they relied on their beliefs and experiences, community
input, and their desired goals and vision in order to manage school climate to provide successful student outcomes.

Hallinger and Murphy (1985) developed a model of instructional leadership by examining the behaviours of elementary principals and reviewing the literature on school effectiveness. From their empirical and theoretical analyses, they created a framework of instructional management with three dimensions and 11 job descriptors.

The three major functions were (a) defining the mission, (b) managing the instructional program, and (c) promoting a positive school climate. Mission was defined in terms of framing and communicating goals. Instruction was elaborated in terms of supervising and evaluating instruction, coordinating curriculum, and monitoring student progress. A positive school climate was created by principals protecting instructional time, promoting professional development, maintaining high visibility, providing teaching incentives, enforcing high academic standards, and providing incentives for students. These functions and their elements are summarised in Table 1.

Table 1 - Elements of Instructional Leadership

<table>
<thead>
<tr>
<th>Defines the mission</th>
<th>Manages instructional program</th>
<th>Promotes school climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing school goals</td>
<td>Supervising and evaluating instructions</td>
<td>Protecting instructional time</td>
</tr>
<tr>
<td>Communicating school goals</td>
<td>Coordinating curriculum</td>
<td>Promoting professional development</td>
</tr>
<tr>
<td></td>
<td>Monitoring student progress</td>
<td>Maintaining high visibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing incentives for teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enforcing academic standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing incentives for students</td>
</tr>
</tbody>
</table>

Adapted from “Assessing the instructional leadership behavior of principals” by P. Hallinger & J. Murphy, 1985, Elementary School Journal, 86(2), p 221.

Murphy (1990) continued to refine and elaborate the model with a systematic and comprehensive review and integration of the research from four major sources, the literature on (a) effective schools, (b) school improvement, (c) staff development, and (d) organisational change. Based on this review, he elaborated on the earlier instructional leadership model to now include four basic dimensions of instructional leadership being broken down into 16 different roles or behaviours. These functions and their elements are summarised in Table 2.

Developing mission and goals remained a fundamental feature, but managing instructional programs was expanded to include the principal’s roles of promoting quality instruction and monitoring student progress. Murphy (1990) also expanded the notion of promoting a positive school climate to include both promoting an academic learning climate and developing a supportive work environment.
In developing Murphy’s work, Weber (1996) addressed the need for instructional leadership regardless of the school’s organisational structure and concluded that “even if an instructional leader were not packaged as a principal, such a leader was imperative” (Weber, 1996, p.254). Based on his review of the literature, Weber (1996) identified five essential domains of instructional leadership (a) defining the school’s mission, (b) managing curriculum and instruction, (c) promoting a positive learning climate, (d) observing and improving instruction, and (e) assessing the instructional program. His model was consistent with the two earlier models and incorporated many of the same elements. These functions and their elements are summarised in Table 3.

In 2000, Elmore built upon much of the instructional leadership theory developed during the 1980s through research efforts concentrated around principal leadership influencing student-learning outcomes. He found themes of (a) promoting effective instructional practices, (b) focusing the vision of the school, (c) communication; collaboration, and (d) emphasising effective, professional development.
Table 3 - Elements of Instructional Leadership

<table>
<thead>
<tr>
<th>Defining the school’s mission</th>
<th>Managing curriculum and instruction</th>
<th>Promoting a positive learning environment</th>
<th>Observing and improving instruction</th>
<th>Assessing the instructional programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructional leader collaboratively develops a common vision goal for the school with stakeholders.</td>
<td>The instructional leader monitors classroom practice alignment with the school’s mission, provides resources and support in the use of instructional practices, and models and provides support in the use of data to drive instruction.</td>
<td>The instructional leader promotes a positive working climate by communicating goals, establishing expectations and establishing an orderly learning environment.</td>
<td>The instructional leader observes and improves instruction through the use of classroom observation and professional development opportunities.</td>
<td>The instructional leader contributes to the planning, designing, administrating and analysis of assessments that evaluate the effectiveness of the curriculum.</td>
</tr>
</tbody>
</table>


Alig-Mielcarek (2003) in designing the Instructional Leadership Inventory (Table 4), synthesised the early work of Murphy and Hallinger (1985), Murphy (1990) and Weber (1996) to show similarity of three instructional leadership functions across the three models:

- Defining and communicating goals
- Monitoring and providing feedback on the teaching and learning process
- Promoting and emphasising the importance of professional development.

Alig-Mielcarek (2003) was the first to empirically test instructional leadership functions, whilst the earlier work of Murphy, Hallinger and Weber was only theoretical. Working in the context of principal’s instructional leadership, school climate and student achievement; Alig-Mielcarek (2003) discerned using the three instructional leadership functions, that whilst the instructional leadership of the principal was not directly related to student achievement, it did have an indirect positive effect on achievement.

Subsequently, Cotton (2003) identified 26 best practice leadership behaviours that led to improved student achievement. Most of these behaviours were seen as instructional in being directed towards improving student learning. Marzano et al. (2005) in performing a meta-analysis of 69 school leadership studies from 1970 to 2005 computed the correlation between the leadership behaviours of principals and the academic achievement of students. They found that highly effective principals have a moderate influence upon student achievement. Their study identified factors of successful school instructional leaders that correlated with student academic achievement as: communication, culture, focus, ideals/beliefs, involvement in
curriculum, instruction, and assessment, knowledge of curriculum, monitoring/evaluating, relationships, resources, and visibility.

Table 4 - Instructional Leadership Inventory

<table>
<thead>
<tr>
<th>Defines and communicates shared goals</th>
<th>Monitors and provides feedback at the end of the learning process</th>
<th>Promotes school wide professional development</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Uses data on student achievement to guide faculty discussions on the instructional program</td>
<td>• Visits the classroom to ensure classroom instruction aligns with school goals ‡</td>
<td>• Encourages teachers to attend professional development activities that are aligned to school goals</td>
</tr>
<tr>
<td>• Encourages teachers to use data analysis of students academic process</td>
<td>• Monitors classroom to ensure classroom instruction aligns with school goals ‡</td>
<td>• Provides for in-house professional development opportunities around instructional practices</td>
</tr>
<tr>
<td>• Develops data driven academic goals in collaboration with teachers</td>
<td>• Works with students on academic tasks ‡</td>
<td>• Plans professional development around teacher needs and wants</td>
</tr>
<tr>
<td>• Communicates the student’s academic goals to the faculty</td>
<td>• Stays in the office all day (reversed score)</td>
<td>• Supports individualised professional development plans</td>
</tr>
<tr>
<td>• Works with teachers to interpret assessment data for instructional implications</td>
<td>• Observes teachers for professional development instead of evaluation</td>
<td>• Plans professional developments in-service with teachers</td>
</tr>
<tr>
<td>• Uses school goals when making academic decisions</td>
<td>• Evaluates teachers to improve instructional practice</td>
<td>• Furnishes useful professional materials and resources to teachers</td>
</tr>
<tr>
<td>• Develops school goals that promote high standards and expectations for all students</td>
<td>• Provides private feedback on teacher effort</td>
<td>• Schedules time on in-service for collaboration along teachers</td>
</tr>
<tr>
<td>• Sets high but achievable standards for all children</td>
<td>• Provides private feedback on student effort</td>
<td></td>
</tr>
</tbody>
</table>


Hallinger (2005) reflected upon the research conducted during the 1980s and 1990s by assessing the instructional leadership role of the school principal. He concluded that instructional leaders (a) focused on creating a shared vision, (b) developed a climate of high expectations, (c) guided the continuous improvements of the school, (d) monitored the curriculum and student learning outcomes, (e) created and communicated the school’s vision, (f) orchestrated staff development, and (g) became a visible presence in the school by modelling the shared values of the school’s culture. This aligns with much of the general leadership research by Bennis and Goldsmith, (2003), Bolman and Deal, (2003) and Northouse (2007).

Glanz (2006) then looked at how the actions and activities of an effective instructional leader improved student learning based upon the Marzano et al.’s (2005) research, and the work
done by Cotton (2003). Glanz (2006) argued that the effective instructional leader needed to be able to do three things:

- Support teachers, by providing resources to improve instruction. They make an effort to hire experienced teachers who promote student achievement.
- Place an emphasis on academics. They set high expectations and standards for student learning.
- Improve instructional practices by conducting instructional conferences with teachers, providing staff development, and developing teacher reflection.

To advance the empirical understanding of instructional leadership further, Robinson et al. (2009) conducted a comprehensive and high quality review and meta-analysis of educational leadership literature published between 1978 and 2006, which “serves as an exemplar for this type of research approach” Educational Administration Quarterly, (2009, p. 515) and which became known as the BES. Only research that was highly credible and had validated empirically the links between school leadership and academic or non-academic student outcomes was included. Unpublished theses and conference papers were excluded because these had not been subject to peer review processes (See Appendix 1 for a complete list of studies and brief information about each).

2.3.2 Instructional Leadership Research Design

Using the Hallinger and Heck (1996a) schema (adapted from Pitner, 1988), studies of instructional leadership can be classified into two broad types: Direct Leadership Effects Studies and Mediated Effects Studies. This bifurcation derives from the manner in which researchers conceptualise the relationship between instructional leadership and other variables in their studies.

Both types of studies make use of antecedents of either principal demographics or school contextual factors. Principal demographic antecedents typically include the principal’s age, experience, gender, teaching experience and school sector. Antecedents that explore the relationship of the school context to instructional leadership typically include variables such as the school size, school level, district size or type (Hallinger, 2008). Some studies incorporated both types of antecedents. Hallinger (2008) further advises that the single most frequent approach has been to study how different personal characteristics of the principals influence their instructional leadership and that the most popular variables have been principal’s gender, years of experience as principal, years of teaching experience prior to becoming a principal, age, and ethnicity.
The Direct Leadership Effects model studies the relationship between instructional leadership and a second variable, usually an in-school variable (school climate, school missions) or school outcomes (e.g., teacher satisfaction, student achievement, school effectiveness) (Hallinger, 2008). Also known as ‘forward mapping’ because it involves starting with a measure of leadership and then tracing its links to student outcomes, researchers have sought to understand the direct relationship between instructional leadership and an outcome variable (Robinson, 2007). The Direct Leadership Effects model accounts for the majority of studies (Scheerens, 2012) with more than half of these also including demographic and/or context antecedent factors (Hallinger, 2008).

Hallinger (2008, p.29) noted that intervening variables and researchers included:

- Teacher morale and satisfaction (Apolonia, 1998; MacNeil, 1992);
- Teacher self-efficacy (Chan, 1992; Keith, 1989; Lubbers, 1998; Ruzicska, 1988);
- Teacher stress (Courtney, 1994);
- Principal locus of control (e.g., Duryea, 1988);
- School and organisational culture (Leitner, 1990; Reid, 1989);
- Teacher effectiveness and time on task (e.g., Kennedy, 1993; Reid, 1989; Watkins, 1992);
- Organisational climate or health (Lord, 2001; Salvador, 1999; Simpson, 1990; Wilson, 2005);
- Teacher participation in decision-making (Sicina, 1996).

The Mediated Effects model seeks to understand the avenues through which instructional leadership influences school outcomes such as achievement. Also known as “backward mapping” (Robinson et al., 2009) researchers examine the range of behaviours that produce an outcome and synthesise these into predictive behaviours. Hallinger (2008) cites such exemplary research as (Campbell, 1999); Cantu (1994); Geiselman (2004); Howe (1995); Maciel (2005); MacNeil (1992); and Meek (1999). Hallinger and Heck (1996b) have noted that this model is among the most powerful approaches to studying school leadership and its effects because of its ability to illustrate relationships.

Such researchers indicate that leadership in schools is for the most part indirect (Leithwood & Day, 2007) and therefore it is most productive to think of leadership as comprising diverse forms of influence (Moos, 2011). That is, because school leaders are often not present when teachers make their decisions or discuss their practices, school leaders must be competent in differing ways of influencing individuals and groups (Moos, 2011; Warren, 1999) and the task is to discern these practices.
Researchers have used a variety of quantitative and qualitative designs to study instructional leadership. These include case studies, usually employing multiple methods and descriptive statistics, as well as a variety of post hoc or ex post facto designs. Most commonly used in research has been the “post-hoc design in which the researcher sampled a population of schools and studied principal leadership in relation to other variables” (Hallinger, 2008, p. 21).

As part of this, cross-sectional research also seeks to compare perceptions across role groups such as principals and teachers. Usually this type of study does not seek causal explanation but to determine if differences exist in perceptions across role groups and is derived from an interest in understanding the validity of perceptions (Hallinger, 2008, p. 21).

Hallinger (2008) further notes many role group perception studies have sought to determine the alignment between teachers and principals instructional leadership. In citing, Brown (1991); Haack (1991); and Vinson (1997) he observes that “there has been statistically significant disagreement across role groups in their perceptions of the principal’s instructional leadership” (Hallinger, 2008, p. 25) and that principals’ self-reports yield higher ratings than reports from their teachers such that the findings are statistically significant (Hallinger, 2008).

Consistently, teacher perceptions provide the highest degree of validity (Hallinger, 1983). Hallinger (2008) also notes that where these results are triangulated with other data sources, such as by Taraseina (1993), the teacher results have proven to be the more accurate and reliable. “These findings suggest that teacher perceptions continue to constitute the preferred source of data on the principal’s instructional leadership for both research and evaluation purposes” (Hallinger, 2008, p. 26).

In the third type of research design, researchers utilise schools as the unit of analysis and contrast characteristics such as performance and socio-economic status across schools to examine differences in the instructional leadership (Hallinger, 2008). Among school context variables, Hallinger (2008, p. 28) notes frequent study topics and researchers have been:

- School level of the principal (Duryea, 1998; Garcia, 1999; Hart, 2006);
- School size (Anderson, 2006; Garcia, 1999; MacNeil, 1992; Meek, 1999; Pratley, 1992; Yang, 1996);
- School performance rating (Gerrell, 2006; Johnson, 2005; Moore, 2003; Waters, 2005);
- Private schools (Chi, 1997; Griffin, 1993; Hart, 2006; Howe, 1995).

Across the research to date, some general trends in the findings are worth noting. The first concerns the relationship between gender and instructional leadership. Early work by Gross and Herriot (1965) found that female gender appeared to be associated with higher levels of instructional leadership activity among the sample of principals. This finding was subsequently supported by Hallinger (1983), Howell (1989), Babcock (1991), Nogay (1995), Meek (1999),
Prater (2004) and Sterrett (2005) and is unusual in its consistency (Hallinger, 2008). This finding also held across school levels (Cunningham, 2004). Although some studies reported no effects of gender on instructional leadership (Geiselman, 2004; O’Donnell, 2002; Rogers, 2005), these were exceptions to the more general trend (Hallinger, 2008).

Among other demographic variables extensively studied including age, gender, experience as an administrator, prior teaching experience and ethnicity, only years of experience as an administrator and prior teaching experience yielded any significant findings (Hallinger, 2008). Additionally, Burwell (1988) cited by Hallinger (2008) reported an interaction between gender and experience which suggested that more experienced female principals exercised the most active instructional leadership.

Hallinger (2008) also notes that much research addressed possible relationships between variables that might substitute for instructional leadership. These included school sector and years of teaching experience prior to becoming a principal. Hallinger (2008) further notes that although several found positive associations (Delano, 1985; Orange 1990; Pratley 1992) other studies did not confirm these findings (Lehl, 1989; Simpson, 1988).

No role group perception studies or studies with demographic variables have been evidenced in instructional leadership in the Australian context; therefore, whether these trends cited in this summary of research are evidenced in Australian schools is unknown. Research that explores role group perception studies along with demographic variables would have the potential to offer unique contribution to the field of educational leadership.

2.3.3 Best Evidence Synthesis (BES)

Since the identification of the concept of educational leadership, the starting point for research has typically been a theory based on a particular philosophy, about the qualities of effective leadership (Bass, 1990; Bryman, 1996; Leithwood et al., 2004), however, Robinson (2006; 2009) fundamentally challenged this process. She suggested instead a backward mapping process of proven leadership practices to produce theories of educational leadership that are much more firmly grounded in teaching and learning. The validity of the resulting theory would be established in showing that leaders who engage in the specified practices have a greater impact on student outcomes than those who do not (Robinson, 2006).

With this in mind, Robinson et al. (2009) worked carefully through a large body of research with an impressive evidence base (Collins, 2010) to extract some clear and compelling findings and implications for school and system leaders. In the creation of a “high quality review” (Fullan & Levin, 2009), the BES – School Leadership and Student Outcomes took an in-depth
look at required contemporary school leadership. The BES identifies the dimensions of school leadership that make a difference for students and describes the knowledge, skills, and dispositions needed for effective leadership. The BES presents the research evidence that connects school leadership and student outcomes. It affirms that the most effective type of leadership in schools prioritises instructional leadership over those aspects of leadership that are more management-focused.

The review became known as the BES and comprised 134 studies which addressed the relationship between leadership and student outcomes. Twenty-seven of the studies were quantitative with the remaining 107 studies being qualitative. Of the 134 studies, 61 were from New Zealand and the remaining studies were international.

The 27 quantitative studies included one from Australia, New Zealand, England, Hong Kong, Israel, Netherlands and Singapore with the remaining 20 studies being from the United States and Canada. Of the 27 quantitative studies, 17 examined leadership in elementary school contexts, 4 in high schools, and 7 studies included a mix of elementary, middle and high schools. Eighteen of the 27 studies confined their analysis of school leadership to the principal or designee only, while 9 took a broader, more distributed view of leadership (See Figure 2).

![Figure 2 - Characteristics of 27 studies linking leadership to student outcomes](image_url)
Initially, Robinson et al. (2009) indicated the 27 quantitative studies as premised on either pedagogical (instructional) leadership theory or transformational leadership theory and analysed then compared these to examine the links between leadership and any type of student outcome. One out of the 14 transformational models was from Australia (Silins & Mulford, 2002); however, no Australian instructional research was included within the 13 instructional models.

Whilst acknowledging that there is “a broad view of what counts as valued student outcomes” (Robinson et al., 2009, p. 72) and that student performance can be alternatively defined and measured by standardised scores, personal well-being, and/or the habits of good citizenship (Jacobson & Bezzina 2008; Qian & Walker, 2011), of the 27 BES quantitative analyses of the effects of leadership on students’ outcomes, 22 utilised academic outcomes, 4 utilised non-academic outcomes and 1 utilised a combination of academic and non-academic outcomes. Within the academic outcomes, mathematics, reading, and language skills predominated (Robinson et al., 2009).

In keeping with Silins and Mulford’s (2002) findings, Robinson et al. (2009, p. 201) showed that:

the impact of instructional leadership is three to four times that of transformational leadership because the latter is focused on the relationship between leaders and followers rather than on the educational work of the school. This is not to say that relationships do not matter; indeed, every leadership dimension identified in this BES includes an important relationships component. But the quality of leader–staff relationships is not predictive of the quality of student outcomes. This is because there is more to educational leadership than building collegial teams, establishing a loyal and cohesive staff, and developing a shared and inspirational vision.

Nir and Hameiri (2014) and particularly Earley et al. (2012) in their reviews of the school leadership landscape and also Day and Gurr’s (2014) 15 stories of successful school leadership from 13 countries agree in noting that transformational leadership needs to be combined with an instructional, pedagogic or learning-centred leadership approach. Educational leadership is about focusing such relationships on specific pedagogical work and when described as instructional leadership, more successfully captures the practices involved (Robinson et al., 2009). These direct evidence studies are marked with an asterisk in Appendix 1.

In conducting this detailed synthesis of the research from the 13 instructional models, Robinson et al. (2009) derived from the quantitative direct evidence five firmly grounded
dimensions that directly tested the relationship between leadership and student outcomes (see Figure 3).

**FIVE DIMENSIONS OF EFFECTIVE LEADERSHIP**
Derived from Quantitative Studies Linking Leadership with Student Outcomes

| 1. Establishing Goals and Expectations | 0.42 |
| 2. Resourcing Strategically | 0.31 |
| 3. Planning, Coordinating and Evaluating Teaching and the Curriculum | 0.42 |
| 4. Promoting and Participating in Teacher Learning and Development | 0.84 |
| 5. Ensuring an Orderly and Supportive Environment | 0.27 |

**Figure 3 - Five Dimensions of Effective Instructional Leadership**


2.3.4 Leadership Dimensions

The five Robinson et al. (2009) BES dimensions of effective leadership derived from the synthesis of quantitative studies are:

1. Establishing Goals and Expectations: Includes the setting, communicating and monitoring of learning goals, standards and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals.

2. Strategic Resourcing: Involves aligning resource selection and allocation to priority teaching goals and includes provision of appropriate expertise through staff recruitment.

3. Planning, Coordinating and Evaluating Teaching and the Curriculum: Direct involvement in the support and evaluation of teaching through regular classroom visits and provision of formative and summative feedback to teachers and includes direct oversight of curriculum through school-wide coordination across classes and year levels and alignment to school goals.
4. Promoting and Participating in Teacher Learning and Development: Leadership that not only promotes but directly participates with teachers in formal or informal professional learning.

5. Ensuring an Orderly and Supportive Environment: Protecting time for teaching and learning by reducing external pressures and interruptions and establishing an orderly and supportive environment both inside and outside classrooms.

In addition to the five dimensions discerned from the meta-analysis of the 27 quantitative studies that directly tested the relationship between leadership and student outcomes, Robinson et al. (2009) also derived a second set of dimensions from the remaining 107 qualitative research studies which were predominantly drawn from the New Zealand context. This qualitative research was not specifically designed to investigate relationships between leadership and student outcomes, but was concerned with the activity of leaders that had positive outcomes for students.

Six qualitative dimensions were derived in this way, three of which had clear equivalents in the quantitative set and these were (a) establishing goals and expectations, (b) resourcing strategically, and (c) promoting and participating in teacher learning and development. The three qualitative dimensions that did not have equivalents in the quantitative meta-analysis were (a) the creation of educationally powerful connections, (b) engagement in constructive problem talk, and (c) the selection, development, and use of smart tools.

Whilst Robinson et al. (2009, p. 202) considered that the evidence for the second set of dimensions was not as robust as for the first set “because the research from which the indirect dimensions were derived did not test the relationship between leadership practices and student outcomes”, the congruence of three of the qualitative leadership dimensions with the quantitative leadership dimensions adds to their plausibility. This research will however focus only on the leadership dimensions derived from the quantitative studies. Similarly, whilst Robinson et al., (2009) used the convention of Glass et al., (1981) and discerned effect size for each of the leadership dimensions as the measure of the strength of the relationship between leadership and student outcomes, this research does not prioritise the dimensions and does not utilise effect size as a measure.

It is also noted however that within this research the BES dimension of Planning, Coordinating and Evaluating Teaching and the Curriculum, will be bifurcated into part A, Planning, Coordinating and Evaluating Teaching; and part B, Planning, Coordinating and Evaluating the Curriculum. This will in essence give this research six leadership dimensions as drawn from the
BES. This approach is consistent with the approach taken by Wylie and Hodgen (2010) in utilising the BES dimensions as part of their research in the New Zealand context.

Therefore for the purpose of this research, the six leadership dimensions are:

1. Establishing Goals and Expectations (Goals and Expectations).
2. Strategic Resourcing (Strategic Resourcing).
3. Planning, Coordinating and Evaluating the Curriculum (Curriculum Quality).
4. Planning, Coordinating and Evaluating Teaching (Quality Teaching).
5. Promoting and Participating in Teacher Learning and Development (Promoting Professional Learning).
6. Ensuring an Orderly and Supportive Environment (Safe Orderly Environment).

As Skerrett (2010, p. 42) observes:

The leadership dimensions conceptualised in the BES (Robinson et al., 2009) shifts leadership to pedagogical leadership with a focus on what and how teachers are teaching, and what and how children and young people are learning and achieving and is premised on understanding what happens at the interactional and relationship levels to make a difference in educational outcomes.

The BES “confirms that school leaders can indeed make a difference to student achievement and well-being. It identifies, explains, and illustrates some of the specific ways in which they can do this” (Robinson et al., 2009, P. 35).

The use of meta-analytic studies provides a generalisable basis for future study (Muijs, 2011, p. 124) such that Cooper, Leggett, Stewart, Faire, and McKenzie (2009) have suggested that the BES should guide further research and development relating to the leadership dimensions that are needed to improve students’ learning outcomes. Additionally, the perceptions of teachers are critical in the interplay between these dimensions (Cooper et al., 2009).

2.4 Research value

Muijs (2011) in analysing a cross section of leadership research in the period 2005 to 2010 has noted that whilst the study of educational leadership has rapidly developed over recent decades, there has been the tendency to jump rapidly from a limited research base to prescriptions for practice. Particularly, he observes that whilst the research method most commonly employed is case study, most of these comprise relatively limited visits and are characterised by a lack of in-depth understanding (Muijs, 2011). Also noted was a dearth of mixed method studies (less than 5% of studies) despite this method being popular in research generally (Muijs, 2011).

Muijs (2011) also discerns that because the research base is not strong due to deficiencies in research methods, there is a need to do more rigorous quantitative and qualitative research.
with more refined methods of data analysis, such as multilevel, growth models and structural equation modelling. Similarly, because of a strong over-reliance of self-report in leadership studies, there is also the need to gather data not only from the school leaders but also from teachers to add additional views (Muijs, 2011). This stance is echoed by Firestone and Riehl (2005) and Dempster et al. (2011) in which they have argued for a blend of qualitative studies and research designs with rigorous quantitative methods.

Similarly, whilst there is an array of research which has clearly shown that leadership practices play an important role in school and student performance, there is no specific practical consensus on what practices are effective (Olsen, 2013) and practitioners are looking to researchers to catch up, to use the lessons of success to provide guidance (Hassel & Hassel, 2009). In essence the ‘theory’ of the BES does just this, and needs now to be tested in practice.

The BES has not been without comment. Thrupp (2010) infers that because the research is government sponsored, it does not have integrity particularly because it does not address the ‘politics of education’ (p.5) but he acknowledges that it is good robust research, with lots of practical information. Similarly Notman (2010) notes the strength of the research evidence and that the “contents are realistic, empirically documented, context-specific and eminently readable” (p. 11). He also calls for further targeted research into pedagogical leadership particularly in secondary schools regards the applicability of these findings. Potaka (2010) argues that the BES report is one of the most significant reports on leadership and that it highlights tensions in the principal’s role and raises important issues for policy makers and practitioners. He comments that “the work is about ‘best evidence’ and does not presume to offer ‘best practice’” (p.27) and therefore “needs testing rather than blind adoption and that the challenge is to find which parts work, under what circumstances and why” (p28).

Thornton (2010) indicates that the BES emphasises a lack of research linking theories on leadership to actual student learning outcomes in schools and that future studies need to more strongly link the leadership as shown in the BES with outcomes for children.

Youngs (2011) advises that as with all research, the BES (Robinson et al., 2009) should be read critically, particularly in relation to the transferability of context and that it is not a case of ‘one-size-fits-all’. As does Robinson, Bendikson and Hattie (2011), Youngs (2011) believes that care needs to be taken in generalising research from primary schools into the secondary school setting.

This doctoral study has value because it will continue to mine the existing research on leadership behaviours to determine if leadership effects can be associated with specific
practices. Barth 1990 (as cited in Chappuis, 2004, p. 18) generalised with, "show me a good school and I'll show you a good principal. However, nailing down what defines 'good', especially as it relates to instructional leadership, has proved to be somewhat elusive". Therefore, additional research illustrating the practical applications of research-based leadership theories may enhance principals' abilities to effectively implement the leadership strategy.

In noting emerging research agendas, Dempster (2011, p. 99) has suggested the initiation of research that asks: “What are the effects of the work of principals who systematically apply particular leadership for learning frameworks in the leadership of their schools?”. The study is also of interest because it begins to explore the importance of teachers' perceptions of principals' leadership and their relationship to student achievement. There is an abundance of research that identifies principal leadership styles and behaviours that influence teachers' performance. For example, Marks and Printy (2003, p. 76) stated, "transformational leaders may challenge teachers to examine their assumptions about their work and to rethink their instructional processes; they may establish expectations for quality pedagogy and support teachers' professional growth". According to Edgerson and Kritsonis (2006), principals have the ability to improve teacher perceptions overall by simply attending to fundamental components inherent in quality relationships. As teachers begin to feel better about themselves and what their collective missions are as a result of significant interactions with their principals, they become more effective in the classroom. Unfortunately, there is limited additional research that focuses on the relationship between teachers and principals from the teacher's perspective. Therefore, this study is of interest because it begins to explore the relationship between teachers' perceptions of principals' leadership practices and student achievement.

Irrespective of methodology, a review of the research shows that principals think they know what they have to do to be successful school leaders. Teachers also have a consistent and clear perception of practices and behaviours principals should display to be successful. No methodology in these research areas has used mixed method to generate a large corpus of quantitative data and then triangulate this with qualitative data via text analytics. Similarly, whilst there is research on principals' perceptions and research on teachers' perceptions there is no research evidenced that compares their perceptions of the prevalence of behaviours in a school context. Further, the comparison of these perspectives against student outcomes has also not been explored.
Additionally, no study has ever been conducted to determine teacher perceptions of the presence of the Robinson et al. (2009) BES behaviours, practices and actions within Australian, or Queensland and/or Catholic schools, or their perception of the behaviours, practices and actions that they value most. Further, no research has attempted to correlate these perceptions against that of the leader’s or against school achievement.

A study that attempts to move beyond general leadership theories and initiates examination of aspects of principal behaviours and actions would have merit. The study could reveal the extent to which principals engage in research-based leadership behaviours and practices as reported by principals and teachers. Second, the study could reveal if principals’ engagement in the practices as reported by principals and teachers can be used to predict the likelihood that schools will enhance student performance outcomes. The results of the study may lead to further investigation of specific principal behaviours and actions that impact school conditions which lead to increased student academic success.

Similarly, comparison of role perceptions and research which includes demographic variables would indicate whether trends reported in overseas research are evidenced in Australian schools. In addition, the findings could also be used for the purpose of redesigning principal professional development programs and the restructuring the principal’s role in schools.

2.4.1 Synthesis

A review of instructional leadership reveals that:

- Teacher perceptions continue to constitute the preferred source of data on the principal’s instructional leadership for both research and evaluation purposes.
- No role group perception studies or studies with demographic variables have been evidenced in instructional leadership in the Australian context. It is unknown whether the trends reported in overseas research are evidenced in Australian schools.
- It is possible to obtain critical, system-wide feedback concerning the instructional capacity of current leaders by assessing collective performance on selected leadership dimensions.
- A gap exists in contemporary research of a large scale mixed method inquiry into classroom teachers’ perceptions of the presence of specific instructional leadership behaviours. Additionally, the presence or not of these specific instructional leadership behaviours has never been contrasted with school outcomes.
2.5 Summary

In 2005, Hallinger commented that, “There is little evidence to support the view that on a broad scale at either the primary or secondary school level principals have become more engaged in hands on directed supervision of teaching and learning in classrooms” (p. 230). Robinson et al. (2009), in reviewing local evidence indicated that this conclusion also applied to New Zealand principals and further indicated that the challenge for researchers is to discover what practices actually matter in their context.

In doing so it may be necessary to go beyond the conceptual parameters of school leadership and consider new possibilities that may alter the work of school leaders (Reeves, 2009; Schmoker, 2006; Whitaker, 2003). School leadership is more about what needs to happen (results) than how one is labelled (Weigel, 2012).

Given that there is very little Australian research that directly links school leadership with student outcomes; the question arises whether the leadership dimensions that emerged from the Robinson et al. (2009) forward mapping quantitative analyses are appropriate in the Australian context. The efficacy of the Robinson et al. (2009) dimensions of effective instructional leadership, and any relationships to school and hence student performance, therefore, forms the focus of this research within the Australian, Queensland Catholic context.
Methodology

A research paradigm should focus on ‘what works’ as truth; advocate for mixed methods; and acknowledge the value of the researcher in interpretation of results.
Teddlie and Tashakkori, 2009, p. 7

3.1 Introduction

This chapter presents and justifies the methodology designed to achieve the intents of this study, which uses the lens of Robinson et al. (2009) and the leadership behaviours drawn from their BES, to identify the presence of these leadership behaviours in Brisbane Catholic Education (BCE) schools, and the relationships between these behaviours and (a) school performance; (b) teacher and principal perceptions; (c) specific leadership actions and school performance; and (d) variations in such perceptions, accounting for demographic characteristics.

The chapter begins with an overview of the pragmatic research paradigm and data sources that underpin the project. The second part of this chapter details the survey instrumentation, measurement of school performance, data collection methods, and ethical considerations of this research before moving to detailing the approaches to be used in the treatment of the quantitative and qualitative data. In Chapter 4 this is analysed to address the respective research questions before being integrated in Chapter 5 as findings and conclusions summarised by both quantitative and qualitative research phases.

3.2 The Research Questions

Specifically, this study uses the lens of Robinson et al. (2009) and leadership behaviours drawn from their BES to explore the research questions:

1. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and school performance?
2. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours?
3. In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?
4. Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years supervised by current principal?
This research is an organised and deliberate effort to collect new information and also to utilise existing information for the specific purpose of addressing the research questions and looking from these to future applications and further research. It is directed towards seeking answers to worthwhile, important and fundamental questions through the application of sound and acceptable methods.

3.3 Inquiry Paradigm

This study will be underpinned by an interpretive research orientation. It is interested in “understanding the meaning people have constructed, that is, how they make sense of their world, and the experiences they have in the world” (Merriam, 1998, p. 6). Specifically, it will seek to determine and understand the perceptions BCE teachers have of the practices associated with instructional leadership in their schools. A range of studies have already been completed on similar perceptual lines such as:

- Arocha-Gill (2010) – perceptions of 413 San Antonio special education teachers regarding educative activities;
- Hannaford (2010) – perceptions of Oklahoma middle school teachers in six schools regarding school climate;
- Fisher (2010) – perceptions of teacher morale in six Californian child care centres; and

While these yielded rich descriptions, they were limited either in terms of breadth or in terms of target group. This research elects therefore to utilise both a quantitative and qualitative dimension to the existing research on instructional leadership to provide a richer understanding of the study (Morse & Niehaus, 2009; Teddlie & Tashakkori, 2009).

As far back as 1966, Diesing opined that developments in computer and mathematical models had made the objectivism-subjectivism arguments obsolete and that instead of arguing over what was scientific or unscientific it was better to determine what sort of approach was most fruitful in specific areas. Advanced technology would make capable the long dreamed of “stereoscopic window on the world” (Pike, 1967:37). Suri and Clarke (2009) in keeping with Walker and Evers (1999) subscribed to a complementarity diversity thesis, with the premise being that different paradigms exist and serve complementary purposes in educational research.

Within the positivist critical realism paradigm, this research attempts to preserve a ‘scientific’ attitude while simultaneously recognising the importance of actors’ meanings and incorporating them into research (Ryan, Tähtinen, Vanharanta, & Mainela, 2012). Positivism (Ambert, Adler, Adler, & Detzner, 1995; Bryant, 1985; Turner, 1985) leads researchers to utilise
methods allowing for the quantification of observations and the accumulation of knowledge using procedures that can be duplicated to find rules or patterns of social life.

Although quantitative research methods are known for their rigour in terms of theory testing and generalising, they are not considered versatile in capturing important contextual factors underpinning the phenomena being studied (Hewege, 2011; Vermeulen, 2005). Conversely, qualitative research methods are efficient in capturing these contextual factors, yet they have been heavily criticised for their lack of generalisability (Arbnor & Bjerke, 2008; Creswell, 2008; Hewege & Perera, 2013; Onwuegbuzie & Leech, 2010).

An objectivist approach to quantitative research is predicated on explaining and predicting phenomena, and enables re-framing of qualitative problems in quantitative terms (Barany, 2009), while the subjectivist approach emphasises describing and understanding phenomena. Borch and Arthur (1995) have suggested a ‘rapprochement’ methodology in that both approaches should be used, arguing a mixed methodology would “contribute to the richness” (Borch & Arthur, 1995, p. 423). Similarly, Sammons et al. (2014, p. 569) note that “mixed method approaches are increasingly being used to unpick complexities and finer detail”.

As such, this research accepts the ontology that reality is ‘real’ but only imperfectly and probabilistically apprehensible and so, triangulation is required to ‘try and know it’ (Perry et al., 1997). Within the modified objectivist epistemology that findings are probably true (Guba & Lincoln, 1994) and the understanding that “research is a process of steps to collect and analyse information in order to increase our understanding of a topic” (Cresswell, 2008, p. 3), a mixed method research strategy was used primarily because such an approach allows for collecting, analysing and ‘mixing’ both quantitative and qualitative research methods in a single study to understand the research problem (Cresswell, 2008).

According to Johnson and Onwuegbuzie (2004, p. 17), “mixed methods research is formally defined as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study”. A mixed methods model uses multiple approaches to answer the research question. It allows the researcher to be expansive and creative rather than limited by the research. The mixed research design provides the researcher the opportunity to combine strategies that likely result in similar strengths and non-overlapping weaknesses being identified (Johnson & Onwuegbuzie, 2004). The mixed method design also offers the advantages of both quantitative and qualitative research approaches which yield a richer understanding of the study than either approach can provide alone (Greene, 2007; Bazeley, 2009).
Creswell and Clark (2007) concurred with Greene (2007) and Bazeley (2009). They further stated, “Researchers can use all tools of data collection available rather than [be] restricted to types of data collection associated with quantitative [methods]” (p. 9). After a review of 57 mixed methods studies, Greene, Caracelli, and Graham (1989) found that the key advantages of mixed methods approaches lay in the way in which quantitative and qualitative methods could be used to enhance or complement each other.

Creswell and Clark (2007) have reminded us that the objective of quantitative research is to test rather than develop theory and that its deductive logic helps to explain the relationships among variables (Neuman, 2010). Therefore, quantitative research was used to investigate the relationship between leadership behaviours and school performance and qualitative research was used to provide a means of eliciting rich detail and evidence that respondents provided (Creswell, 2012; Klieve, Sveticic, & De Leo, 2009; Klieve et al., 2011).

This research could also be noted as having an ‘embedded design’ (Creswell and Plano Clark, 2007) in that one data set provides a supportive, secondary role in the study based primarily on the other data type. The purpose of this mixed methods design was to better understand a research problem by converging both broad numeric trends from quantitative data and the detail of qualitative data (Creswell, 2003).

3.4 Overview of Methodology

Information for this study was collected through the Educational Leadership Practices (ELP) survey which captured demographic data and teacher and principal perceptions regarding six specific leadership practices. It did so through Likert scale quantitative data and also through the use of open-ended short responses. These data were analysed using the Statistical Package for Social Sciences, v.21 (SPSS) and SPSS Text Analytics for Surveys (TAS).

The discernment of school performance was obtained through a combination of individual school longitudinal performance data from NAPLAN being triangulated with expert judgement to arrive at a determination of whether a school, given its context, was:

A - Performing better than expected
B - Performing as expected
C - Performing less than expected.

These two sets of data were then blended to see how they interacted. See Figure 4.
3.5 Research Design and Approach

A survey design was chosen for this study which had the ability to source participant perceptions through quantitative data and also to source participant opinions through the use of open-ended responses.
of additional relatively short responses within the survey. The study was designed as a large-scale survey and called for numerical data and descriptive statistics to ascertain teachers’ understanding and experiences of instructional leadership in BCE schools. Its attractiveness was in its “ability to make statements which are supported by large data banks and its ability to establish the degree of confidence which can be placed in a set of findings” (Cohen, Manion, & Morrison, 2007, p. 207). To this end, surveys were employed because of their ability to gather information from a large population in one or several locations without making personal contact with the respondents (Bless & Achola, 1990). Furthermore, surveys lend themselves to logical and organised data entry and analysis (Anderson & Arsenault, 1998).

Teachers’ perceptions are the primary source of information used in educational research (Bates & Nettelbeck, 2001) and research into the accuracy of teachers’ perceptions have been positively and significantly correlated (Hopkins et al., 1985; Wright & Wiese, 1988). Whilst acknowledging individual variations, Harris and Willower (1998), Louden et al. (2006), Frawley et al. (2010) and Heldsinger and Humphry (2010) also noted that there is accuracy of perception in teacher judgments. As demonstrated by Frawley et al. (2010), who researched the methodology of contemporary educational research practices, the use of perceptions as ascribed in Likert style quantitatively analysed questionnaires is widely prevalent as effective research methodology.

Surveys are “information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behaviours” (Fink, 2006, p. 1). A survey is a self-report instrument useful for economically and speedily obtaining data from a large number of respondents (Brown, 2001). In the study of teachers’ beliefs and practices, surveys have made regular appearances (MacDonald, Badger, & White, 2001) such that a survey, whilst a quantitative design, nevertheless “provides a numeric description of trends, attitudes, or opinions of a population” (Creswell, 2003, p. 153).

Within the survey design, numeric values are apparent within the responses so as to allow correlation, “a statistical technique used to measure and describe a relationship between two variables” (Gravetter & Wallanau, 2005, p. 412) and is the “simplest way to look for relationships between variables” (Gravetter et al. 2005, p. 10). Such correlation research affords integrity of research because we can “observe what naturally goes on in the world without directly interfering with it” (Field, 2009, p. 12).

The inclusion of additional open-ended responses at the end of each section of the survey gives qualitative capacity to understand and justify the quantitative ratings given by respective participants. As noted by Fielding et al. (2013, p. 3261), open-ended responses:
may be included in survey instruments to capture dimensions not represented in the numerical items or anticipated by the survey designer, to enable respondents to provide reasons or background informing the option they have selected from the response set provided in fixed response questions, or even to make respondents feel that the survey instrument has a human and less constraining face.

3.5.1 Setting Selection

The study took place in 2013 in the Catholic Archdiocese of Brisbane which is located in the south-east corner of Queensland and follows approximately 350 km of the east coast of Queensland and reaches inland from 100-300 km west as it follows the Great Dividing Range. The Archdiocese services approximately 550,000 Catholics in a land area of 77,000 square kilometres across 112 parishes.

There are 137 schools in the region and of these 104 are primary (preparatory to year 7), 24 are secondary (years 8-12) and 9 are preparatory to year 12 schools (P-12). There are 137 principals and approximately 4,500 teaching staff of whom approximately 3,500 are full-time continuous in their employment.

Given the diversity of this context, on-line surveys provide a valuable means to capture the knowledge and experience of the responding cohort that is large in size and dispersed over a wide geographical area (Andres, 2012; Klieve et al., 2011).

3.5.2 Participants

Using the predication of full time continuous teaching staff, entire group sampling was employed for this study. Despite the possibility of convenience sampling which involves “drawing elements from a group that is easily accessible by the researcher” (Kemper, Stringfield & Teddlie, 2003, p. 273), entire group sampling was possible using high-end technology and had the benefit of providing the ability “to best illuminate and test the hypothesis” (Kemper et al., 2003, p. 279) as well as validity, reliability, generalisability and transferability (Creswell, 2008; Gall et al., 2007; Gay, Mills, & Airasian, 2009).

Rather than gathering unformed or uninformed perceptions from temporary and/or short term staff, the sample determination was based on all full time continuous teaching staff actively in service during May, June and July of 2013. Whilst limiting the potential return numbers, this ensured greater data defensibility because these staff had proven experience and history within their respective schools and actively on duty. Sample size had the potential
to be as large as 3,500 full time continuous teachers. Given the potential data size, Stokes and Belin (2004) have indicated a sample of size of over 1,000 produces a highly reliable sample.

Further, the study only consisted of those principals and teachers who voluntarily agreed to participate in the study. The study population was therefore clearly defined as voluntary participants who were full time continuous teachers in active service for BCE during Term Two, 2013.

3.6 Instrumentation

With permission, this research modified the Educational Leadership Practices Survey (ELP) developed by the New Zealand Council for Educational Research (NZCER). The history, structure and subsequent modifications of the ELP for the Queensland Catholic context are discussed to establish research integrity.

3.6.1 The Educational Leadership Practices Survey (ELP)

The ELP for teachers and principals (see Appendices 2 and 3) was developed in 2009 by the NZCER for the New Zealand Ministry of Education, who requested a practical tool consistent with the Educational Leadership Best Evidence Synthesis (Wylie & Hodgen, 2010) and able to be used with principals and teachers. Content validity for this survey instrument had initially been established in New Zealand through a review by a panel of experts and a pilot test within the NZCER.

NZCER then trialled the survey with a cross-section of 37 New Zealand schools and following feedback and amendment was then utilised across 282 New Zealand schools and was undertaken by 4,716 teachers, whose principals had completed the ELP in October–December 2009 as part of the needs analysis for their work in 2010 (Wylie & Hodgen, 2010).

The NZCER version of the ELP covers the following aspects of educational leadership:

1. Goal Setting
2. Strategic Resourcing
3. Ensuring Curriculum Quality
4. Ensuring the Quality of Teaching
5. Promoting and Participating in Teacher Learning and Development
6. Ensuring a Safe and Orderly Environment
7. Ensuring Educationally and Powerful Connections with Families, Whanau and Community
8. Ensuring Maori success
9. Effectiveness of principal leadership.

Assessments of the NZCER ELP indicate it is a highly reliable instrument with the structure closely linked to the leadership literature supporting assessments of its validity. In the New Zealand trial and calibration of the ELP, each of the aspects had high internal reliability.
(Cronbach’s alphas of 0.81 to 0.88)—the items in each scale “hung together” well (Wylie & Hodgen, 2010, p. 5), and were measuring dimensions of the same underlying construct. The scales were also seen to have a high level of inter-correlation and a Rasch analysis confirmed that the scales could be treated as different aspects of a single underlying meta-construct—overall leadership practice (OLP) (Wylie & Hodgen, 2010).

The survey was designed to satisfy two objectives. Firstly, to identify the beliefs teachers had regarding specific leadership behaviours and secondly, to obtain information about teachers’ reported principal practices regarding these leadership behaviours (Wylie & Hodgen, 2010).

The NZCER ELP has three distinct parts. An initial section that contained 66 close-ended sections that required teachers to respond to statements on a 5-point Likert scale, as well as to identify their source of evidence in making the response for that specific question. The survey requested participants to rate the effectiveness of the school's leadership by choosing: "Ineffective", "Minimally Effective", "Satisfactorily Effective", "Highly Effective", or "Outstandingly Effective" for each of the 66 questions and also to identify the source or sources of evidence that led to their rating from: "Personal Observations"; "Other Sources", and "No Evidence". Other Sources may refer to artefacts such as school documents, meeting notes, and others' comments (NZ Ministry of Education, 2011).

The second section moved from asking questions about the “school leadership” to asking 16 questions about the effectiveness of the principal. The third section contained 18 demographic questions regarding the participant’s teaching and work experience. All questions were to be answered in terms of the participant’s own experience and knowledge and participants could omit any question where they considered they had no experience or knowledge.

In New Zealand the tool is used as a needs analysis to focus professional development and support for school leadership (Wylie & Hodgen, 2010). Wylie and Hodgen (2010) also have noted that while the ELP provides a useful way of gauging and describing school leadership practices that are linked to teaching and learning, the ELP levels need to be linked to patterns in student engagement and performance over time to discern whether they are high enough to make a real difference to student engagement and performance. “We do not yet know whether schools need to be at the high or outstandingly effective levels of educational leadership practices to affect student achievement levels, or whether the ‘satisfactorily’ effective level would be sufficient” (Wylie & Hodgen, 2010, p. 53).
A literature review as of January 2014 could not discern any context where performance of schools had been linked to levels of school leadership practices as described in the BES (Robinson et al., 2009) and utilised in the ELP.

### 3.6.2 Adaption for Australian Context

The ELP was chosen because it is premised on the contemporary meta-research of Robinson et al. (2009) and directly relates to the leadership behaviours to which this research is directed. Additionally it has been validated as an instrument within New Zealand, a proximate neighbour of Australia with similar cultural mores.

A modified version of the ELP was used in the study following the permission of the authors, Wylie and Hodgen (2010) and the NZCER, to adapt the instrument for use within the Queensland Catholic context (see Appendix 4). This adaptation was necessary because the last three of the nine aspects of the NZCER version were based on the vision for school leadership set out in the Kiwi Leadership for Principals (Wylie & Hodgen, 2010) and these were not pertinent to the Australian context.

This modification is defensible because the NZCER calibration of the ELP showed that each of the remaining aspects had high internal reliability and Rasch analysis confirmed that the scales could be treated as different aspects of a single underlying meta-construct. Therefore, because each of the six dimensions utilised in the context of this research were designed separately with respect to the effective educational leadership practice described in the Educational Leadership BES (Robinson et al., 2009), it was expected that the omission of those aspects particular to Maori education would not affect reliability.

Further, several questions were modified or eliminated to ensure content validity for the BCE context. Specifically, these referred to processes or terminology particular to the New Zealand context but for which there are BCE equivalents (See Appendix 5: Word Version of New Zealand Teacher ELP highlighted items: 1.3; 1.7; 2.6; 3.6; 4.9; and 5.8).

These modifications included the re-wording of questions to ensure cultural relevance and some modifications related to the organisation of the survey. The BCE version of the ELP therefore only articulates the key dimensions of:

1. Goal Setting
2. Strategic Resourcing
3. Curriculum Quality
4. Quality of Teaching
5. Promoting and Participating in Teacher Learning and Development
Because the purpose of this study was to explore the relationship between specific leadership behaviours and school performance, the responses requested of participants were modified from "Ineffective", "Minimally Effective", "Satisfactorily Effective", "Highly Effective", or "Outstandingly Effective" to rating the presence of specific leadership behaviours across a series of frequency indicators on a 5-point Likert scale by choosing: "Almost Always", "Often", "Sometimes", "Rarely", or "Almost Never".

3.6.3 Pilot Study

Before moving into field work, pilot studies can test the reliability and validity of the research design and as a smaller scale version of the research, test the methodology itself (Blessing & Chakrabarti, 2009; Sproull, 2002) so as to identify any issues and build confidence in the data collection process (Hall, 2008; van Teijlingen & Hundley, 2001).

Following the refinement of content validity, a pilot study utilising the instrument was conducted in two BCE schools to provide information on thoroughness, appropriateness and ease of use of the instrument. Feedback from respondents was very positive, with suggestions leading to some minor revisions to some wording in the survey.

3.6.4 Survey Structure

The survey was designed as an online electronic web-based survey and managed through the Griffith University Survey Research Centre, which had developed a LimeSurvey solution for researchers within the University. The internet is increasingly recognised as having certain advantages, including reduced time requirements, lower costs, ease of use, reliability of data capture, flexibility in format and the ability to secure additional information (Granello & Wheaton, 2004).

The survey was identified as “Leadership and School Performance (ID 79593)” and moved by the University staff from the sandpit to production environment and thus on-line following ethical approval.

University hosting of the tool provided links to the university research infrastructure, including ethical approval processes and IT support systems and also provided greater capacity for confidentiality of responses (Klieve et al., 2011).

The choice of survey collection method needs to take into account a number of factors. Whilst acknowledging that mail surveys potentially achieve a higher response rate than web surveys (Greenlaw & Brown-Welty, 2009; Hirsch et al., 2013; Lin & Van Ryzin, 2012; Shih & Fan, 2008), online surveys have gained increasing prominence in survey delivery, being a highly efficient
and attractive method of delivery which has the potential to achieve high response rates and yet maintain a confidential environment for participant management (Andres, 2012; Klieve et al., 2011). Further, a number of researchers have reported that respondents write longer and more self-disclosing comments on email questionnaires than they do in mail surveys (Yun & Trumbo, 2000), adding to the richness of the data from respondents.

An online survey was also chosen not only because the process is highly cost effective but also has efficient mechanisms for allowing data to be exported to other environments for subsequent analysis (Andres, 2012; Klieve et al., 2011), which minimises research translation error (Andrews et al., 2003; King et al., 2013) but also provides strong advantages of speedy distribution and response cycles (Kim, 2014; Swoboda et al., 1997; Yun & Trumbo, 2000).

Further, being web-based, the survey also provided a mechanism for access to an identified target population spread across a diverse area and also provided a capacity through which reminders to all staff could be made for survey completion. This practice of data collection through web-based surveys is familiar to BCE staff and is currently widely and effectively used with anonymity across the system.

**3.6.4.1 Demographic data**

In designing the demographics section of the survey, a branching technique was used to ensure that respondents were only asked relevant questions (See Figure 5). This technique allowed the survey to be tailored to each individual respondent so that respondents with different characteristics, experiences, knowledge, and opinions were routed to applicable survey questions (Anderson-Knott, 2008). The survey primarily used ‘radio buttons’ for participants to check their responses.

**Common questions:**
1. Gender – Male/Female
2. Highest education qualification – Bachelor/Graduate Diploma/Masters/Dual Masters/Doctorate
3. School size – Less than 100/100-300/300-600/600-900/900plus
4. School name
5. Are you a principal – Yes/No

**Questions of Teachers:**
1. Years teaching experience – Less than 2 /2-5 /5-10 /More than 10 /More than 15
2. Years teaching experience in current school - Less than 2 /2-5 /5-10 /More than 10 /More than 15
3. Years current principal has been at that school - Less than 2 /2-5 /5-10 /More than 10 /more than 15
4. Teaching area – Primary/Secondary
Questions of Principals:

1. Years teaching experience prior to Principalship – Less than 2 /2-5 /5-10 /More than 10 /more than 15
2. Years’ experience as a principal - Less than 2 /2-5 /5-10 /More than 10 /more than 15
3. Years as principal in current school - Less than 2 /2-5 /5-10 /More than 10 /more than 15

All questions were optional and participants could leave the question unanswered and proceed without prejudice.

3.6.4.2 Identification of School

In being asked to name the school in which they worked, the school identification was indicated as clearly optional with specific wording near that question. Because it was important to the research to be able to identify schools where participants worked so as to be able to discern relationships between teacher perceptions of specific leadership behaviours and of school performance, it was specifically noted that: “This is optional but would be very helpful to the research. Absolute anonymity is assured. All data is aggregated at the school level and system level” (see Educational Leadership Practices Survey, Demographic Details item 8 in Appendices 6 and 7).

The default option was to ‘choose not to identify’ so that participants had to deliberately select their school name from a drop-down menu. Thus in asking respondents at which school they worked, the reason for this request was explained and the confidentiality of school level analysis was made explicit.

On completion of the demographic questions, all participants whether principal or not, then moved seamlessly into the same research questions.
3.6.4.3 Leadership Dimensions Data

Consistent with the Educational Leadership BES (Robinson et al., 2009) the leadership section of the survey was arranged into six sections related to the key dimensions in section 3.6.2.
The survey collected quantitative data via 40 close-ended questions that requested participants to rate the presence of specific leadership behaviours across a series of frequency indicators on a 5-point Likert scale by choosing: "Almost Always", "Often", "Sometimes", "Rarely", or "Almost Never". At the conclusion of each of the respective sections, participants were also invited to provide qualitative comment providing examples to explain their views.

Participants were requested to answer each question in terms of their own experience and knowledge. Whether open-ended or closed, all questions were optional and participants could leave the question unanswered and proceed without prejudice.

Whilst not used in the original NZCER version, the open responses were included to provide a capacity to link a respondent’s assessment with their identification of the actions on which assessments are based. Such open responses to on-line surveys provide a valuable means of eliciting rich detail and recent evidence suggests that respondents provide extensive responses (Emde & Fuchs, 2012; Klieve et al., 2011; Yun & Trumbo, 2000).

3.7 Measuring School Performance

This research does not require measurement of absolute school performance or comparisons of specific performance across schools. However, it does require the identification of schools performing unusually well or unusually poorly so that in those particular instances, the absence or presence of the six specific leadership behaviours can be investigated and a conclusion drawn as to whether a relationship exists or not. Additionally, in those schools indicated as performing beyond expectations, it will be useful to discern the specific leadership behaviours being evidenced.

Within BCE, schools are organised into clusters (based on geographical areas), each of which is supported by an Area Supervisor in the provision of a wide range of services to schools, students, families, and staff. Area Supervisors are senior officers with extensive prior successful school leadership experience. Each of the 10 Area Supervisors has the role of working across a designated cluster of 10-15 schools and is thoroughly familiar with his or her particular schools and principals, and having been chosen for his or her work in the appropriate area have credibility with the target audience and are acknowledged as experts (Powell, 2003).

The Area Supervisors have the required specific knowledge and contextual awareness so as to triangulate discernment of schools performing above or below general expectations. Their judgement was sought to confirm or reject longitudinal NAPLAN data within ‘like schools’ parameters to indicate whether a respective school was doing better or worse or as expected.
From confidential interviews with Area Supervisors, the longitudinal NAPLAN data of each school was considered within the ‘like schools’ information and each specific context. Especially for schools at the margins of performance groups (Ammar et al., 2000), expert judgement was utilised to subsequently codify each school as doing better than expected; or less than expected; or as expected. For example, an Area Supervisor identified a school which longitudinal NAPLAN data indicated as performing just over the cusp of ‘as expected’ and into the ‘better than expected’ category. However confidential discussion also noted that contextually the school habitually ensured that the majority of low performing students were always exempted from the NAPLAN tests and hence markedly skewed the school’s results. Consequently the school was not kept in the ‘better than expected’ category but located in the ‘as expected’ category.

Thus NAPLAN data and expert judgements were used as a broad comparative tool to identify schools performing above or below general expectations, rather than a measure of absolute performance. This research will therefore replicate the approach of Robinson et al. (2009), who in conducting the meta-analysis as part of the BES, predominantly drew from research that utilised standardised tests in mathematics, reading and language skills to find the impact of leadership on a range of student outcomes.

3.8 Ethics

At the core of all research ethics is the understanding that those who volunteer to be participants in research have their rights and needs respected and protected (Bogden & Biklen, 1998; Honan & Gitsaki, 2008). In keeping with the tenets of Fontana and Frey (2000), this research ensured:

- Informed consent
- Right to privacy
- Protection from harm.

Approval to undertake the research was obtained separately from both the Brisbane Catholic Education Research Committee (A11.096 WB:cf ref:53) and the Griffith University Ethics Committee (Reference Number EDN/A2/12/HREC). This BCE approval was advised to principals via group email (See Appendices 8, 9 and 10).

Central to the BCE research approval is the understanding that participation of each school is at the discretion of the respective principal and should the school choose to engage, individual participation is at the discretion of each teacher.
3.9 Data Collection Procedures

Using the BCE email system, initial individual emails were sent in May 2013 to each BCE principal outlining the research and requesting the participation of their school (see Appendix 11 – email request for research assistance) and if participation was granted, a list of full time continuing teaching staff currently on active duty at school in Term Two was requested. Names of temporary teaching staff or teaching staff on any form of paid or unpaid leave were not included.

Of the 137 schools approached, 10 schools declined for reasons given as: busyness of the term; unwillingness to impose additional requests on staff; acting principals unwilling to commit the school. Across the 127 schools that agreed to participate, a list of 3,575 names of full time continuing teaching staff was provided. The names of 127 principals as full time continuing teaching staff were included in this list.

For the 127 participating schools, the numbers 1 to 128 were utilised to cover the 127 schools and the group of participants who might choose not to identify their school.

All schools were masked from the beginning of the research through the replacement of all school names with value labels and then further assigned randomly one of the numbers between 1 and 128 but out of synchronisation with the ‘drop down’ menu of the electronic survey. This ensured that the researcher was always unaware of school names as data was synthesised.

In parallel, all schools when assigned a level of performance through the triangulation of longitudinal NAPLAN data and expert judgement were also assigned that numeric identifier so that identity continued to be obscured.

In June 2013, each of these 3,575 teachers were sent individual emails (see Appendices 12 and 13 – email Educational Leadership Practices Survey invitation; email Educational Leadership Practices Survey link) explaining the background and context and seeking their assistance in carrying out the research through the Griffith University Survey Research Centre.

Insider-researchers choose to study a group to which they belong (Breen, 2007; Costley, Elliott & Gibbs, 2010; Robson, 2002) and consequently in this study, the researcher has a direct involvement or connection with the research setting or ‘habitus’ (Zevenbergen, 2005, p. 609).

Whilst DeLyser (2001) and Hewitt-Taylor (2002) have expressed concerns about a potential loss of objectivity through unconsciously making wrong assumptions based on prior knowledge, Bonner and Tolhurst (2002) and Smyth & Holian (2008) have cited this as an
advantage through having a greater understanding of the culture being studied and in general having a great deal of knowledge which takes an outsider a long time to acquire.

The caution for all however is that to conduct credible research, insider-researchers must constitute an explicit awareness of the possible effects of perceived bias on data collection and analysis, respect the ethical issues related to the anonymity of the organisation and individual participants and consider and address the issues about the influencing researcher’s insider role on coercion, compliance and access to privileged information, at each and every stage of the research (Unluer, 2012).

In recognition of potential difficulties with this insider research, participants were assured that all data were anonymous, that perceptions and demographic data would be de-identified and aggregated. Particularly, different links were provided should they wish to know more about the research, or had difficulty in completing the survey or had any concerns about the ethical conduct of the study.

The survey, as summarised in Table 5, also employed the response-enhancing techniques of personalisation, pre-notification, deadlines, reminders, offering result summaries and an altruistic appeal as much as possible (Dillman, 2000).

Table 5 - Survey correspondence with participants

<table>
<thead>
<tr>
<th>Communication</th>
<th>Content</th>
<th>Date</th>
<th>See</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCE Executive Director email to all schools (“All Principals” group distribution)</td>
<td>• Advising of research approval&lt;br&gt;• Participation of school at discretion of principal&lt;br&gt;• Research summary available to staff</td>
<td>Early May 2013</td>
<td>Appendix ten</td>
</tr>
<tr>
<td>Email to all 137 BCE principals (Individually addressed)</td>
<td>• Research outline&lt;br&gt;• Participation of school request&lt;br&gt;• Staff list request (full time continuing Term Two, 2013)</td>
<td>Early May 2013</td>
<td>Appendix eleven</td>
</tr>
<tr>
<td>Email to staff in participating schools (Individually addressed)</td>
<td>• Research context and outline&lt;br&gt;• Ethics and protocols&lt;br&gt;• Advice of forthcoming email with survey weblink</td>
<td>Late May 2013</td>
<td>Appendix twelve</td>
</tr>
<tr>
<td>Email to staff in participating schools (Individually addressed)</td>
<td>• Invitation to participate&lt;br&gt;• Survey permission&lt;br&gt;• Survey structure&lt;br&gt;• Contacts for ethics and research&lt;br&gt;• Survey instructions&lt;br&gt;• Survey weblink</td>
<td>Early June 2013</td>
<td>Appendix thirteen</td>
</tr>
<tr>
<td>Email to staff in participating schools (Individually addressed)</td>
<td>• Acknowledging prior emails&lt;br&gt;• Re-affirming anonymity&lt;br&gt;• Requesting survey completion if not already done</td>
<td>Early July 2013</td>
<td>Appendix fourteen</td>
</tr>
<tr>
<td>Survey closed by Griffith University Survey Research Centre</td>
<td></td>
<td>July 26 2013</td>
<td></td>
</tr>
</tbody>
</table>

*Note. BCE = Brisbane Catholic Education*
Participants were asked to answer each question in terms of their own experience and knowledge and advised that they could omit any question where they thought they had no experience or knowledge. Once the survey had commenced individual participants could discontinue their participation at any time with impunity. Opportunity was also given at the end of the survey for participants to review and change their responses if they wished. To commence the survey, participants were invited to click on a hyperlink that took them to the ELP within the Griffith University Survey Research Centre. Once commenced, the survey took approximately 10 minutes to complete.

The survey remained open for a period of 6 weeks which encompassed the last 2 weeks of Term Two, the 2 weeks of the winter vacation (June/July) and the first 2 weeks back into Term Three so that participants could have opportunity to complete the survey without feeling overwhelmed. A reminder email was sent to all potential participants (see Appendix 14) at the survey exposure midpoint to prompt returns, but in doing so advised that there was no way of knowing whether respective participants had already completed the survey, however, if they had not yet completed the survey, their participation would be appreciated. The survey closed on 26 July 2013.

3.10 Data Treatment

All responses to the ELP were electronically captured through the Griffith University Survey Research Centre and automatically entered into a cumulative data file. When the survey was closed by Griffith University staff, the data were then transferred into SPSS and SPSS TAS software for subsequent analysis.

3.10.1 Survey Responses

Whilst higher response rates presume more accurate survey results (Aday 1996; Babbie 2009; Rea & Parker 1997), recent studies have challenged the presumption that a lower response rate means lower survey accuracy (Keeter et al., 2006; Visser et al., 1996). Holbrook et al. (2007), in examining the results of 81 national surveys with response rates varying from 5% to 54%, found that surveys with much lower response rates were only minimally less accurate. Nevertheless, survey researchers seek high response rates from participants so there is confidence in generalising the results to the population under study (Creswell, 2008).

Nulty (2008) has reminded researchers that assertions regarding the adequacy or otherwise of a particular percentage response rate appear to be made without reference to any theoretical justification and should instead be premised around sampling error and confidence level. He
has noted that in surveys with over 2,000 participants, a response rate of 25% or greater is statistically reliable (Nulty, 2008).

When closed by the Griffith University Survey Research Centre, the survey “Leadership and School Performance (ID 79593)” had 1,686 responses; a return rate of approximately 47% from all BCE staff who were invited to participate in the survey. This was therefore a statistically very reliable collection of data (Nulty, 2008).

### 3.10.2 Data Cleaning

Although it is generally acknowledged that measurement error is probably the norm rather than the exception in any attempt to measure constructs of interest, researchers continue to assume that measurement error is random rather than systematic (Baumgartner & Steenkamp, 2006). However, it is almost inevitable to encounter missing data particularly in large scale research (Baraldi & Enders, 2010; Spratt et al., 2010; Sterne et al., 2009; White & Carlin, 2010). In pre-empting potential response bias where people misrepresent answers usually through administrative error such as carelessness, confusion, neglect, or omission (Zikmund & Babin, 2012), data cleansing to inspect data for missing responses or responses outside of accepted ranges, whether deliberate or accidental, is essential so that readers can accurately interpret results (Aday & Cornelius, 2008; Chambliss & Schutt, 2012; Creswell, 2008). Thus, George and Mallory (2001) recommended reporting the handling of missing data for ethical reasons.

In cleansing data, Creswell (2008) and Andres (2012) have advised that it is permissible to eliminate participants with all or partially missing scores and also that where the variable is categorical (such as school size); it is permissible to insert data where this has been entered erroneously or left blank. Where such range checking is conducted, Aday and Cornelius (2008) have advised decision rules have to be developed for dealing with these errors or omissions.

Decision rules for this research were therefore formed as:

1. Where no demographic data was provided, the entry was not included in the study
2. Where little demographic or response data was provided, the entry was to be overlooked
3. Where school name was provided in demographic data, the associated three categorical variables would be checked and adjusted if needed (School size; Years current principal has been at that school; Teaching area).

In perusing the participant responses, 74 responses had no demographic data and/or no research data and hence were excluded according to decision rules one and two. This reduced
the useable survey numbers to 1,612 with a return rate of approximately 45%, still well within high statistical reliability. Of the 1,612 responses to be used as the research database, 137 responses chose not to identify their school. Nevertheless, each of these unidentified-school participants completed the other demographic and research aspects of the survey particularly the three categorical variables of School size, Years current principal has been at that school and Teaching area and thus were included in all relevant analyses.

Within School size, adjustments were made to 87 of 1,612 entries. Twenty-seven of these came from the same school, which had split campuses. A further 17 were entered where the school name was given but no school size was selected. Of the remaining 43, 33 were in schools near the cusp of the assigned variable, that is, less than 100/100-300/300-600/600-900/900plus. The remaining 10 errors are unexplained but were adjusted according to school name data.

Within Years current principal has been at that school, adjustments were made to 172 of the 1,612 entries. Sixty-six of these came from schools with split campuses and may have reflected the Head of Campus tenure at that site. Of the remaining 106, 68 of the adjustments were in the same row as participants who described themselves as having less than 2 years’ experience at that particular school and therefore may not have been fully aware of how long their principal had been at the school. The remaining 38 errors were unexplained but were adjusted according to school name data.

Within Teaching area, adjustments were made to seven entries that indicated they were teaching in a secondary area yet the school was a primary school and not a P-12 school or a secondary school.

3.10.3 Data File Preparation

Creswell (2008) and Andres (2012) have recommended that prior to analysis, the data file is prepared and organised in such a way as to easily identify information and facilitate interrogation. In preparation for analysis, the following tasks were completed to the SPSS data file for this research:

- Shortened all variable names whilst remaining explicit to prevent variable misreading.
- Recoded all string variables to numeric variables for use in analysis (such as school type, gender).
- Ensured all numeric categorical variables had labels.
- Deleted the 74 survey responses which had no demographic data and/or no research data and hence were overlooked according to decision rules one and two.
• Corrected 87 entries in the categorical variable School size to accurately reflect the size of the school named for that entry.
• Corrected 172 entries in the categorical variable Years current principal has been at that school to accurately reflect the tenure of the principal at the school named for that entry.
• Corrected 7 entries in the categorical variable Teaching area to accurately reflect the school setting where the setting was explicit.
• Transformed the response scale was so that 5 became 1, 4 became 2, 3 remained the same, 2 became 4, and 1 became 5. This facilitated convenience of analysis via replication of usual practice where a higher number indicates a more positive response and also provides a visually better presentation.
• Managed potential bias, from the beginning of the analysis, by replacing all school names with a random number so the researcher was unaware during analysis of what school was being analysed.

3.11 Data Conventions
Throughout this research, specific conventions have been adopted to facilitate consistency of analysis and discussion. These include treatment of decimal places, calculation of responses and treatment of non-response items as well as clarifying degrees of statistical significance and naming conventions.

3.11.1 Decimal Places
With respect to decimal places in the presentation and discussion of data associated with this research, percentages for demographic data because of the scale of responses (1,612) will be described to one decimal place. With respect to descriptive statistics arising from demographic and scale data, this will be presented to two decimal places in keeping with expected precision within the reporting scales (1-5) whilst preventing display confusion (Data Analysis Australia, 2014). Given the size of the participant pool (1,612) and the approximate 97% response rate across respective demographic and scale data questions, the level of uncertainty is acceptable to two decimal places (Leo, 1992), but where necessary, such as in Cronbach’s alpha or p-values, will be noted to three decimal places (Field, 2013).

3.11.2 Response Calculations
The pool of responses for this survey is 1,612; however, for most variables a few participants left the question unanswered. In making calculations such as percentages associated with this
research, the non-returns are omitted and calculations are premised as percentage indications of those who responded.

3.11.3 Degrees of significance

It is generally accepted in research that the threshold significance level is 0.05, and that from this, every result leads to a conclusion of either "statistically significant" or "not statistically significant" (Coolidge, 2012; Dempsey, & Davies, 2013). Some statisticians use adjectives or asterisks to describe value levels of statistical significance such as “very significant” or “extremely significant” (Kan, 2003; Underhill & Bradfield, 1998). This research adopts the schema of Curtin, Stewart and Ostrove (2013), Goff et al. (2014) and Klieve et al. (2009) shown in Table 6.

Table 6 - Degrees of significance

<table>
<thead>
<tr>
<th>p value</th>
<th>Wording</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 0.001</td>
<td>Extremely significant</td>
<td>***</td>
</tr>
<tr>
<td>0.001 to 0.01</td>
<td>Very significant</td>
<td>**</td>
</tr>
<tr>
<td>0.01 to 0.05</td>
<td>Significant</td>
<td>*</td>
</tr>
<tr>
<td>≥ 0.05</td>
<td>Not significant</td>
<td>ns</td>
</tr>
</tbody>
</table>

3.12 Data Analysis Software

This research uses SPSS v21 and SPSS TAS software for data analysis. These were obtained under research licence from IBM through Griffith University.

3.12.1 SPSS

SPSS is a Windows based program used to perform data entry and analysis and to create tables and graphs. SPSS is capable of handling large amounts of data and is commonly used in the Social Sciences and in the business world. SPSS statistical analysis capacity includes:

- Descriptive statistics: Cross tabulation, Frequencies, Descriptives, Explore, Descriptive Ratio Statistics
- Bivariate statistics: Means, t-test, ANOVA, Correlation (bivariate, partial, distances), non-parametric tests
- Prediction for numerical outcomes: Linear regression
- Prediction for identifying groups: Factor analysis, cluster analysis (two-step, K-means, hierarchical), discriminant analysis.
3.12.2 SPSS TAS

SPSS TAS codes open-ended responses and transforms unstructured survey text into quantitative data using sentiment analysis. This SPSS-compatible software provides a systematic means to build, refine, and cross-member check a set of key themes automatically generated, which can be reviewed by inspection of actual comments, renamed and expanded across themes if not appropriate to text, and allow final recheck of text linkages to all themes (Beamish, Bryer, & Klieve, 2014).

Using natural language processing technologies specifically designed for survey text, SPSS categorises responses into specific themes. The software creators, IBM (2010, p. 8) note that:

The natural language processing technologies groups noun terms into categories by identifying terms that are likely to have the same meaning (synonyms) or are either more specific than the category represented by a term (hyponyms) or more general (hyperonyms). For cleaner results, these linguistic techniques exclude adjective terms and other qualifiers.

Therefore, the primary statistical technique of SPSS TAS is premised on the frequency with which terms, types, or patterns occur. Xu and Reynolds (2013) in researching the reliability of TAS indicate that “a significant interrater reliability exists between the text mining method of IBM SPSS Text Analytics for Surveys and human ratings” (p. 575).

After initial themes were established using TAS, each of the participant responses within each of the themes was then individually perused for theme validation and subsequent deletion and/or association with other themes. The one response may be identified across several themes.

3.13 Research Data Treatment Overview

In analysing and discussing both the qualitative and quantitative data gathered in this study, the summary of data treatment and purpose can be seen in Table 7, Research Data Treatment Overview. The overall process of analysing and making inferences from the research data can be viewed as a process of refinement that involves a number of separate and sequential steps (Smith & Albaum, 2005).

This research adopts Smith and Albaum’s (2005, p. 405) three broad stages of:

1. Tabulation: identifying appropriate categories, sorting the data into them, making the initial counts of responses, and using summarising measures to provide economy of description and so facilitate understanding.
2. Formulating observations: using the information derived from the data concerning the relevant variables, their parameters, their differences, and their relationships to make observations.

3. Making inferences: reaching conclusions about the variables, their parameters, their differences, and the relationships among them.

### Table 7 - Research Overview Data Treatment

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Treatment and Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background variables - demographic data</strong></td>
<td>• For demographic data common to teachers and principals, cross-tabulation frequencies and % distribution by role for background factors</td>
</tr>
<tr>
<td></td>
<td>• For demographic data common pertinent to teachers only cross-tabulation frequencies and % distribution for background factors</td>
</tr>
<tr>
<td></td>
<td>• For demographic data common pertinent to principals only cross-tabulation frequencies and % distribution for background factors</td>
</tr>
<tr>
<td><strong>Validation of the reliability of each of the six scales of the Educational Leadership Practices Survey (ELP).</strong></td>
<td>For each of the six specific leadership behaviours and the 40 individual items:</td>
</tr>
<tr>
<td></td>
<td>• Cronbach’s alpha - internal consistency</td>
</tr>
<tr>
<td></td>
<td>• Factor Analysis – number of factors in each scale</td>
</tr>
<tr>
<td></td>
<td>• Scale means</td>
</tr>
<tr>
<td>1- What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours?</td>
<td>For each of the six specific leadership behaviours:</td>
</tr>
<tr>
<td></td>
<td>• Means of Teachers</td>
</tr>
<tr>
<td></td>
<td>• Means of Principals</td>
</tr>
<tr>
<td></td>
<td>• Comparison of response patterns of teachers and principals (Chi Squared test, T-test)</td>
</tr>
<tr>
<td></td>
<td>• Logistic Regression – from responses, able to predict role?</td>
</tr>
<tr>
<td>2- What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance?</td>
<td>For each of the six specific leadership behaviours:</td>
</tr>
<tr>
<td></td>
<td>• Means of schools</td>
</tr>
<tr>
<td></td>
<td>• Cross-tabulation Frequencies</td>
</tr>
<tr>
<td></td>
<td>• School means by school performance level (3 levels)</td>
</tr>
<tr>
<td></td>
<td>• School means by school performance level (5 levels)</td>
</tr>
<tr>
<td></td>
<td>• One-way ANOVAs – relationship between school mean and school performance levels</td>
</tr>
<tr>
<td>3- In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?</td>
<td>For each of the six specific leadership behaviours:</td>
</tr>
<tr>
<td></td>
<td>• SPSS Text Analytics for Surveys (TAS)</td>
</tr>
<tr>
<td></td>
<td>• Thematic analysis</td>
</tr>
<tr>
<td></td>
<td>• Comparison of themes with groups in performance levels.</td>
</tr>
<tr>
<td>4- Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years supervised by current principal?</td>
<td>For Overall Leadership Practice – single construct:</td>
</tr>
<tr>
<td></td>
<td>• Means of Teachers</td>
</tr>
<tr>
<td></td>
<td>• Chi squared and t-tests – comparing response patterns across demographic groups</td>
</tr>
<tr>
<td></td>
<td>• One-way ANOVAs – relationship between demographic groups of teachers</td>
</tr>
<tr>
<td></td>
<td>• MANOVA – relationship across demographic groups of teachers</td>
</tr>
<tr>
<td></td>
<td>• Discriminant analysis – to explore predictability of performance</td>
</tr>
</tbody>
</table>
3.14 Chapter summary

This chapter presents and validates the research paradigm, data collection instrumentation and process and provides an overview of the forthcoming data treatment. Chapter four addresses the demographic data and each of the research questions in turn, utilising the methodology described, and subsequently, elaborates the findings for each research question. Where appropriate, graphical and quantitative descriptions are used to assist interpretation and improve presentation of results.
Research Findings

There is a considerable amount of work in the area of educational leadership, but relatively little that examines the impact of leadership on student attainment. Robertson & Timperley, 2011, p. xii

This chapter reports the responses from 1,612 teachers and principals at BCE, with these responses providing the information through which the research questions, repeated below, are addressed.

Specifically, the analysis and discussions addresses the research questions:

1. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance?
2. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours?
3. In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?
4. Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years supervised by current principal?

This chapter initially profiles the respondents to this survey through their demographic characteristics before undertaking validation of the reliability of each of the six scales of the ELP. The chapter then uses this information to move in sequence through each of the research questions with an analysis and synthesis of the quantitative and qualitative responses to observed leadership behaviours. Further discussion takes place in Chapter 5 before finally integrating the performance, demography and leadership data and making conclusions pertinent to this research.

4.1 Demographic Data Analysis

In keeping with the branching technique of the survey the demographic data is analysed as:

- Demographic data common to teachers and principals
- Demographic data pertinent to teachers only
- Demographic data pertinent to principals only.
### 4.1.1 Demographic Data Common to Teachers and Principals

The demographic characteristics of respondent, both teachers and principals, can be viewed in Table 8 below.

**Table 8 - Demographic data common to teachers and principals**

<table>
<thead>
<tr>
<th></th>
<th>Teachers</th>
<th></th>
<th>Principals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1169</td>
<td>76.2</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>Male</td>
<td>365</td>
<td>23.8</td>
<td>24</td>
<td>54.5</td>
</tr>
<tr>
<td>Total</td>
<td>1534</td>
<td></td>
<td>44</td>
<td></td>
</tr>
<tr>
<td><strong>Highest Qualification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>726</td>
<td>47.2</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Graduate Diploma</td>
<td>404</td>
<td>26.3</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>Masters</td>
<td>354</td>
<td>23.0</td>
<td>33</td>
<td>71.7</td>
</tr>
<tr>
<td>Dual Masters</td>
<td>45</td>
<td>2.9</td>
<td>7</td>
<td>15.2</td>
</tr>
<tr>
<td>Doctorate</td>
<td>9</td>
<td>0.6</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>1538</td>
<td></td>
<td>46</td>
<td></td>
</tr>
<tr>
<td><strong>School size - Enrolments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;100</td>
<td>7</td>
<td>.5</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>100-300</td>
<td>188</td>
<td>12.1</td>
<td>15</td>
<td>32.6</td>
</tr>
<tr>
<td>300-600</td>
<td>540</td>
<td>34.7</td>
<td>16</td>
<td>34.8</td>
</tr>
<tr>
<td>600-900</td>
<td>495</td>
<td>31.8</td>
<td>8</td>
<td>17.4</td>
</tr>
<tr>
<td>900+</td>
<td>325</td>
<td>20.9</td>
<td>5</td>
<td>10.9</td>
</tr>
<tr>
<td>Total</td>
<td>1555</td>
<td></td>
<td>46</td>
<td></td>
</tr>
<tr>
<td><strong>School Name</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identified</td>
<td>1423</td>
<td>91.4</td>
<td>44</td>
<td>95.7</td>
</tr>
<tr>
<td>Not Identified</td>
<td>134</td>
<td>8.6</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>Total</td>
<td>1557</td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

Of the 1,534 teacher participants who chose to identify their gender, 76% were female. This proportion of BCE teachers being female reflects the approximate 72% national and international profile of most education systems (Feistritzer, 2011; National Centre for Education Statistics, 2012). The proportion of BCE males being lower in primary schools (16.4%) than in secondary schools (39.8%) is also consistent with sectorial patterns across most Australian education systems (Australian Bureau of Statistics, 2011) (see Table 9).

Similarly, in replication of education profiles across Australia and the USA, whilst males represented some 24% of the teaching workforce, they disproportionately represented 54% of the principalship (Su et al., 2003). Gender-role cross-tabulation indicated that given the BCE teaching population profile, the expected count for female principals should be 75% (rather than 46%) and male principals as 25%. Further analysis by cross-tabulation of principal gender by school size indicated however, that across the range of school sizes, male and female principals were distributed approximately equally.
In examining the relationship between highest qualification levels and roles within schools, the Chi-Square value of 90.173 with p<.0000 denoted extremely significant variation with 89% of principals having Masters qualification or higher, whilst less than 27% of teachers did so (see Table 8). Across Australia the pattern is for approximately 30% of principals and approximately 9% of teachers to have a Masters level qualification (McKenzie et al., 2011; Su et al., 2003).

**Table 9 - Teachers’ Gender by Teaching Area**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Teaching Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>879</td>
<td>83.6</td>
</tr>
<tr>
<td>Male</td>
<td>173</td>
<td>16.4</td>
</tr>
</tbody>
</table>

**4.1.2 Demographic Data Pertinent to Teachers Only**

The demographic data pertinent to teachers only is presented in Table 10.

**Table 10 - Demographic Data Pertinent to Teachers Only**

<table>
<thead>
<tr>
<th>Teaching Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Years of Teaching Experience</td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>39</td>
</tr>
<tr>
<td>2-5</td>
<td>104</td>
</tr>
<tr>
<td>5-10</td>
<td>194</td>
</tr>
<tr>
<td>10-15</td>
<td>147</td>
</tr>
<tr>
<td>15+</td>
<td>577</td>
</tr>
<tr>
<td>Highest Qualification</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>544</td>
</tr>
<tr>
<td>Graduate Diploma</td>
<td>250</td>
</tr>
<tr>
<td>Masters</td>
<td>230</td>
</tr>
<tr>
<td>Dual M</td>
<td>28</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>Years in Current School</td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>174</td>
</tr>
<tr>
<td>2-5</td>
<td>299</td>
</tr>
<tr>
<td>5-10</td>
<td>304</td>
</tr>
<tr>
<td>10-15</td>
<td>177</td>
</tr>
<tr>
<td>15+</td>
<td>110</td>
</tr>
<tr>
<td>Teaching experience with Current Principal</td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>199</td>
</tr>
<tr>
<td>5-10</td>
<td>451</td>
</tr>
<tr>
<td>10-15</td>
<td>341</td>
</tr>
<tr>
<td>15+</td>
<td>76</td>
</tr>
</tbody>
</table>

Secondary teachers were represented as more experienced than primary teachers. Approximately 32% of primary teachers and about 20% of secondary teachers had been
teaching less than 10 years. Conversely, approximately 66% of secondary teachers and approximately 54% of primary teachers had been teaching for more than 15 years (see Table 10).

Qualification levels, however, were similar across primary and secondary sectors with approximately 30% of secondary teachers and 25% of primary teachers having qualifications at Masters level or higher, respectively (see Table 10). Similarly, tenure within current school was similar with 26.9% of both primary and secondary teachers having been in their current school for 10 or more years, and both groups having around 30% of teachers within the same school for 5-10 years (see Table 10).

Forty-two percent of teachers reported that their principal had been in the school for more than 2 but less than 5 years and a further 33% of teachers reported that their principal had been in the school between 5 and 10 years. In all, there was very little variance across primary and secondary sectors by the number of years teachers had been supervised by the current principal with 39% primary and 46% secondary supervised by their current principal for more than 5 years (see Table 10).

4.1.3 Demographic Data Pertinent to Principals Only

The demographic data pertinent to principals only can be viewed in Table 11

<table>
<thead>
<tr>
<th>Teaching Area</th>
<th>Primary</th>
<th>Secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Years of Teaching Experience prior to Principalship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>1</td>
<td>2.9</td>
<td>0</td>
</tr>
<tr>
<td>2-5</td>
<td>3</td>
<td>8.6</td>
<td>0</td>
</tr>
<tr>
<td>5-10</td>
<td>5</td>
<td>14.3</td>
<td>0</td>
</tr>
<tr>
<td>10-15</td>
<td>12</td>
<td>34.3</td>
<td>2</td>
</tr>
<tr>
<td>15+</td>
<td>14</td>
<td>40.0</td>
<td>7</td>
</tr>
<tr>
<td>Years of Experience as a Principal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>7</td>
<td>20.0</td>
<td>2</td>
</tr>
<tr>
<td>2-5</td>
<td>7</td>
<td>20.0</td>
<td>1</td>
</tr>
<tr>
<td>5-10</td>
<td>5</td>
<td>14.3</td>
<td>0</td>
</tr>
<tr>
<td>10-15</td>
<td>3</td>
<td>8.6</td>
<td>3</td>
</tr>
<tr>
<td>15+</td>
<td>13</td>
<td>37.1</td>
<td>3</td>
</tr>
<tr>
<td>Years of Current Tenure at that School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>11</td>
<td>31.4</td>
<td>3</td>
</tr>
<tr>
<td>2-5</td>
<td>14</td>
<td>40.0</td>
<td>1</td>
</tr>
<tr>
<td>5-10</td>
<td>8</td>
<td>22.9</td>
<td>2</td>
</tr>
<tr>
<td>10-15</td>
<td>1</td>
<td>2.9</td>
<td>2</td>
</tr>
<tr>
<td>15+</td>
<td>1</td>
<td>2.9</td>
<td>1</td>
</tr>
</tbody>
</table>

Of the 44 participants who identified as principal and named their school, 9 (approx. 20%) were from secondary schools and 35 (approx. 80%) were from primary schools. All of the
secondary principals had teaching experience of at least 10 years prior to becoming a principal. Of these, approximately 78% had more than 15 years teaching experience prior to becoming a principal whereas only 40% of primary principals had more than 15 years teaching experience prior to becoming a principal (see Table 11).

Fifty-four percent of primary principals had less than 10 years’ experience as a principal whereas only 33% of secondary principals did so. Both primary and secondary principals had about a third of their cohort with more than 15 years’ experience as a principal (see Table 11).

The number of years that principals had been at their current school also differed markedly by sector. Whereas about 70% of primary principals had been in their current school less than 5 years, almost 56% of secondary principals had been at their current school for more than 5 years. Six percent of primary principals and more than 33% of secondary principals had been in their current school more than 10 years (see Table 11).

4.1.4 Demographics Summary

Overall, the demographic data of BCE teachers and principals is similar to national profiles across state, independent and Catholic sectors with the exception of qualifications and tenure of principals.

Compared to Australian national profiles where approximately 35-40% of principals have a Master’s degree, approximately 89% of BCE principals have at least a Master’s degree and 26% of Brisbane Catholic Education teachers have a Masters qualification compared to a national teaching profile of 9% (McKenzie et al., 2011; Su, 2003).

Similarly, whilst on average only 10% of BCE principals have been in their school longer than 10 years, across Australia this figure is closer to 20% on average (McKenzie et al., 2011 p 46). Particularly, about 65% of BCE principals have been in their school less than 5 years whereas nationally this figure approximates 50% (McKenzie et al., 2011, p. 46).

With respect to profiles of gender distributions across sectors and leadership, these approximate national profiles as do school tenure profiles for teachers. In summary, BCE teaching demographics are approximately consistent nationally, with the exception that BCE principals and teachers are more qualified and BCE principals are more transient.

4.2 Educational Leadership Practices Survey (ELP) Scales Reliability

There are six scales for the ELP. They are:

- Scale One: Establishing Goals and Expectations
• Scale Two: Resourcing Strategically
• Scale Three: Ensuring Curriculum Quality
• Scale Four: Ensuring Quality Teaching
• Scale Five: Promoting Teacher Professional Learning and Development
• Scale Six: Ensuring Safe and Orderly Environment.

Whilst each of these scales was validated as reliable as part of the New Zealand version of the ELP, for research integrity each of the respective scales that comprise the six leadership dimensions of the ELP was subject to further scrutiny and validation in this study to be able to be used defensibly in addressing the research questions. Further details of the proven reliability of each of the respective ELP scales is analysed and presented in Appendix 15.

In summary however per Table 12, each of the scales of the ELP was evidenced to have high internal reliability (Cronbach’s alphas of 0.873 to 0.930) and the subscale items in each scale “hung together well” (Wylie & Hodgen, 2010) with all item total correlations higher than 0.658. Therefore, each of the subscales is seen to measure dimensions of the same underlying construct for that scale and rather than treat each subscale item separately, it is statistically appropriate to treat each collection of subscales as a single statistical item. In utilising this data for research purposes, it was therefore valid to utilise the mean of each scale drawn from the respective subscales of that scale.

**Table 12 - Reliability for respective scales of Educational Leadership Practices Survey (ELP)**

<table>
<thead>
<tr>
<th>ELP Scales</th>
<th>Items</th>
<th>n</th>
<th>Cronbach’ alpha</th>
<th>Comment</th>
<th>Scale Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals and Expectations</td>
<td>5</td>
<td>1584</td>
<td>0.875</td>
<td>All item total correlations high &gt;.658</td>
<td>4.09</td>
</tr>
<tr>
<td>Resourcing Strategically</td>
<td>6</td>
<td>1492</td>
<td>0.897</td>
<td>All item total correlations high &gt;.658</td>
<td>3.84</td>
</tr>
<tr>
<td>Curriculum Quality</td>
<td>8</td>
<td>1432</td>
<td>0.912</td>
<td>All item total correlations high &gt;.658</td>
<td>3.71</td>
</tr>
<tr>
<td>Quality Teaching</td>
<td>6</td>
<td>1443</td>
<td>0.923</td>
<td>All item total correlations high &gt;.688</td>
<td>3.54</td>
</tr>
<tr>
<td>Promoting Professional Learning</td>
<td>7</td>
<td>1414</td>
<td>0.914</td>
<td>All item total correlations high &gt;.680</td>
<td>3.40</td>
</tr>
<tr>
<td>Safe Orderly Environment</td>
<td>8</td>
<td>1413</td>
<td>0.930</td>
<td>All item total correlations high &gt;.658</td>
<td>4.16</td>
</tr>
</tbody>
</table>

In presenting the findings therefore for the respective research questions, each leadership dimension is treated as a singular scale rather than a collection of sub-scales.

**4.3 Research Question 1- leadership behaviours and school performance**

Research question 1 asks, “What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance?” This calls for information at the school level and also of the expert panel assessments of the schools included in the study.
To establish the relationship, the means for each school was calculated across the six leadership behaviours. Prior to relating these behaviours to school performance it is however necessary also to examine any potentially biasing relationships with other factors such as school response rates and school size.

4.3.1 Scale Means Against School Response Rates

Appendix 16 shows the table of the means for all schools of all leadership behaviours as well as the response level (n) within that school. The participant response levels varied across schools and ranged from 1 to 57 responses (see Figure 6). This figure shows participant response levels across 127 schools from 1,485 respondents, with the 137 responses who chose not to identify their school not included in this figure.

![Figure 6 - Rates of School response](image.png)

Sixty-five schools had response levels less than 10 whilst 20 schools had response levels of 20 or greater.

In examining the means of schools by response levels, it was apparent that schools with response levels between 10 and 19 most closely approximate the means for all scales, whilst schools with responses less than 10 generally scored higher, and those schools with response levels greater than 20, generally scored lower. Overall however, the maximum variation from the mean for all levels of schools’ responses was never more than 0.17 and averages varied only 0.10 in a 5.00 scale range. That is to say, response levels from schools had an approximate 2% capacity for difference between high return rate schools and low return rate schools (see Table 13). As such, precluding schools with a low response rate from the research interrogation would not enhance or detract from the validity or integrity of the results.
### Table 13 - School Response Levels against Scale Means

<table>
<thead>
<tr>
<th>School Response Levels</th>
<th>Goals &amp; Expectation Mean</th>
<th>Resourcing Strategically Mean</th>
<th>Curriculum Quality Mean</th>
<th>Quality Teaching Mean</th>
<th>Promoting Prof Learn Mean</th>
<th>Safe Orderly Environ Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 responses</td>
<td>4.21</td>
<td>3.94</td>
<td>3.79</td>
<td>3.67</td>
<td>3.44</td>
<td>4.32</td>
</tr>
<tr>
<td>10 to 19 responses</td>
<td>4.10</td>
<td>3.85</td>
<td>3.72</td>
<td>3.52</td>
<td>3.38</td>
<td>4.12</td>
</tr>
<tr>
<td>More than 20 responses</td>
<td>4.02</td>
<td>3.80</td>
<td>3.65</td>
<td>3.51</td>
<td>3.41</td>
<td>4.09</td>
</tr>
<tr>
<td>Total</td>
<td>4.09</td>
<td>3.85</td>
<td>3.71</td>
<td>3.55</td>
<td>3.41</td>
<td>4.15</td>
</tr>
<tr>
<td>Maximum variation from mean</td>
<td>0.11</td>
<td>0.09</td>
<td>0.08</td>
<td>0.12</td>
<td>0.03</td>
<td>0.17</td>
</tr>
</tbody>
</table>

### 4.3.2 Scale Means against School Size

In turning the focus to actual schools a first consideration is the size of such schools. Table 14 summarises the means for each leadership dimensions for the 5 school sizes identified in the study.

### Table 14 - Scale Means by School Size

<table>
<thead>
<tr>
<th>School Size</th>
<th>Goals &amp; Expectation Mean</th>
<th>Resourcing Strategically Mean</th>
<th>Curriculum Quality Mean</th>
<th>Quality Teaching Mean</th>
<th>Promoting Prof Learn Mean</th>
<th>Safe Orderly Environ Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>4.44</td>
<td>3.90</td>
<td>3.89</td>
<td>3.79</td>
<td>3.75</td>
<td>4.33</td>
</tr>
<tr>
<td>100-300</td>
<td>4.23</td>
<td>3.95</td>
<td>3.87</td>
<td>3.80</td>
<td>3.56</td>
<td>4.33</td>
</tr>
<tr>
<td>300-600</td>
<td>4.10</td>
<td>3.82</td>
<td>3.69</td>
<td>3.52</td>
<td>3.35</td>
<td>4.18</td>
</tr>
<tr>
<td>600-900</td>
<td>4.10</td>
<td>3.91</td>
<td>3.74</td>
<td>3.56</td>
<td>3.47</td>
<td>4.14</td>
</tr>
<tr>
<td>900+</td>
<td>3.97</td>
<td>3.74</td>
<td>3.59</td>
<td>3.44</td>
<td>3.30</td>
<td>4.01</td>
</tr>
<tr>
<td>Total</td>
<td>4.09</td>
<td>3.85</td>
<td>3.71</td>
<td>3.55</td>
<td>3.41</td>
<td>4.15</td>
</tr>
<tr>
<td>N</td>
<td>1610</td>
<td>1542</td>
<td>1495</td>
<td>1481</td>
<td>1461</td>
<td>1453</td>
</tr>
</tbody>
</table>

The means across the six leadership scales of this research tended to decline as the size of the school increased. Notwithstanding, if the means of schools with less than 100 enrolments are excluded because only 9 respondents out of 1,612 came from such schools, then the means of schools with 300-600 enrolments and schools with 600-900 enrolments both approximate the scale mean. Schools with over 900 enrolments, however, tended to be 0.11 lower than each of the respective scale means. While the number of responses from small schools are naturally lower, due to the fewer staff from whom responses can be elicited, they have been included for completeness and do not significantly alter the overall scale mean (see Table 14).

### 4.3.3 Scale Means against School Performance

Of the 137 BCE schools approached to participate in this research, 10 schools declined leaving 127 participating schools. As noted in Chapter Three, the performance of each of the BCE schools was through longitudinal NAPLAN data and expert judgement, denoted as: Performing better than expected; or Performing as expected; or Performing less than expected.
In discerning school performance as ‘better than expected’, 3 of the 12 schools identified through longitudinal NAPLAN data and expert judgement were performing much better than expected. Similarly, in discerning school performance as ‘less than expected’, 4 of the 13 schools identified through longitudinal NAPLAN data and expert judgement were performing much less than expected. Thus it is possible to discern school performance by either three or five levels.

Table 15 below identifies the 127 participating BCE schools within the three and five levels of performance. It is noted that all 10 of the non-participating schools were from the ‘performing as expected’ category.

Table 15 - Participating schools performance levels

<table>
<thead>
<tr>
<th>BCE Schools Three Performance Levels</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing better than expected</td>
<td>12</td>
</tr>
<tr>
<td>Performing as expected</td>
<td>102</td>
</tr>
<tr>
<td>Performing less than expected</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BCE School Five Performance Levels</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing much better than expected</td>
<td>3</td>
</tr>
<tr>
<td>Performing better than expected</td>
<td>9</td>
</tr>
<tr>
<td>Performing as expected</td>
<td>102</td>
</tr>
<tr>
<td>Performing less than expected</td>
<td>9</td>
</tr>
<tr>
<td>Performing much less than expected</td>
<td>4</td>
</tr>
</tbody>
</table>

Note. BCE = Brisbane Catholic Education

Using cross-tabulation frequencies it is possible to illustrate scale means by three levels of school performance and also by five levels of school performance. In examining three levels of school performance it was apparent that the means of each of the six scales ascends as the schools move from low to high performance (see Table 16). The variation from the extremes across the scales ranges from lowest variation of 0.90 in Curriculum Quality to the greatest variation of 1.21 in Quality Teaching. In essence, schools that are performing above expectations, consistently evidence much higher levels of leadership behaviours across the six dimensions. Conversely, schools that are performing below expectations, consistently evidence much lower levels of leadership behaviours across the six dimensions. Means across all scales for schools performing as expected, is closely consistent with the mean for each scale with a plus or minus mean variation of 0.01 only. The number of responses in each of the three performance levels of schools is sufficient to provide integrity and reliability to the results (see Table 17).
Table 16 - Scale Means by School Performance - 3 Levels

<table>
<thead>
<tr>
<th>Performance Rating</th>
<th>Goals and Expectations</th>
<th>Resourcing Strategically</th>
<th>Curriculum Quality</th>
<th>Quality Teaching</th>
<th>Promoting Prof Learn</th>
<th>Safe Orderly Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below expectations</td>
<td>3.53</td>
<td>3.36</td>
<td>3.32</td>
<td>3.00</td>
<td>2.92</td>
<td>3.54</td>
</tr>
<tr>
<td>At expectations</td>
<td>4.10</td>
<td>3.84</td>
<td>3.70</td>
<td>3.54</td>
<td>3.39</td>
<td>4.16</td>
</tr>
<tr>
<td>Above expectations</td>
<td>4.61</td>
<td>4.39</td>
<td>4.22</td>
<td>4.21</td>
<td>3.95</td>
<td>4.68</td>
</tr>
<tr>
<td>Total</td>
<td>4.11</td>
<td>3.87</td>
<td>3.73</td>
<td>3.58</td>
<td>3.42</td>
<td>4.17</td>
</tr>
<tr>
<td>Extremes Variation</td>
<td>1.08</td>
<td>1.03</td>
<td>0.90</td>
<td>1.21</td>
<td>1.03</td>
<td>1.14</td>
</tr>
</tbody>
</table>

When the means of the scales of leadership behaviours are cross-tabulated against five levels of school performance, the variation is accentuated even further (See Table 18). The variation from the extremes across the scales ranges from lowest of 1.39 in Goals and Expectations to the highest variation of 2.15 in Curriculum Quality across a 5-point scale. Figure 7 illustrates further the variation in responses by performance levels.

Table 17 - Number of Responses by Performance - 3 Levels

<table>
<thead>
<tr>
<th>Performance Rating</th>
<th>Goals and Expectations</th>
<th>Resourcing Strategically</th>
<th>Curriculum Quality</th>
<th>Quality Teaching</th>
<th>Promoting Prof Learn</th>
<th>Safe Orderly Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below expectations</td>
<td>151</td>
<td>147</td>
<td>144</td>
<td>143</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>At expectations</td>
<td>1115</td>
<td>1066</td>
<td>1033</td>
<td>1023</td>
<td>1006</td>
<td>1000</td>
</tr>
<tr>
<td>Above expectations</td>
<td>209</td>
<td>202</td>
<td>199</td>
<td>197</td>
<td>197</td>
<td>196</td>
</tr>
<tr>
<td>Total</td>
<td>1475</td>
<td>1415</td>
<td>1376</td>
<td>1363</td>
<td>1343</td>
<td>1336</td>
</tr>
</tbody>
</table>

Table 18 - Scale Means by School Performance - 5 Levels

<table>
<thead>
<tr>
<th>Performance Rating</th>
<th>Goals and Expectation</th>
<th>Resourcing Strategically</th>
<th>Curriculum Quality</th>
<th>Quality Teaching</th>
<th>Promoting Prof Learn</th>
<th>Safe Orderly Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well below expectations</td>
<td>3.37</td>
<td>3.21</td>
<td>3.19</td>
<td>2.73</td>
<td>2.76</td>
<td>3.31</td>
</tr>
<tr>
<td>Below expectations</td>
<td>3.61</td>
<td>3.44</td>
<td>3.38</td>
<td>3.13</td>
<td>2.99</td>
<td>3.64</td>
</tr>
<tr>
<td>At expectations</td>
<td>4.10</td>
<td>3.84</td>
<td>3.70</td>
<td>3.54</td>
<td>3.39</td>
<td>4.16</td>
</tr>
<tr>
<td>Above expectations</td>
<td>4.60</td>
<td>4.37</td>
<td>4.19</td>
<td>4.18</td>
<td>3.92</td>
<td>4.68</td>
</tr>
<tr>
<td>Well above expectations</td>
<td>4.76</td>
<td>4.79</td>
<td>4.89</td>
<td>4.88</td>
<td>4.76</td>
<td>4.77</td>
</tr>
<tr>
<td>Total</td>
<td>4.11</td>
<td>3.87</td>
<td>3.73</td>
<td>3.58</td>
<td>3.42</td>
<td>4.17</td>
</tr>
<tr>
<td>Extremes Variation</td>
<td>1.39</td>
<td>1.58</td>
<td>1.70</td>
<td>2.15</td>
<td>2.00</td>
<td>1.46</td>
</tr>
</tbody>
</table>
It is also possible using the mean data of each scale to profile each school by each scale and regardless of its’ overall performance level, indicate how it was performing in each of the respective scales using bands of means (see Appendix 17 – School Means for Scales shown as Bands). For example, the scale mean for Establishes Goals and Expectations is 4.09 and in calculating the ‘range’ of responses for each of the Band levels, this then would be:

- Lower third band – means below 3.80 (red)
- Mid third band – means between 3.80 and 4.39 (orange)

When bands of means are viewed alongside overall school performance level (Appendix 18) it shows that generally, schools performing above expectations are performing in the upper third in all or most scales (shown as green) and schools performing below expectations generally are in the lower third in most or all scales (shown as red). Schools performing as expected have a mixed profile of red and/or green but mostly orange.

With respect to the response group “prefer to remain anonymous”, if they were to be treated as a single school response, the means across each of the scales would place them in the “as expected” school performance level.
4.3.4 Summary - Research Question 1

Research question 1, in examining the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance, identifies that neither the number of responses coming from a respective school nor the size of the school were factors of significance in determining the mean of responses from that school.

The data also evidences that whether using a three or five school performance scale, schools that are performing above expectations consistently show much higher levels of leadership behaviours across the six dimensions and that conversely, schools that are performing below expectations, consistently evidence much lower levels of leadership behaviours across the six dimensions.

Generally, schools performing above expectations are performing in the upper third of all or most ELP scales and schools performing below expectations generally are in the lower third in most or all ELP scales.

4.4 Research Question 2 - teacher and principal perceptions

Research question 2 asks “What is the relationship between teacher and principal perceptions of the presence of the six specific leadership behaviours?” The six leadership scales are therefore used in turn to establish the degree of relationship between teacher perceptions and principal perceptions of these aspects. This includes calculation and comparison of means of teachers, means of principals, two-way frequency tables to compare teacher and principal means as well as Chi Square to compare the response patterns between teachers and principals.

4.4.1 Scale One: Establishing Goals and Expectations

Scale one which addresses the leadership behaviour of Establishing Goals and Expectations has an overall mean of 4.09 across all subscales and roles. The scale mean for teachers is 4.08 whilst it is 4.24 for principals, indicating all respondents have a strongly positive awareness of the presence of each leadership aspect. Across all subscales, teachers have consistently lower means than principals (see Table 19).

There is clear alignment between the distribution of teacher and principal responses in four of the five subscale items, yet “long term goals set high expectations for students” is significantly different (Chi Square, df=4, p=.039). Of the 46 principals, all but three believe this to happen “often” or “always”, whereas of the 1,544 teachers, only approximately 1,255 believe this to
be so. More than 250 teachers believe this happens only “sometimes” while approximately 40 believe this happens “rarely” or “almost never”.

Table 19 - Scale One: Establishing Goals and Expectations

<table>
<thead>
<tr>
<th>SubScales</th>
<th>Almost Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
<th>Mean by Role</th>
<th>Subscale Mean</th>
<th>Chi Sq df 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>% within role</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>T 1. Long term goals clearly</strong></td>
<td>1557</td>
<td>0.3</td>
<td>2.1</td>
<td>16.8</td>
<td>44.4</td>
<td>36.4</td>
<td>4.14</td>
<td>4.16 0.159</td>
</tr>
<tr>
<td>communicated</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
<td>54.3</td>
<td>41.3</td>
<td>4.37</td>
<td>ns</td>
</tr>
<tr>
<td><strong>T 2. Long term goals set high</strong></td>
<td>1544</td>
<td>0.3</td>
<td>2.4</td>
<td>16.1</td>
<td>42.2</td>
<td>39.1</td>
<td>4.17</td>
<td>4.18 0.039</td>
</tr>
<tr>
<td>expectations for students</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>6.5</td>
<td>45.7</td>
<td>47.8</td>
<td>4.40</td>
<td>*</td>
</tr>
<tr>
<td><strong>T 3. Evaluation of progress</strong></td>
<td>1546</td>
<td>1.1</td>
<td>4.8</td>
<td>21.3</td>
<td>42.2</td>
<td>30.5</td>
<td>3.96</td>
<td>3.97 0.749</td>
</tr>
<tr>
<td>towards student targets</td>
<td>46</td>
<td>0.0</td>
<td>2.2</td>
<td>19.6</td>
<td>50.0</td>
<td>28.3</td>
<td>4.04</td>
<td>ns</td>
</tr>
<tr>
<td><strong>T 4. Expected to cater for ‘at</strong></td>
<td>1551</td>
<td>0.3</td>
<td>2.6</td>
<td>14.0</td>
<td>41.3</td>
<td>41.8</td>
<td>4.22</td>
<td>4.22 0.184</td>
</tr>
<tr>
<td><strong>risk’ students</strong></td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
<td>54.3</td>
<td>41.3</td>
<td>4.37</td>
<td>ns</td>
</tr>
<tr>
<td><strong>T 5. Students set challenging and</strong></td>
<td>1548</td>
<td>1.0</td>
<td>3.4</td>
<td>23.8</td>
<td>45.0</td>
<td>26.8</td>
<td>3.93</td>
<td>3.94 0.828</td>
</tr>
<tr>
<td><strong>achievable goals</strong></td>
<td>46</td>
<td>0.0</td>
<td>2.2</td>
<td>19.6</td>
<td>52.2</td>
<td>26.1</td>
<td>4.02</td>
<td>ns</td>
</tr>
</tbody>
</table>

**Scale Summary:** Teacher Mean = 4.08; Principal Mean = 4.24; Scale Mean = 4.09; n = 1584

*Note.* P = Principal; T = Teacher.

4.4.2 Scale Two: Resourcing Strategically

Scale two which addresses the leadership behaviour of Resourcing Strategically has an overall mean of 3.85 across all subscales and roles. The scale mean for teachers is 3.84 whilst it is 4.07 for principals. Across all subscales, teachers’ means are consistently lower than principals (see Table 20).

There is significant difference between the distribution of teacher and principal responses in two of the six subscale items and very significant difference in another. Particularly with respect to the construct of resourcing strategically, only 67.3% of teachers believe that the “timetable reflects teaching and learning priorities” “often” or “always”, whereas 93.5% of principals believe this to be the case (Chi Square, df=4, p=0.006). Similarly, with respect to “at risk’ students getting extra learning opportunity”, only 64% of teachers believe that this occurs “often” or “always”, whereas more than 82% of principals believe this occurs “often” or “always”.

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Table 20 - Scale Two: Resourcing Strategically

<table>
<thead>
<tr>
<th>Subscales</th>
<th>n</th>
<th>Almost</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
<th>Mean by Role</th>
<th>Subscale Mean</th>
<th>Chi Sq df 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1. Teaching resources aligned to school goals</td>
<td>1487</td>
<td>0.3</td>
<td>2.8</td>
<td>21.5</td>
<td>48.4</td>
<td>27.0</td>
<td>3.98</td>
<td>3.99</td>
<td>0.353</td>
<td>ns</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>13.0</td>
<td>60.9</td>
<td>26.1</td>
<td>4.13</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>T 2. Ready resources for 'at risk' students</td>
<td>1479</td>
<td>0.4</td>
<td>4.5</td>
<td>26.1</td>
<td>45.0</td>
<td>24.0</td>
<td>3.88</td>
<td>3.88</td>
<td>0.107</td>
<td>ns</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>15.2</td>
<td>63.0</td>
<td>21.7</td>
<td>4.07</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>T 3. Timetable reflects teaching and learning priorities</td>
<td>1483</td>
<td>1.1</td>
<td>5.6</td>
<td>26.0</td>
<td>40.9</td>
<td>26.4</td>
<td>3.86</td>
<td>3.87</td>
<td>0.006</td>
<td>**</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>6.5</td>
<td>60.9</td>
<td>32.6</td>
<td>4.26</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>T 4. Routines maximise student learning opportunities</td>
<td>1476</td>
<td>0.5</td>
<td>4.5</td>
<td>28.0</td>
<td>41.6</td>
<td>25.3</td>
<td>3.87</td>
<td>3.88</td>
<td>0.012</td>
<td>*</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>8.7</td>
<td>60.9</td>
<td>30.4</td>
<td>4.21</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>T 5. At risk students get extra learning opportunity</td>
<td>1482</td>
<td>0.9</td>
<td>4.6</td>
<td>30.5</td>
<td>40.7</td>
<td>23.3</td>
<td>3.81</td>
<td>3.81</td>
<td>0.042</td>
<td>*</td>
</tr>
<tr>
<td>P</td>
<td>45</td>
<td>0.0</td>
<td>0.0</td>
<td>17.8</td>
<td>62.2</td>
<td>20.0</td>
<td>4.02</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>T 6. Resources support home school partnerships</td>
<td>1461</td>
<td>1.2</td>
<td>7.7</td>
<td>34.5</td>
<td>39.3</td>
<td>17.2</td>
<td>3.64</td>
<td>3.64</td>
<td>0.149</td>
<td>ns</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
<td>0.0</td>
<td>0.0</td>
<td>39.1</td>
<td>50.0</td>
<td>10.9</td>
<td>3.71</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
</tbody>
</table>

Scale Summary: Teacher Mean = 3.84; Principal Mean = 4.07; Scale Mean = 3.85; n = 1,536.

Note: P = Principal; T = Teacher.

4.4.3 Scale Three: Ensuring Curriculum Quality

Scale three which addresses the leadership behaviour of Ensuring Curriculum Quality has an overall mean of 3.71 across all subscales and roles. The scale mean for teachers is 3.70 whilst it is 3.85 for principals. Across all subscales, teachers’ means are consistently lower than principals (see Table 21).

There are significant differences between the distribution of teacher and principal responses in five of the eight subscale items, one of which (“strategies to maximise student engagement”) is seen as extremely significant (Chi Square, df=4, p=0.001). Of teachers, nearly 38% believe this happens “almost never”, “rarely” or “sometimes”, whilst only 18% of principals share the same categories. Both principals and teachers hold similar views about the occurrence of “systematic monitoring of student progress”, but this is clearly not the case with respect to “teachers getting rigorous feedback about their planning”. Nearly 30% of teachers believe this happens “almost never” or “rarely”, whilst less than 10% of principals believe this to be so. Similarly, all principals believe that students “have a challenging program” at least “sometimes” or more, whilst more than 100 teachers believe this happens “almost never” or “rarely”. 
### Table 21 - Scale Three: Ensuring Curriculum Quality

<table>
<thead>
<tr>
<th>SubScales</th>
<th>n</th>
<th>Almost</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
<th>Mean by Role</th>
<th>Subscale Mean</th>
<th>Chi Sq  df</th>
<th>% within role</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1. Systematic monitoring of student progress occurs</td>
<td>144</td>
<td>0.4</td>
<td>4.</td>
<td>19.</td>
<td>47.</td>
<td>28.</td>
<td>4.0</td>
<td>4.0</td>
<td>0.30</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>44</td>
<td>0.0</td>
<td>0.</td>
<td>11.</td>
<td>59.</td>
<td>29.</td>
<td>4.1</td>
<td>3.9</td>
<td>0.03</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 2. School assessment plan aligned to learning goals</td>
<td>142</td>
<td>0.6</td>
<td>6.</td>
<td>21.</td>
<td>42.</td>
<td>29.</td>
<td>3.9</td>
<td>3.9</td>
<td>0.03</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>7</td>
<td>2.3</td>
<td>0.</td>
<td>16.</td>
<td>62.</td>
<td>18.</td>
<td>3.9</td>
<td>3.9</td>
<td>0.03</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>T 3. Every student has a challenging program</td>
<td>143</td>
<td>0.6</td>
<td>5.</td>
<td>33.</td>
<td>43.</td>
<td>16.</td>
<td>3.6</td>
<td>3.7</td>
<td>0.00</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>2</td>
<td>9.</td>
<td>5.</td>
<td>8.</td>
<td>3.8</td>
<td>3.6</td>
<td>0.03</td>
<td>0</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 4. At risk students identified early and supported</td>
<td>143</td>
<td>1.0</td>
<td>6.</td>
<td>28.</td>
<td>41.</td>
<td>23.</td>
<td>3.8</td>
<td>3.8</td>
<td>0.00</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>2</td>
<td>1.0</td>
<td>4.</td>
<td>1.</td>
<td>5.</td>
<td>0.</td>
<td>1.</td>
<td>2</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 5. Curriculum includes diverse learners</td>
<td>143</td>
<td>0.6</td>
<td>3.</td>
<td>27.</td>
<td>48.</td>
<td>20.</td>
<td>3.8</td>
<td>3.8</td>
<td>0.21</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>6</td>
<td>1.</td>
<td>4.</td>
<td>1.</td>
<td>9.</td>
<td>6.</td>
<td>2.</td>
<td>2</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 6. Rigorous feedback given about teacher planning</td>
<td>143</td>
<td>8.2</td>
<td>21.</td>
<td>36.</td>
<td>23.</td>
<td>10.</td>
<td>3.0</td>
<td>3.0</td>
<td>0.00</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>1</td>
<td>0.</td>
<td>5.</td>
<td>9.</td>
<td>3.</td>
<td>2.</td>
<td>6.</td>
<td>8</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 7. Strategies to maximise student engagement</td>
<td>143</td>
<td>1.0</td>
<td>5.</td>
<td>31.</td>
<td>46.</td>
<td>16.</td>
<td>3.7</td>
<td>3.7</td>
<td>0.00</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>0.</td>
<td>2.</td>
<td>3.</td>
<td>7.</td>
<td>0.</td>
<td>2.</td>
<td>7</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>T 8. Routine data discussion informs planning</td>
<td>143</td>
<td>2.8</td>
<td>10.</td>
<td>28.</td>
<td>39.</td>
<td>18.</td>
<td>3.6</td>
<td>3.6</td>
<td>0.09</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>5</td>
<td>0.</td>
<td>0.</td>
<td>6.</td>
<td>45.</td>
<td>38.</td>
<td>9.1</td>
<td>3.5</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
</tbody>
</table>

**Scale Summary:** Teacher Mean = 3.70; Principal Mean = 3.85; Scale Mean 3.71; n = 1,413.

*Note.* P = Principal; T = Teacher.

#### 4.4.4 Scale Four – Ensuring Quality Teaching

Scale four which addresses the leadership behaviour of Ensuring Quality Teaching has an overall mean of 3.55 across all subscales and roles. The scale mean for teachers is 3.54 whilst it is 3.93 for principals. Across all subscales, teachers’ means are consistently lower than principals (see Table 22).

This scale of the ELP has most variance between principal and teacher perceptions with significant difference between the distribution of teacher and principal responses in five of the...
six subscale items and extremely significant difference in the other (Chi Square variance, df=4, p=0.001 to 0.038). More than 84% of principals believe “classroom help focuses on teaching and students” “often” or “always”, whereas just over 53% of teachers believe this to be so. Nearly 20% of teachers think that it “rarely” or “almost never” happens that “teachers having difficulty are helped early”, and a further 40% of teachers think this happens “only sometimes”, yet close to 70% of principals think this occurs “often” or “always”. More than 78% of principals believe that “teachers with expertise help other teachers” “often” or “always”, whereas only about 54% of teachers hold the same degree of view.

### Table 22 - Ensuring Quality Teaching

<table>
<thead>
<tr>
<th>SubScales</th>
<th>n</th>
<th>Almost Never %</th>
<th>Rarely %</th>
<th>Sometimes %</th>
<th>Often %</th>
<th>Always %</th>
<th>Mean by Role %</th>
<th>Chi Sq 4 df</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1. All staff share responsibility for student learning</td>
<td>1431</td>
<td>0.6</td>
<td>5.1</td>
<td>25.2</td>
<td>44.4</td>
<td>24.7</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>P</td>
<td>42</td>
<td>0.0</td>
<td>0.0</td>
<td>7.1</td>
<td>61.9</td>
<td>31.0</td>
<td>4.2</td>
<td>0.024</td>
</tr>
<tr>
<td>T 2. Teachers with expertise help other teachers</td>
<td>1428</td>
<td>2.0</td>
<td>9.5</td>
<td>34.0</td>
<td>36.5</td>
<td>17.4</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>P</td>
<td>42</td>
<td>0.0</td>
<td>2.4</td>
<td>19.0</td>
<td>52.4</td>
<td>26.6</td>
<td>4.0</td>
<td>0.038</td>
</tr>
<tr>
<td>T 3. Teachers are helped with disengaged students</td>
<td>1415</td>
<td>3.8</td>
<td>15.3</td>
<td>39.6</td>
<td>27.7</td>
<td>13.3</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>P</td>
<td>42</td>
<td>0.0</td>
<td>0.0</td>
<td>40.5</td>
<td>42.9</td>
<td>16.2</td>
<td>3.7</td>
<td>0.020</td>
</tr>
<tr>
<td>T 4. Teachers having difficulty are helped early</td>
<td>1414</td>
<td>3.6</td>
<td>15.6</td>
<td>39.7</td>
<td>26.4</td>
<td>14.6</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>P</td>
<td>41</td>
<td>0.0</td>
<td>4.9</td>
<td>29.3</td>
<td>48.8</td>
<td>17.1</td>
<td>3.7</td>
<td>0.011</td>
</tr>
<tr>
<td>T 5. Classroom help focuses on teaching and students</td>
<td>1422</td>
<td>2.3</td>
<td>11.2</td>
<td>33.1</td>
<td>35.3</td>
<td>18.6</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>P</td>
<td>41</td>
<td>0.0</td>
<td>0.0</td>
<td>14.6</td>
<td>61.0</td>
<td>24.4</td>
<td>4.1</td>
<td>0.001</td>
</tr>
<tr>
<td>T 6. Assessment data are used to improve teaching</td>
<td>1422</td>
<td>2.3</td>
<td>11.3</td>
<td>34.4</td>
<td>33.4</td>
<td>18.6</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>P</td>
<td>41</td>
<td>0.0</td>
<td>4.9</td>
<td>26.8</td>
<td>58.5</td>
<td>9.8</td>
<td>3.7</td>
<td>0.016</td>
</tr>
</tbody>
</table>

**Scale Summary:** Teacher Mean = 3.54; Principal Mean = 3.93; Scale Mean 3.55; n = 1,443

*Note. P = Principal; T = Teacher.*

### 4.4.5 Scale Five - Promoting Teacher Professional Learning and Development

Scale five which addresses the leadership behaviour of *Promoting Teacher Professional Learning and Development* has an overall mean of 3.41 across all subscales and roles. The scale mean for teachers is 3.40 whilst it is 3.57 for principals. Across all subscales, teachers’ means are consistently lower than principals (see Table 23).
Whilst there is no significant difference between the distribution of teacher and principal responses in four of the seven subscale items, none of these four has a Chi value above 0.181. Of the remaining three subscales, one is seen as significant at 0.022 and two as very significant with 0.005 and 0.003, respectively. Close to 90% of principals, as opposed to just over 62% of teachers, believe “professional learning enables quality teaching for all students”. With respect to “staff meetings discussing teaching and learning”, just fewer than 10% of principals and just over 20% of teachers believe this happens “always”. Yet for the same subscale, more than 62% of principals think this happens “often” and only 35% of teachers have the same perception. More than 165 teachers believe there is “rare” or “no correlation” in their “professional learning being informed by student achievement”, whilst only one principal has that opinion.

Table 23 - Scale Five: Promoting Teacher Professional Learning and Development

<table>
<thead>
<tr>
<th>SubScales</th>
<th>n</th>
<th>% within role</th>
<th>Mean by role</th>
<th>Subscale Mean</th>
<th>Chi Sq df 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1. Student achievement informs teacher PL</td>
<td>1401</td>
<td>2.0 9.8 34.7 38.4 15.1 3.55</td>
<td>3.55</td>
<td>0.022 *</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 2.3 39.5 55.8 2.3 3.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 2. Teachers discuss student results to help each other</td>
<td>1404</td>
<td>2.2 11.9 34.7 36.7 14.5 3.49</td>
<td>3.50</td>
<td>0.181 ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 9.3 30.2 53.5 7.0 3.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 3. Staff meetings discuss teaching and learning</td>
<td>1407</td>
<td>2.1 11.6 30.8 35.0 20.5 3.60</td>
<td>3.61</td>
<td>0.005 **</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 4.7 23.3 62.8 9.3 3.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 4. Teachers observe each other teach</td>
<td>1403</td>
<td>12.3 27.1 32.4 18.1 10.1 2.87</td>
<td>2.88</td>
<td>0.119 ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>7.0 14.0 48.8 20.9 9.3 3.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 5. Teaching changes through student evidence</td>
<td>1393</td>
<td>3.7 16.9 37.0 29.6 12.8 3.31</td>
<td>3.32</td>
<td>0.112 ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 9.3 34.9 46.5 9.3 3.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 6. Teachers evaluate their teaching effectiveness</td>
<td>1436</td>
<td>5.0 17.4 38.1 29.7 9.8 3.22</td>
<td>3.22</td>
<td>0.108 ns</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 11.6 51.2 34.9 2.3 3.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 7. PL enables quality teaching for all students</td>
<td>1401</td>
<td>1.4 7.1 28.8 41.3 21.4 3.74</td>
<td>3.76</td>
<td>0.003 **</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0 0.0 11.6 69.8 18.6 4.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale Summary: Teacher Mean = 3.40; Principal Mean = 3.57; Scale Mean = 3.41; n = 1,414

Note. P = Principal; T = Teacher.

4.4.6 Scale Six – Ensuring Safe and Orderly Environment

Scale six which addresses the leadership behaviour of Ensuring a Safe and Orderly Environment has an overall mean of 4.15 across all subscales and roles. The scale mean for teachers is 4.14 whilst it is 4.43 for principals indicating all respondents have a strongly positive awareness of
the presence of each leadership aspect. Across all subscales, teachers’ means are consistently lower than principals (see Table 24).

There are significant differences between the distribution of teacher and principal responses in only one of the eight subscale items and very significant difference in another. Of note is the strong alignment between teacher and principal perceptions regarding: “consistent school wide behaviour management”; “positive environment focuses on learning”; and “regular monitoring of student safety”. Within the “often” and “always” categories for these three subscales, teachers range from 71% to 86% whilst principals range from 81% to 95%.

However, more than 430 teachers believe that “staff views about culture are taken seriously” “almost never”, “rarely” or “sometimes”, yet nearly 98% of principals believe this occurs “often” or “always”. Similarly, more than 20% of teachers are of the opinion that “almost never”, “rarely” or “only sometimes” are “teacher-parent problems resolved fast and fair”. Conversely, 100% of principals believe this occurs “often” or “always”.

Table 24 - Scale Six: Ensuring Safe and Orderly Environment

<table>
<thead>
<tr>
<th>SubScales</th>
<th>n</th>
<th>Almost Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
<th>Mean by Role</th>
<th>Subscale Mean</th>
<th>% within role</th>
<th>Chi Sq of 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1. Work environment is safe and supportive</td>
<td>1402</td>
<td>0.5</td>
<td>1.9</td>
<td>11.5</td>
<td>38.1</td>
<td>48.1</td>
<td>4.31</td>
<td>4.32</td>
<td>0.143</td>
<td>ns</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>44.2</td>
<td>55.8</td>
<td>4.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 2. Staff views about culture taken seriously</td>
<td>1401</td>
<td>2.0</td>
<td>7.7</td>
<td>21.1</td>
<td>35.5</td>
<td>33.7</td>
<td>3.91</td>
<td>3.94</td>
<td>0.002 **</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>42</td>
<td>0.0</td>
<td>0.0</td>
<td>2.4</td>
<td>42.9</td>
<td>54.8</td>
<td>4.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 3. Teacher-student problems resolved fast and fair</td>
<td>1393</td>
<td>0.6</td>
<td>2.7</td>
<td>15.6</td>
<td>42.1</td>
<td>39.1</td>
<td>4.16</td>
<td>4.17</td>
<td>0.093 ns</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>2.3</td>
<td>46.5</td>
<td>51.2</td>
<td>4.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 4. Teacher-parent problems resolved fast and fair</td>
<td>1396</td>
<td>0.5</td>
<td>2.5</td>
<td>17.1</td>
<td>41.3</td>
<td>38.5</td>
<td>4.15</td>
<td>4.16</td>
<td>0.023 *</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>46.5</td>
<td>53.5</td>
<td>4.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 5. Consistent school wide behaviour management</td>
<td>1404</td>
<td>1.0</td>
<td>4.1</td>
<td>16.0</td>
<td>35.5</td>
<td>43.5</td>
<td>4.16</td>
<td>4.17</td>
<td>0.384 ns</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>9.3</td>
<td>39.5</td>
<td>51.2</td>
<td>4.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 6. Positive environment focuses on learning</td>
<td>1402</td>
<td>0.2</td>
<td>1.9</td>
<td>11.8</td>
<td>38.7</td>
<td>47.4</td>
<td>4.31</td>
<td>4.32</td>
<td>0.520 ns</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>4.7</td>
<td>44.2</td>
<td>51.2</td>
<td>4.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 7. Regular monitoring of student safety</td>
<td>1390</td>
<td>1.2</td>
<td>6.0</td>
<td>21.6</td>
<td>36.0</td>
<td>35.2</td>
<td>3.98</td>
<td>4.00</td>
<td>0.410 ns</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>2.3</td>
<td>16.3</td>
<td>48.8</td>
<td>32.6</td>
<td>4.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 8. School is positive environment for all</td>
<td>1398</td>
<td>0.9</td>
<td>2.4</td>
<td>17.2</td>
<td>39.6</td>
<td>40.0</td>
<td>4.15</td>
<td>4.17</td>
<td>0.198 ns</td>
<td>P</td>
</tr>
<tr>
<td>P</td>
<td>43</td>
<td>0.0</td>
<td>0.0</td>
<td>7.0</td>
<td>53.5</td>
<td>39.5</td>
<td>4.33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale Summary: Teacher Mean = 4.14; Principal Mean = 4.43; Scale Mean = 4.15; n = 1413

Note. P = Principal; T = Teacher.
4.4.7 Summary - Research Question 2

Across all six scales for leadership behaviours, teachers consistently have lower means than principals with this deficit being between 0.15 and 0.39 on a 5-point Likert scale (see Figure 7 and Table 25).

Figure 7 - Comparison of Teacher and Principal Means across Scales

Table 25 - Scale Means by Role Groups

<table>
<thead>
<tr>
<th>Role</th>
<th>Goals and Expectations</th>
<th>Resourcing Strategically</th>
<th>Curriculum Quality</th>
<th>Quality Teaching</th>
<th>Promoting Professional Learning</th>
<th>Safe Orderly Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher n=1557</td>
<td>4.08</td>
<td>3.84</td>
<td>3.70</td>
<td>3.54</td>
<td>3.40</td>
<td>4.14</td>
</tr>
<tr>
<td>Principal n=46</td>
<td>4.24</td>
<td>4.07</td>
<td>3.85</td>
<td>3.93</td>
<td>3.57</td>
<td>4.43</td>
</tr>
</tbody>
</table>

* Difference between mean scores for Principals and Teachers

As a generalisation, across all 40 subscales of all six leadership dimensions principals’ assessments are consistently more positive than teachers. This difference is statistically significant in 20 of the 40 subscales (significant in 11, very significant in 7 and extremely significant in 2). That is, teachers consistently have lower perceptions of frequency of behaviours being apparent in all 40 of the subscales across the six leadership behaviour scales, and in 20 of these 40 subscales, it is either statistically significantly or very significantly or extremely significantly at variance with principals.
Appendix 19 shows all 40 subscales across the six scales of leadership behaviours and summarises the assessments as not significant, significant, very significant or extremely significant.

Particularly, the statistical variation is most evident in the leadership behaviour of *Ensuring Quality Teaching* where all of the six subscale items show significant or extremely significant statistical difference between principal and teacher perceptions of frequency of behaviours being apparent. Similarly, in the leadership behaviour of *Ensuring Curriculum Quality*, five of the eight subscale items show significant or very significant or extremely significant statistical difference between principal and teacher perceptions of frequency of behaviours apparent.

Noticeably in the leadership behaviour of *Ensuring a Safe Orderly Environment*, only two of the eight subscales show significant or very significant statistical difference between principal and teacher perceptions of frequency of behaviours being apparent. Similarly, in the leadership behaviour of *Establishing Goals and Expectations*, only one of the five subscales is statistically different for apparent principal and teacher perceptions of frequency of behaviours.

However, when the data is tabulated by performance levels of schools and then role and scale means, it is evident that in schools performing better than expected, the teaching staff has higher perceptual levels of five of the six scale means of leadership behaviours than those of principals. That is, they perceive that leadership behaviours occur more often than the principal perceives (See Table 26).

For schools performing as expected, there is closer parity of principal and teacher perceptions although principals are more optimistic than teachers about behaviour prevalence. Noticeably, in schools performing below expectations the principals’ perceptions of the prevalence of leadership behaviours are considerably different to teaching staff with principals consistently having markedly higher perceptual levels ranging in variations of scale means from 0.53 to 1.16. For all six scales, in schools performing better than expected, teacher’s perceptions of leadership behaviours are higher than that of the principal; in schools performing as expected, perceptions are lower, and in teacher perceptions are much lower.
Table 26 - Performance levels of schools by role and scale means

<table>
<thead>
<tr>
<th>School Performance Level</th>
<th>Goals and Expectations</th>
<th>Resourcing Strategically</th>
<th>Curriculum Quality</th>
<th>Quality Teaching</th>
<th>Promoting Professional Learning</th>
<th>Safe Orderly Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Expectations</td>
<td>P</td>
<td>4.46</td>
<td>4.28</td>
<td>3.96</td>
<td>4.27</td>
<td>3.60</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>4.61</td>
<td>4.39</td>
<td>4.23</td>
<td>4.20</td>
<td>3.97</td>
</tr>
<tr>
<td></td>
<td>D*</td>
<td>-0.15</td>
<td>-0.11</td>
<td>-0.27</td>
<td>0.07</td>
<td>-0.37</td>
</tr>
<tr>
<td>At Expectations</td>
<td>P</td>
<td>4.23</td>
<td>4.07</td>
<td>3.79</td>
<td>3.76</td>
<td>3.53</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>4.09</td>
<td>3.83</td>
<td>3.69</td>
<td>3.53</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>V*</td>
<td>0.14</td>
<td>0.24</td>
<td>0.10</td>
<td>0.23</td>
<td>0.15</td>
</tr>
<tr>
<td>Below Expectations</td>
<td>P</td>
<td>4.15</td>
<td>4.13</td>
<td>3.83</td>
<td>4.13</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>3.52</td>
<td>3.34</td>
<td>3.30</td>
<td>2.97</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td>V*</td>
<td>0.63</td>
<td>0.79</td>
<td>0.53</td>
<td>1.16</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Note. V* denotes difference between means for Principals and Teachers.

For example, in schools performing below expectations the principal believes that the following six leadership behaviours all drawn from the leadership dimension of *Ensuring Quality Teaching* occur often to almost always whereas teachers believe they occur rarely to sometimes.

1. All staff share responsibility for student learning
2. Teachers with expertise help other teachers
3. Teachers are helped with disengaged students
4. Teachers having difficulty are helped early
5. Classroom help focuses on teaching and students
6. Assessment data are used to improve teaching

4.5 Research Question 3 – leadership behaviour actions

Research question 3 asks, “In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?”

In the following sections, the open-ended responses for each of the six specific leadership behaviours of the survey are, using SPSS Text Analytics Software, categorised as themes and are presented diagrammatically to illustrate response levels and relationships across these themes. The participant responses have not been edited and the syntax, grammar, punctuation and spelling reflect the input of the participant. There are approximately 70,000 words expressed across some 2,720 useable qualitative comments with an average length of approximately 25 words each.

These diagrams illustrate the connections among themes within groups of responses. Each theme is represented by a node. The size of the node corresponds to the frequency of responses containing that theme. The thickness of the lines connecting the nodes indicates the
strength of these shared responses. The legend of each diagram provides the descriptors for node respondent numbers and for line strength in respondent numbers.

In the following sections, each of the themes identified from comments regarding each Leadership Dimension are discussed in turn within the context of the three levels of school performance to identify the specific actions associated with that theme and performance level.

4.5.1 Goals and Expectations

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe goals and expectations are met by the leadership of your school?”

Of the 1,612 overall survey respondents, 600 provide qualitative comment to this question. Of these, 35 are not used because of a lack of clarity of meaning or usefulness, for example: “None” (R 208), “Streaming” (R 1138), and “No” (R 1411).

Figure 8 identifies the six themes generated for the leadership behaviour of Goals and Expectations and the numeric patterns of the 565 useable responses when categorised and identifies the relationships amongst the themes.

Figure 8 - Response Patterns for Goals and Expectations showing (a) the frequency of themes and (b) the relationship between themes
The web diagram illustrates that paramount for teachers within *Goals and Expectations* is that the process is collaborative whilst strongly linked to consistency and clarity. Each of these respective themes of *Goals and Expectations* is profiled using the words of respondents from different levels of school performance to illustrate the specific actions attributed to the theme.

### 4.5.1.1 Clear goals and expectations

Teachers refer often to the need for “Expectations and goals to be explicitly stated using different modes” (R 380) and are critical when “Guidelines on the performance standards and expectations of teaching are not clearly defined to staff” (R 162) and “There is rhetoric about staff development and learning/teaching challenges which attempt to improve teaching and develop longer term targets but these are not backed by structure” (R 897).

In schools performing better than expected, the comments demonstrate more specific details of observed approaches, with a consistent note of a “school renewal plan with annual goals and identified requirements of what teachers need to complete” (R 1478), and “There is constant communication between the Principal and staff. Staff are also involved in looking at future goals at the beginning of each year so we know where we stand” (R 1607). Similarly, “The principal has taken clear accountability for goals which are explicit and often referenced within meetings, projects and planning” (R 942).

### 4.5.1.2 Collaborative process

Collaborative process is paramount for teachers with respect to setting goals and expectations. In schools performing better than expected, the processes often cited are of “Staff consultation and discussion where our goals are developed through comparison and analysis of student data. Groups of staff develop whole school approaches to improvement in student achievement” (R 1424). The tenor of the sentiment cited by respondent 19 is also prevalent across schools performing better than expected, “There is open discussion about all issues with all staff, collaborative decision making processes exist and there is a close working relationship with the board and P&F”.

Conversely, respondents in schools not performing as expected note, “there is no long term plan available. It may be written somewhere that we don’t have easy access to. The term plans change often without warning; they are digitally changed on line and we aren’t told of the changes until they happen (dates and expectations)” (R 243), and “Admin team uses the staff meetings and twilight sessions to look at strategic renewal and goals for the school, however, there is never really any time given to discussing if these have been met or any evaluation of the work/thoughts we put forward” (R 314).
4.5.1.3 Linked to strategic plan

Strategic alignment is evident in schools performing better than expected, “The direction of the school is mapped through the strategic renewal framework to our school renewal plan. Once various internal review components are examined, clear goals are set by staff for the future direction of the school. The goals are regularly reviewed and achievements celebrated” (R 116). Similarly, “Personal Goals are required to be written at the beginning of each year. There is an expectation that they are aligned with both the School Renewal Goals and the Australian Professional Standards for Teachers. The Principal then meets with each Teacher to discuss how these will be achieved” (R 1544).

However, respondent 1099 in a school not performing as expected notes, “I don’t believe the leadership team sets a good example to staff, they go off and do whatever comes into their heads”.

4.5.1.4 Linked to professional learning

To achieve the goals and expectations of the school requires planned growth in individuals. Respondent 514 ties it all together with

Annual school goals are formulated through a collaborative process with staff. Specifics to achieve the goals are worked out as a leadership team and the finalised results are communicated to whole staff early in the year and revisited as the year progresses as is necessary. Staff set own professional goals based on the school goals and communicate these to leadership in one-on-one goal setting meetings. The leadership team support staff to achieve their goals and check in with them to see how they are travelling as the year progresses. Leadership examines what needs to be done for each teacher to support them reaching their goals - eg offering specific PD, personalised support in classroom, modelling of pedagogy, linking staff up with others who have similar goals, sourcing outside help eg BCE education officers etc.

In another school performing better than expected it is noted, “Professional development is made a priority through staff meetings. As a staff we work on the skills needed for our goals and demonstrate how these might be achieved” (R 1503).

4.5.1.5 Linked to student learning

In schools performing better than expected the links to student learning are very explicit:

We focus on individual students and data to help set and meet our goals. We meet to discuss and look at the specific learning needs of each child and work from there. We also
look at the extra support we have in the school and use this to assist in supporting the specific learning needs. We track the students and use these results to determine the success of the students and our expectations and our goal setting (R 594).

As well, “Our leadership team explore research and best practices to identify possible strategies or frameworks to enhance student achievement” (R 658), and “Leadership regularly view and analyse student data - Goals and expectations are reviewed/set as a result” (R 463).

However, in schools not performing as expected there may be a disconnect such as: “High standards and expectations for students are voiced by the school leaders but there is a disconnect between promoting these goals and achieving them” (R 287), or a perceived absence altogether, “Only recently has there been a commitment by leadership to facilitate goals and expectations about kids within the school. Not all students are catered for equally and fairly. Leadership can often be perceived as discriminating and uncaring. Leadership needs to put energy and heart into redeveloping harmony into staff morale and trust because staff are the ones who are performing the hard tasks of creating ways to assist students who are at risk” (R 492).

Similarly, “Goals are mostly about building, planning, extra-curricular activities, with very few goals set by leadership about classroom practice and student learning” (R 293).

4.5.1.6 Consistent process evident

Staff in schools performing better than expected report consistency of process at two levels. At the meta-level, “The annual cycle of expectations of the school are made very clear to all stakeholders. Staff are expected to know these to be able to contribute effectively. This constancy of process is strongly led by the administration team” (R 1609), and at the micro-level “Each staff meeting, we are reminded how the content of the meeting is heading toward the standards to be met - from goals set at the beginning of the year. It’s a very open and honest school - leadership continues to work on developing their awareness of how teachers are working and meeting their personal/professional goals” (R 698). In these schools “expectations and goals are explicitly stated using different modes and professional conversations linked to goals and areas of focus (whole school) are constant” (R 380).

Staff in schools performing better than expected know the pattern that will be followed with goals and expectations, “First, we outline our whole school goals together at the start of each year, then we survey staff, parents and students to assess how we are currently meeting these goals, then we form groups to design ways to improve our meeting of goals. Then in our
individual goal setting, we address these whole school goals as well as our individual goals” (R 416).

### 4.5.1.7 Goals and Expectations summary

In essence, when identifying specific actions attributed to goals and expectations, teachers want to collaboratively establish the goals of the school so that they are explicit in terms of priorities and expectations and reflect clear links to both the school’s strategic plan and student learning outcomes. Once known, these goals, through a consistently applied process, should be apparent at an organisational level and personal level to deliberately link with professional learning. Integral to the consistency of process is embedding of the individual goal setting process and within this, the desire for regular performance feedback using data and professional observation.

Within this research, high performing schools usually have:

- a collaboratively created set of strategic learning priorities for the school
- a transparent management structure that prioritises the resources of the school’s time, money and people in achieving these priorities
- an embedded approach to individual goal setting which is deliberately linked to:
  - regular performance feedback
  - structured but informal peer observation and feedback
  - tailored professional learning

### 4.5.2 Resourcing Strategically

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe resources are aligned and prioritised by the leadership of your school?”.

Of the 1,612 overall survey respondents, 486 provide qualitative comments in this resourcing strategically section of the survey. Of these, 8 are not used because of a lack of clarity of meaning or usefulness. Figure 9 identifies the nine themes of Resourcing Strategically and the numeric patterns and relationships of the 478 useable responses.
Figure 9 - Response Patterns for Resourcing Strategically showing (a) the frequency of themes and (b) the relationship between themes

Each of these respective themes is profiled using the words of respondents from different levels of school performance to illustrate the specific actions attributed to the theme.

4.5.2.1 Technology

Technology comments make reference to the provision levels of hardware such as laptops, iPads and whiteboards and also software and on-line resources. This theme of Resourcing Strategically evokes most survey response, and most comment is on the effective utilisation of these resources.

In schools performing better than expected there is an emphasis on “how we can best integrate technology into all areas of KLA’s” (R 104) and having ready access to “the most up-to-date IT resources possible” (R 1497). Note was made several times regarding “high priority given to provision of computer and iPad resources, in close consultation with the learning support team, library staff and teaching staff” (R’s 486, 1503), and where “leadership is interested in how best to keep up-to-date with resources and technology and often initiate discussions about etexts, ibooks, text book downloads etc.” (R 179).

In schools performing below expectations the most common comments are on both “the lack of technology access” (R 434), and “the maintenance of anything [about] technology seems to be an ongoing problem” (R 292). Frequent note is also made of technology cross-purposes where “It doesn’t seem that our leadership team and learning support team are very cohesive in working together” (R 1110), and a lack of consultation in discerning what staff need in both
the provision and efficient access of technology resources so that “Hardware is supplied without instruction or support” (R 125). The “black hole of technology whilst prioritised by the leadership of our school, has little visible measure or evidence of impact on student learning and their ability to achieve success despite so much money” (R 693).

4.5.2.2 Learning Priorities

In schools performing better than expected, “The emphasis of this school is on teaching and learning” (R 1591), and “Staff are engaged in discerning annual priorities which are incorporated into the School’s Renewal Plan” (R 449) often by a process where “Leadership and staff use student data to look into areas where there needs to be improvement or where there are weaknesses in student learning and strategies are put into place to improve these areas” (R 1496). “The identified goals for each year get the resource priority” (R 55).

In schools performing below expectations, comment includes, “There too many activities, sometimes this is too hectic for teachers to teach the curriculum well” (R 585) or “Timetable is overcrowded and often eaten into by extraneous demands (R 985) or “Money and time is invested in overseas trips for staff and students as a priority” (R 292). Consistently, there is comment regarding a lack of focus: “Materials and equipment are as much a priority for any/all areas” (R 300) or disagreement, “The leadership team regard the Arts as a high learning priority, we don’t” (R 681) or “Resources are often prioritised to maximise subject offering from a marketing perspective. While this results in a wide range of subjects this does not always lead to greater educational opportunities for students” (R 1359).

4.5.2.3 Time

In commenting on the theme of time, two subthemes emerge for teachers. One is the uninterrupted time for teaching and learning and the other is time for engaging in the activities to support their capacity as teachers. In schools performing better than expected there are comments such as “Preference in the timetable is given to Literacy and Numeracy block time, this is our learning priority” (R 54), and “Specialist lessons, co-curricular activities are timetabled in the latter half of the week to allow for 3 solid interruption free teaching days” (R 1425), and “Uninterrupted teaching and learning time from 9-11 Mon-Thurs” (R 1478) so that “The interruptions to my timetable have been kept to an absolute minimum and thus the ability to teach effectively has remained constant” (R 595). In these schools, the “Timetable of specific teaching strategies is prioritised” (R 37), and “The annual goals and priorities directs the structure of the timetable” (R 45) so that “Staffing and timetabling of support staff/specialist lessons ensure prime learning for all students” (R 390).
Similarly, in such schools “Teachers are given regular time to meet together to plan effective learning and teaching” (R 1021), and “Much time has been reserved to spend looking at data to identify students at risk of academic failure” (R 1166).

Whereas in schools not performing to the same expectations, it is noted that “Because of lack of time, it is very difficult for individual class teachers to organise and modify classroom resources/activities and assessment for students” (R 324). “Our school tries to do EVERYTHING and valuable teaching time (and release time) is lost to things that should come second to the bread and butter of education” (R 1212), and “In our 'Interruption Free Period' before assessment, there were excursions that were approved - why did we allow that?” (R 1067). Similarly, “There is pressure on not wasting learning time, but often time is wasted by admin staff in the mornings at every morning assembly with lots [of] non relevant school business” (R 524).

4.5.2.4 Professional Learning

Whilst professional learning evokes the least number of responses in the Resourcing Strategically domain, it features as a theme in the analysis of comments in every leadership behaviour domain. With respect to Resourcing Strategically in schools performing as expected or better than expected, comment is around “Prioritising for funding for professional learning time and opportunity” (R 1439), and “Investment in quality and ongoing professional development as outlined in the goals of the SRF” (R 1593), and “Generous budgets allocated to PD and planning days, which are specifically designed to enhance teaching and learning outcomes” (R 898).

In schools not performing as expected, note is made of resourcing for professional learning being ‘encouraged’ but not structured or supervised (R’s 206, 275) and “There have been opportunities for staff to participate in professional development but there are no opportunities to share this knowledge” (R 77).

4.5.2.5 Partnerships

In referring to partnerships within Resourcing Strategically, respondents comment particularly on relationships with the parent body and also with ‘interest’ groups within the school. In all schools, comment is made of positive relationships with parents and a range of information activities to keep parents informed, however, in schools performing better than expected, school and parent groups are purposefully and actively integrated so that “Leadership will find the resources necessary for teaching and learning programs once APRE/CST & Teacher librarian, teachers and P&F identify needs” (R 1432). Similarly, “Admin, school guidance
councillor, teacher librarian and learning support teachers meetings with parents identify needs and allocate resources” (R’s 1589; 1539), and “The value placed on a team approach led by the leadership team and enacted at a number of levels throughout the whole staff and community ensure that the resources available at the school are well utilised for student learning” (R 1531), and that “P&F meetings and school board is where parents and school discuss the needs of the school community” (R 1547).

4.5.2.6 Personnel

With respect to personnel as a resource of the school, note is made of the methods of allocation of staff and the appropriateness of the allocations. Consultation and transparency are evident in schools performing better than expected as evidenced in, “There is consultation with support staff and allocation of funding to support the identified needs” (R 1548), and “Classes are allocated [to] School officers based on needs and class sizes” (R 1588).

Conversely, in schools not performing to the same expectations, note is made of a lack of understanding of methodology or rationale for deployment of staff. “There has been a very definite shift in resourcing with big cuts but it is hard to see where it has been reallocated” (R 782), and “We struggle at times to get fair access for support …. have to ‘fight’ for what you get” (R 985). Similarly, “I believe that the [school officer] model is in need of questioning and overhaul - with more teacher (at the coal-face) input” (R 929), and “The funding we have received for having children with needs goes to someone who rarely works with children, those funds would be better used on aides to work in class with particular children” (R 350).

4.5.2.7 Alignment

Alignment, whilst identified as a separate theme, is evidenced across all other thematic areas of Resourcing Strategically. Schools performing better than expected report close synchronicity between allocation of resources and school intentions. Respondent 514 provides an exemplar with “Everything is aligned with the school goals - no shiny balls! All temporal, financial and personnel resourcing is aligned with the stated annual school goals each year”. Similarly, “Resources are selected around our goals” (R 885), and “The Leadership team are always interested in hearing about resources that may align with the school's vision and priorities” (R 591).

In other schools however comment is made of a lack of structure or focus, “There is no overall plan” (R 1099), and “Not sure if they are aligned” (R 497), and “I have no direct experience of how resources are aligned or how priorities are determined” (R 1317).
Whether accurate or not, the comments from respondents 326 and 292 epitomise, in schools not performing as expected, the absence of explicit and understood alignment of staff activities with the intentions of the school, “They aren’t. The staff spends meetings talking about matters which concern the administration rather than discussing, sharing and developing resources” (R 326), and “Due to lack of communication, it is difficult to see where money and time is spent on resources” (R 292).

### 4.5.2.8 Finances

In schools performing better than expected, “Goals are created with staff and then prioritised. These are then also prioritised as a budget item to make sure the goals are appropriately resourced” (R 48). Further, “The budget is adjusted annually to reflect the particular goals for the school year” (R 54), and “The school leadership direct resources to ensure suitable and appropriate quantity and quality are accessible” (R 1469), and there is “Consultation with support staff and teachers for any further allocation of funding to support identified needs” (R 1548). Particularly, schools performing better than expected note comments such as “The budget process is known to all and followed each year” (R 29).

### 4.5.2.9 Resources

In schools performing better than expected, resources are seen as a tool to support student learning so that “If there is ever a need, resources are sourced, bought or hired” (R 1529), and “We only have to suggest/request teaching resources which will benefit our students and they are made available to us” (R 1505), and “Leadership understands the importance of resourcing the curriculum and giving students the most up-to-date resources possible” (R 1497). As well, there is “Regular review of resources” (R 1464), and “Leadership is always willing to discuss with staff and individual staff members the more efficient method of using resources” (R 101).

In schools not performing as expected respondent 294 summarises the antithesis as, “Not enough done here. Example: just to get a white board marker involves a hierarchy of steps, forms to fill in and signed before you can get one to use in your room. Students have to make do with teacher using one that is on its last legs and just about running out”. Similarly a lack of resource understanding is demonstrated by respondent 243 in noting succinctly that “Management say they have no money”.

### 4.5.2.10 Resourcing Strategically Summary

In essence, when identifying specific actions attributed to resourcing strategically, teachers note that the three key assets of time, money and people should be handled transparently and be explicitly aligned to the collaboratively established strategic learning goals of the school.
schools performing better than expected, note is made of selective minimisation of the number of school priorities so that focus of assets is applied through proper direction of professional learning, resource purchase, technological integration and support for implementation. Leadership in these schools act as ‘gatekeepers to distractions’ and also create and uphold structures for uninterrupted periods of learning.

4.5.3 Ensuring Curriculum Quality

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe curriculum quality is ensured by the leadership of your school?”

Of the 1,612 overall survey respondents, 494 provide qualitative comment in this ensuring curriculum quality section of the survey. Of these, 59 are not used because they simply state “no” or “no comment” or are simply a line of dots or because of a lack of clarity of meaning. Figure 10 identifies the nine themes of Ensuring Quality Curriculum and the numeric patterns and relationships of the 435 useable responses.

![Figure 10 - Response Patterns for Ensuring Curriculum Quality showing (a) the frequency of themes and (b) the relationship between themes](image)

4.5.3.1 Leadership presence

Foremost of all comments regarding ensuring quality curriculum in schools, teachers express consistently the desire for school leadership to have an active presence in the organisation and preparation of school curriculum. In schools performing better than expected, “Leadership has ongoing discussion about the design and delivery of a quality curriculum” (R 1415), and “Leadership plan with staff in all professional planning days” (R 1564). Particularly, “Leadership
team members are everywhere with curriculum. They sit on the Student Support Team meetings, in all EAP meetings, in planning meetings and they help us co-construct our curriculum documents” (R 48).

In schools not performing as expected, however, comment is often around an absence of leadership, “I don't believe that it is ensured by the leadership. What leadership, there isn't any, it is ensured by good teachers” (R 229). Further:

Curriculum quality is not effectively monitored by the Leadership team. There is no system of accountability to ensure that programs of learning are produced each term. Teachers are essentially left to their own devices, although most year levels work as a team, but others have individuals who are not team players. More direction from the Leadership team is necessary to ensure that quality teaching and learning can take place. (R 132)

4.5.3.2 Professional learning

In every school performing better than expected, access to a broad range of personalised professional learning is very evident, “We are given lots of PD on the curriculum, how to implement it and adapt it to suit individual students” (R 1598), and “There is always availability to attend Professional development” (R 1429). Similarly,

We have it all in relation to curriculum - Outside experts are consulted and conduct professional learning and also act as critical friends, we have peer mentors, planning coaches, in-house PD given by other teachers to familiarise with new curriculum directions and expectations, and most of all my supervisor works in my classroom with me one to one to help me plan it right. (R 857)

4.5.3.3 Planning time

Pace and space to plan effectively feature in teachers comments around quality curriculum. Some staff in schools not performing as expected note, “We are constantly being informed about new curriculum information however we do not get enough time to get our head around one area and then we are hit with another area/ program”(R 590), and “This is scarey! Leadership expect so much without resourcing time adequately and the teachers are being pressured to meet admin goals one after another” (R 310).

In schools performing better than expected however, “We have release time allocated for team and individual planning, data analysis and program writing” (R 34), and “Regular planning and review meetings with Learning Support teacher for each class. Regular standardised
testing and time to follow up. Curriculum planning time is also given each term. I like the way our boss gate-keeps for us to not be overwhelmed” (R 349).

4.5.3.4 Planning feedback

Although acknowledging the professionalism of teaching, teachers also very strongly cite the desire for feedback around how they prepare on behalf of their children, “The leadership team is of the belief that we are highly professional and proficient people. There is very little quality control, which isn't necessarily a good thing” (R 497), and “Staff are encouraged to plan to inform teaching but this is not carefully monitored to ensure that this actually occurs” (R 642), and “Leadership rarely provide feedback to teachers about the quality of their planning - particularly where there is a teacher who is not doing well” (R 1024).

Along similar lines other teachers note, “To be honest we have either the APA or APRE sit into our planning sessions but we are never ever expected to produce planning to be checked by the leadership team and are given almost no feedback or guidance about what we plan. It would be nice if we were” (R 821), and “Planning is rarely checked, and useful, actionable feedback is rarely given. Clear direction in expectations of curriculum quality and planning is not given” (R 204), and “I have never ever been given feedback as a teacher or HOD about any planning that I have ever done” (R 314).

Conversely, in schools performing better than expected, “The leadership reads planning and provides constructive feedback - every term!” (R 1587), and “All planning has to be done in the same format, must be linked to curriculum and show differentiation. All planning is thoroughly checked by admin for keeping with our school expectations and if not up to par, revised” (R 1599). Importantly in these schools, “Planning is an expectation but we all got together to decide the standard and format - this is ‘checked’ by the Curriculum Support Teacher/APA to ensure balance and range. Feedback is always given” (R 85).

4.5.3.5 Collaborative design

Teachers in schools performing better than expected articulate both the pooling of expertise to design curriculum and also the alignment this produces across year levels, “Curriculum quality is important at our school. We plan in class levels and ensure the curriculum is thoroughly addressed in all of our planning and implementation of subject areas” (R 104), and “We peer mentor and coach each other regularly to produce consistency first across our year levels then in our individual teacher planning” (R 51).

In schools not performing as expected however, “The classroom teachers are left to write/come up with programs themselves” (R 262), and “There is no consistent approach for
ensuring all teachers are providing a relevant, modern approach to teaching and learning in the school. A small percentage of teachers follow guidelines and curriculum and continually reflect on practice. Most people are Lone Rangers’” (R 126).

4.5.3.6 Data informed

In schools performing better than expected, data collection and interrogation is a structured and formative process, “All staff are aware that educational decisions are data driven. Selected focus areas will present the area of highest need according to the extensive amounts of data collected. I believe teachers can see the value of informed decisions and well established processes regarding the implementation of the curriculum” (R 1609), and:

We have a school based plan for collection and analysis of student data in reading comp, phonological knowledge, benchmarking and we have a rigorous cycle of data collection and analysis which we teachers then use as the basis for the next cycle of teaching- allowing us to address student needs specifically, while providing appropriate challenge. (R 1425)

In other schools however, “While programs are implemented the follow up with data collected is inefficient. Instruments used to collect data are not the most efficient and do not answer the needs of teacher requirements. Feedback is not efficient. Data collection is not evenly spread across the school and not used efficiently” (R 924), and “I don’t believe we are using student data enough to inform our curriculum planning. It may be looked at by leadership but this data is not being fed down through the ranks to the teachers who need to use it” (R 1110).

4.5.3.7 Differentiation

In one school not performing as expected, “Discussions are never held about student progress and there is no help for teachers to use the data to inform and create better teaching programs to support students at risk” (R 379), and in another, “Our teachers do not answer the needs of verified children or even the quiet students that need extra support” (R 924).

Yet teachers in schools performing better than expected note, “Adjustment profiles are used to determine levels of support for students. Planning is monitored and instruction and feedback provided. Professional development and data gathering and analysis of data is used to support adjustments to programs and then there is the discussion in professional teams” (R 380), and “Curriculum meetings are held to discuss the progress of students against curriculum. We are given extra time to ensure that work programs address the learning needs of students. There are several processes presently in place in the school to monitor the adjustment of teaching and learning” (R 177).
4.5.3.8 Assessment framework

In a school not performing as expected a teacher comments, “A school assessment plan? Never really heard of it” (R 314) and in another such school, “Reporting anomalies are never checked and teachers are accountable only to themselves for what they assess and how they assess and for the results of the students in their classes” (R 278).

In schools performing better than expected however, “We have a learning and assessment outline and specific results are reported to the leadership and support teams” (R 1598), and “There is a rigorous assessment policy to ensure that all students complete assessment in a timely manner and that teachers are consistent in how they collect progress around student learning” (R 854). The value and use of an assessment framework in pursuit of quality curriculum was summarised by respondent 1012, “We use a school assessment plan to monitor the collection of student data and to ensure consistency of assessment info gathered throughout the school. Some class teachers have limited experience and this aligns them with teachers who are academically more capable but it lets us all talk the same language”.

4.5.3.9 At-risk identification

In schools performing better than expected, “Academic care is a priority. Every student's progress is tracked, at-risk students interviewed, parents interviewed. Professional discussions are held during staff meetings to find ways to help these children learn” (R 708), and “Use of standardized testing and student profiling is used to identify student progress and at risk students” (R 390). Similarly, “Our collecting of student results, data analysis and teacher to teacher discussions allow for early identification and intervention on students at risk” (R 943).

Conversely, in schools not performing as expected, teacher ownership and responsibility may be absent, “The teachers don’t a great job at flagging children at risk and when we do, we forward said concerns onto the Learning Support unit, and that’s where it ends for us” (R 262).

4.5.3.10 Ensuring Curriculum Quality Summary

In essence, when identifying specific actions attributed to ensuring curriculum quality, teachers want the presence of the school leadership to be significant and apparent. When evident, it is greatly appreciated, however, in most cases teachers comment that care and control of the school’s curriculum is usually left to classroom teachers assisted by specialist teachers. Whilst teachers particularly appreciate the common strategy of planning time particularly when it is in collaborative circumstances as teams, frequent note is made of a lack of published expectations around planning responsibilities, a considerable lack of consistency across teachers within the same school and particularly a dearth of feedback about the quality
or usefulness of teachers’ preparation and planning for teaching. Systemic data sets (such as NAPLAN) are frequently used at whole of school, year level and class levels to discern areas of curriculum focus, however, internal school frameworks for consistently tracking student learning and growth across year levels using local data sets, whilst desired, are not often apparent.

Differentiation of curriculum occurs most often via collaborative processes across teachers at ‘support’ meetings where specialist teachers assist in both the confirming of ‘at-risk’ status of individual students and identification of strategies to address their needs.

Within this research, high performing schools usually have:

- a collaboratively designed and published document of expectations regards teacher planning
- regular involvement and comment from school leadership regarding teacher planning appropriateness and quality
- a collaboratively designed and published framework for consistently tracking and reporting student learning and growth across year levels
- dedicated time regularly reserved specifically for teachers to interrogate data sets, plan collaboratively, engage in learning from each other and utilise the expertise of internal and external personnel.

### 4.5.4 Ensuring Quality Teaching

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe teaching quality is ensured by the leadership of your school?”

Of the 1,612 overall survey respondents, 374 provided qualitative comment in this ensuring quality teaching section of the survey. Of these, nine are not used because they simply stated “I cannot respond to this” or “not really” or “we are moving to 5” and hence have a lack of clarity of meaning. Figure 11 identifies the eight themes of Ensuring Quality Teaching and the numeric patterns and relationships of the 363 useable responses.
4.5.4.1 Classroom Support

In schools performing better than expected, teachers indicate a strong sense of community and support for their work in the classroom where “The leadership team are quick to respond whenever there is an issue in any classroom. CST, STie, Guidance Counsellor, Peer Teacher are all actively involved” (R 101), and “There is a very high level of collegiality fostered within the large teaching staff and this ensures that teachers collaborate in classes and openly coordinate to guarantee best practice” (R 1479).

Whereas in schools not performing as expected, “There is no real communication between admin and teaching staff about the class achievements or improvements or expectations, we are on our own” (R 314), “Classroom teachers are left alone to support their children” (R 590), and “If a teacher does not complain constantly or is not favoured, few things are done for that classroom” (R 222).

4.5.4.2 Leadership Intervention

The desire for active leadership intervention in quality teaching is the most frequent theme of all respondent feedback. Comments such as “The administration would have no idea what I am teaching or how in my classroom” (R 326), and “Leadership actually impedes quality teaching by lack of communication and their devaluing of the teaching processes” (R 310) are noted in schools not performing to expectations. Similarly, leadership presence is absent in the following, “Very little is done to help teachers who are struggling. Teachers are not encouraged to ask for help as this would make them look weak and ineffective. We all know...
who the teachers are but nothing ever changes. Some teachers disguise this by being easy markers and giving a good list of results. Because there is little moderation they can get away with it” (R 855).

In schools performing better than expected, there are however comments such as “The leadership team frequently observes teachers implementing an identified instructional approach and writes feedback for that teacher based on our own feedback protocols” (R 55), and “The leadership team are invested in the 'deprivatisation' of the classroom. All teachers are observed by the leadership team and a group of their peers and provided with productive feedback” (R 1593).

4.5.4.3 Sharing Best Practice

Teachers express a strong desire to intentionally talk about their craft and to learn from others in situ. In schools performing better than expected, “We identify 'champions' on staff who have well developed skills in a certain area and they are used to support/coach peers” (R 51), and “Time is allocated to work in other classrooms and share teacher expertise” (R 1609), and “I am regularly visiting other classrooms and learning from others practices to improve on my ability to teach” (R 694).

Whereas in schools not performing as expected, “There is no time allocated to maximising learning and teaching experiences among colleagues. I have made a formal request to have time allocated to teachers visiting other classrooms to improve practice as well as opportunities for team-teaching and mentoring – nothing happens” (R 292), and “There is not opportunity for coaching. No time allocated to allow teachers to visit other classes to observe, no time just to talk teaching” (R 1067).

4.5.4.4 Peer Mentoring

Teachers generally prefer to learn from each other rather than ‘experts’ and visitors. Particularly, teachers trained in mentoring skills are most prevalent in schools performing better than expected and elicit comments such as, “Mentoring is provided to me when I identify particular weaknesses/strengths I want to work on. This is done discreetly and provides trained professional support when required” (R 1605). Similarly, “Mentoring programs in place allows a greater emphasis on learning communities to occur, we can talk professionally and open-ended questions are not taken personally” (R 177).

In schools not performing as expected diamefic comment notes, “This is really informal - experienced teachers work with inexperienced teachers and does needs to improve” (R 215), and “We are encouraged to be mentors but there is no training and some staff are reluctant to
take up the opportunities” (R 1342), and “There is a ‘mentoring’ program but staff do not engage because we are unsure of what to properly do” (R 1178). Similarly, “There is too much of an emphasis on micro management and outside experts, let us set the agenda and spend the money on time for us to grow each other” (R 176).

4.5.4.5 Professional Learning

In schools performing better than expected respondents note, “[We] Do significant professional development on how best to teach” (R 1416) and this “Professional development is planned around teacher’s needs” (R 1513), and “We use contemporary research to inform our professional learning” (R 49). Additionally “The learning is linked closely to data and achievements of students” (R 1598).

In other schools however, “There is none [professional development], teachers are discouraged from attending PD days” (R 419), and “Some teachers simply do not want to change or take the time to learn and nobody makes them” (R 533). Similarly, “Time and access to professional help for the teacher is always an issue here” (R 1102).

4.5.4.6 Structured Development

Whether conducted formally or informally, teachers indicate through comment their preference for a known and explicit process for enhancing their competencies. In schools performing better than expected, “We are encouraged to undertake study for higher education and complete BCE courses” (R 1610), and particularly, “We have goal setting that goes through all the year, we have structure at our year level and planning meetings, we have mentors and buddies and access to modelling and support from lead teachers, all aimed at how best to assist the teacher teach” (R 1002).

However, respondent 297, a teacher with more than 15 years’ experience, 10 in the current school not performing as expected, notes that “I have not witnessed anything to support my development”, and similarly, “Staff do not feel at all supported by the administration, particularly the principal who has no process for helping us grow” (R 326).

4.5.4.7 Data Informed

In schools not performing as expected, utilisation of student data is generally premised around “Only standardised testing done each year” (R 260) so that “Support is provided to improve Naplan results” (R 196), but “We have no diagnostic testing and only examine Naplan results for areas of weakness identified in the testing to give extra attention in teaching programs” (R 319). Respondent 150 summarised the accent on NAPLAN in underperforming schools via,
“They say not so much focus on NAPLAN but it always gets put up in staff meetings and discussed about improvements and that is all we get”.

Conversely, in schools performing better than expected, “Data gathering is of high importance and is used to assess and to improve student outcomes and lead discussions to improve teaching practice” (R 1523), and in such schools, “Our school has a whole school plan for a variety of assessment of students throughout the year and this data is continuously available to teachers” (R 129) so that “Assessment data is used to improve teaching but not in isolation” (R 408).

4.5.4.8 School Wide Pedagogy

The theme of a school-wide pedagogy is significantly the least prevalent of all the themes discerned within analysis of quality teaching responses. Whilst nearly all the responses come from schools performing better than expected, nevertheless, teachers are less concerned with what the pedagogy is, and more concerned with collaborative discernment and consistency across teachers. In schools performing better than expected, “We collaboratively arrived at our whole school pedagogy, and now model lessons and observe experts and peer teachers to ensure consistency” (R 1599), and “The school has a consistent approach to expectations of how we should teach” (R 1427).

In other schools, “We are becoming more and more aware of this but nothing is done” (R 1298), and “Teaching quality is currently not ensured by members of the leadership team, we each all do what and how we want” (R 293).

4.5.4.9 Ensuring Quality Teaching Summary

In essence, in schools performing better than expected, teachers are constantly mentoring each other in their classrooms around issues identified through student performance monitoring and relevant to their teaching at that time. Leadership in such schools has classroom support as a high priority and are actively engaged with teachers in the process, which ensures sufficient resources to allow such interaction to occur. Particularly, the design is intentional by leadership but invitational to teachers.

Within this research, high performing schools usually have:

- a consistent approach and expectations to what quality teaching “looks like, sounds like, feels like”
- leadership teams invested in the 'deprivatisation' of the classroom
leadership actively involved in observations of teachers’ pedagogy and regular provision of developmental feedback to teachers
- frequent structured but informal opportunity for staff to share ideas/concerns with each other
- time allocated to work in other classrooms and share teacher expertise
- shared and collective ‘ownership’ of student performance across classrooms.

4.5.5 Promoting Teacher Professional Learning and Development

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe teacher learning and development is promoted by the leadership of your school?”

Of the 1,612 overall survey respondents, 388 provided qualitative comment in this Promoting Teacher Professional Learning and Development section of the survey. Of these, four are not used because they simply stated “no” or “not really”. Figure 12 identifies the seven themes of Promoting Teacher Professional Learning and Development and the numeric patterns and relationships of the 384 useable responses.

![Figure 12](image)

**Figure 12 - Response Patterns for Promoting Teacher Professional Learning and Development showing (a) the frequency of themes and (b) the relationship between themes**

Each of these respective themes is profiled using the words of respondents from different levels of school performance to illustrate the specific actions attributed to the theme.

4.5.5.1 Opportunity

Comments about opportunity to learn are double than those of any other theme relevant to teacher professional learning and development.
In schools performing better than expected, comments indicate there are a “Vast array of professional learning opportunities offered” (R 47), and “The principal is very supportive of any request for training towards improving the effectiveness of our teaching” (R 1427). Similarly, “We are provided with many opportunities to partake in professional development. This includes inservices at school and our leadership team always keeps us up to date with other opportunities for learning development” (R 1487).

Dissatisfaction is expressed in schools not performing as expected via, “Inservice opportunities are rare (seen as too expensive). The opportunities are not enough. Also, there is no follow up. This needs to improve” (R 215), and “Only a select few are given time and are used in almost every new development. There are no open meetings. People are given opportunity but it is done after staff meetings with no discussion” (R 222). Other comments in such schools indicated, “We are asked our opinion but our opinions are rarely if ever taken into consideration” (R 238), and “It is not. Time is not spent effectively in order to improve the teaching in the school. We hold meetings to discuss information that should be, and often is anyway, contained in an email. Instead of spending the time in twilight sessions developing our teaching, trying to engender some creativity in our teaching and improving what we deliver” (R 326). The most common response across schools not performing as expected was, however, reflected by respondent 1096, “Teacher learning and development is at a standstill as there is no funding given for this but we seem to have money for anything else”.

**4.5.5.2 Leadership Participation**

The absence of leadership in teacher professional learning is noted in schools performing less than expected, “Leadership has rarely or almost never discussed teaching strategies, there is no peer evaluation of teaching and I have never discussed the effectiveness of teaching with any leadership member” (R 314), and “The principal is not usually involved in anything to do with this” (R 250). Similarly, “This may be done by individual teachers but not by leadership” (R 844), and “It would be great if leadership could get involved and learn more about learning” (R 923).

However in schools performing better than expected comment frequently reflects, “Professional learning and dialogue is encouraged and modelled by leadership” (R 1472), and “There is a culture that we are all learning together and this involves the Leadership team in the PD” (R 1591).
4.5.5.3 Shared Learnings

In acknowledging “We can’t all go to everything” (R 556) teachers from schools performing better than expected know that “Teachers who attend PD are called upon to share what they have learnt with their colleagues in Professional Learning Communities” (R 1440), and “Staff take it in turns to demonstrate teaching practices or tools that they have learnt and that they find to be particularly effective” (R 504) because “We promote sharing of best practise between teachers” (R 1589).

Other schools however indicate, “Many programs are introduced but there is too little sharing and reflection and this limits effectiveness” (R 196), and “I have seen that the staff meetings are sometimes used as a platform for a vague opportunity to give educators more information. It usually fails” (R 235), and “Some teachers are handpicked to complete teaching enhancements but very little time is allocated to pass on skills and information to other staff” (R 297).

Even in schools performing as expected comment often reflects, “Regular inservice is provided. Not sure how much feedback is going on after it though” (R 495).

4.5.5.4 Staff Meetings

The difference in the rationale and use of staff meetings is very marked across the performance levels of schools. At a time when the whole staff is gathered in one place, schools performing better than expected reflect, “Staff meetings are no longer staff meetings but have become professional development” (R 87), and “Staff meetings are usually Professional Learning Team meetings where teachers are able to discuss and research current practices and how effective they are” (R 1525), and “Staff meeting schedules are specifically planned well in advance to best maximise opportunities for teacher learning and development. A cycle has been introduced to include a balance of professional learning and curriculum planning” (R 1021). In these schools performing better than expected, the active professional tenor of the meetings is reflected via comments such as, “We have really robust discussion during staff meetings; we use data to examine trends/weaknesses in the whole school and then plan to address any whole school issues” (R 883).

Conversely, teachers in schools of other performance levels reflect, “There are no open meetings, we come together to get told what to do and how to do it and when” (R 222), and “The focus for staff meetings is chosen by the Admin Team and all staff receive the same or similar experiences – shotgun and they talk about differentiation!” (R 1022).
4.5.5.5 Collaborative Learning

Comment from teachers in schools not performing as expected indicate a feeling of isolation and vulnerability, “Positive feedback rarely occurs but I’m always left alone but I’m not sure how I feel about that” (R 279), and “I believe observation of other teachers is planned, but not yet in action, we’ll be told when and how I suppose” (R 204). Similarly, “Staff are often reluctant to allow others access to rooms and we have an insular culture where collaboration and sharing is a slow process” (R 17).

Collective ownership for student and peer learning is, however, evident in schools performing better than expected, “By fostering the professional conversations between teachers there is the opportunity to have dialogue about areas that teachers wish to learn more [about] and improve their learning” (R 1469), and “Part of our expectations we have designed for ourselves is a new local model for observing and understanding others called ‘Sharing Wisdom’” (R 49), and “Our learning teams have a responsibility to their colleagues and to the school community to continue to improve the learning and teaching for all students at the school” (R 1598), and “Teachers welcome other teachers into their classes and discuss the strategies in an informal environment following the class” (R 1049).

4.5.5.6 Student Focused

In schools performing better than expected, “Teacher learning and development is promoted through what may be useful for particular teachers based on their skill base and the learning needs of their students” (R 1440), and “Certainly the staff professional development is focused on the learning needs of the students” (R 99).

In contrast, comment from teachers at schools not performing as expected indicate “There never seems to be enough professional development opportunities offered to teachers to develop skills to assist them with particular students in their classes” (R 1110), and “Staff have often asked for professional development and time to work on adjusted programs for diverse learners and this has not occurred. Staff have a willingness, however they lack the competence and ability to do so” (R 154). Particularly, respondent 147 notes that “The decision to change teaching pedagogy had little to do with the impact on students. Sad but true!”.

4.5.5.7 Aligned to Goals

Alignment of professional learning to own and school goals emerges as a strong theme from teachers’ comments. In schools not performing as expected there is “No understanding of why we do what with a very top-down model and without a deep understanding of how it all works
together and how leadership needs to empower staff” (R 782), and that “Learning is usually of our own accord, not necessarily encouraged or instigated by leadership” (respondent 923).

Yet in schools performing better than expected “Opportunities for professional learning and mentoring are whole school rather than incidental but our annual goal setting by all staff informs our own professional learning needs and also recognises the needs of the cohort of students we serve” (R 20), and “Professional learning is closely monitored according to the school’s priorities, as well as any specific needs of individual staff” (R 465), and “The vision is shared with the learning community and our goals are explicit and embedded within our model for professional development and school wide pedagogical practices” (R 1593).

4.5.5.8 Promoting Teacher Professional Learning and Development Summary

In essence, at a personal level, teachers in schools performing better than expected learn best in deep dialogue with peers around issues pertinent to themselves at that time. At a whole-of-school level, learning is derived from the goals of the school which is derived from the system priorities, and the school and systemic data about student learning needs. Within this, it is evident that the school’s leadership team act as genuine learners participating with and alongside staff as they engage with the learning goals.

Teacher comments indicate that teacher professional learning in schools performing better than expected is highly structured, very explicit and very collaborative whereas in schools not performing as expected it is ‘encouraged’ but in a serendipitous fashion with little feedback or sharing.

4.5.6 Ensuring a Safe and Orderly Environment

Within the ELP, respondents were invited through open-ended text, to respond to the question “Can you give any specific examples of how you believe a safe and supportive environment is ensured by the leadership of your school?”

Of the 1,612—overall survey respondents, 368 provide qualitative comment in this section of the survey. Of these, two are not used because they simply stated “no” or inserted a line of dots. Figure 13 identifies the nine themes of Ensuring a Safe and Orderly Environment and the numeric patterns and relationships of the 366 useable responses.
4.5.6.1 School-Wide Behaviour Management

“Everyone being on the same page and knowing what consequences come regardless of who you are” (R 600) is evident in schools performing better than expected.

The whole school is involved in Swpbs [school wide positive behaviour system]- staff teams involving teachers, leadership, guidance officers, school officers, parents and we developed 3 guiding principles and a matrix of expected behaviours for each area in the school. Teaching strategies/ plans were developed to specifically break open and teach each behaviour- a very proactive consistent owned approach (R 1425).

And “The Leadership team have weekly meetings with the Support Teachers, Guidance and pastoral workers so everyone is on the same page with respect to student behaviours. We have clearly established rules for behaviour at this school and these are displayed on posters and discussed at the beginning of the year by the Leadership team” (R 1591), and “The school rules and behaviours are taught in classrooms and through assemblies. All the teachers use a similar language re behaviour management” (R 99).

Inconsistency is evidenced in schools not performing as expected via, “The school does make attempts to promote being responsible, being respectful and being safe but this is terribly inconsistent” (R 262), and “A safe and supportive environment is provided for parents and students but many teachers do not feel that they are supported by the principal. There is nothing school-wide about our approach” (R 259), and “Some staff need to be made more
accountable in this as they seem to treat students differently and do not follow the 'norm'” (R 807).

4.5.6.2 School Leadership

In schools performing better than expected, school leadership has presence, “Our Principal is always out and about and knows everyone, or makes you feel that way. The Principal sends thankful emails and messages of support and encouragement on a job well done by staff. The Principal is readily available for all staff to chat with. The Principal attends as many events as is humanly possible” (R 1271), and “Leadership actively promote a feeling of community and a safe environment where everyone can be themselves freely” (R 886).

Comments indicate a high level of trust and open interaction with the school leadership and also the active involvement of leadership in creating a supportive environment. “Open and honest communication is valued and supported by leadership” (R 1415), and “Leadership are always out and about, talking to students, teachers and parents” (R 1588), and “Staff feel comfortable discussing issues openly in order to get them resolved” (R 1610). In such schools there is “Willingness to sit and discuss, ask for staff opinion where appropriate, share information, act on concerns of staff, be supportive, caring and compassionate” (R 47).

In schools not performing as expected however issues of care and concern are reflected in, “Staff issues appear to present a distancing between leadership team and staff generally” (R 318), and “I love my school, but I am often frustrated with the lack of leadership. Teachers monitor and enforce school rules, but the back up from leadership is again haphazard” (R 983), and “I haven’t heard of many occasions where the admin has supported the teacher. One teacher had to apologise to a family, for something they [sic] did not do but was asked to apologise anyway” (R 314). Similarly, “Certain staff will assist others in need however the leadership is conspicuous in their lack of concern” (R 419), and “The Principal is more concerned about career trajectory than about staff” (R 844).

Particularly in schools not performing as expected, perceived inequity by the leadership is often noted. Respondent 924 felt “There is a definite line of division with leadership - those that are accepted because they are ‘the yes people’ and those that are not accepted, and dare I say targeted, because they challenge leadership with ideas and to look at other ways to improve and implement” and respondent 1209 noted, “Some teachers are not supported by admin. It depends who you are. I am angry because some people’s behaviour is covered up. Other people get crucified”.

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4.5.6.3 School Culture

School culture comments are woven through all the themes within ensuring a safe orderly environment. In some schools performing better than expected, comment is on the trust and relational activities that result in a positive culture, “Leadership is strongly involved with and supportive of the positive culture within the College” (R 13), “The very positive culture that has been established is because the leadership team are always available to discuss issues as they arise” (R 960), and “Active listening by the leadership team as well as the whole school behaviour approach has built positive culture in the school” (R 29). Other comments from schools performing better than expected describe the culture via “The school has the most wonderful, caring and supportive culture with a multicultural parent and student body” (R 574), and “We have high expectations of all in our school to: be brave and participate, to treat one another the way we want to be treated, to be the master not the victim of our feelings, to pursue our personal best no matter who we work with, to have reasons for the things we say and do, and to be strong and sensible” (R 1531), and “It is a lovely school to work in and I enjoy coming to work each day” (R 1595).

In these schools performing better than expected, there is a deliberateness to building unity through culture and is summarised by respondent 390 as “The principal and leadership team work well together with us staff on a jointly constructed school vision that has examined what the culture was and we set the goals of the school to get the culture we wanted”.

However, comment from a principal in a school not performing as expected suggests passive acceptance of negative culture via, “There are always individuals in a large school who will not openly and completely share the cultural appreciation of the community as a whole - you just have to wear that” (R 187). Distrust is evidenced in schools not performing as expected, as “Only a few years ago the staff was much more positive and cohesive - the present principal is intentionally disrupting staff in the hope of promoting staff turnover” (R 325), and “The school culture and morale is extremely low due to experiences of distrust and discrimination by members of leadership” (R 492). Similarly, respondent 782 notes, “A number of staff feel undervalued and unfairly treated. Other staff members feel that their expertise and wisdom is ignored, and they are excluded from the tight group that makes all decisions”, so that “This is not such a happy place to work” (R 494), and “Our leadership is not as affirming of the efforts of its staff - there is a large emphasis on what is 'wrong' with the system (teacher’s practice) and not what is so right about it. The general mood of the staff is 'gloomy' as a result” (R 929).
4.5.6.4 Issues Resolution

Every comment within this theme of a safe and orderly environment wants issues dealt with quickly, openly, fairly and consistently. The differential across performance levels of schools, however, is whether this is perceived to be the case or not. In schools not performing as expected, “Problems between teachers and parents are not openly addressed. Most frequently the student is moved into another class without any of the teachers having any idea there is a "problem". Students or parents who complain, are not encouraged to enter into conference with the teacher involved” (R 282), and “Teachers are not ensured fair hearings when parent complaints are logged. Admin sides with the parent” (R 310), and “The teachers work very hard at ensuring every student is made welcome, but the weakness is that open dialogue, robust discussion and sharing of ideas, feelings, thoughts and especially those contrary to the leadership team is not encouraged. Indeed it is discouraged” (R 291).

In schools performing better than expected, issues resolution is addressed both proactively, “The school recently ran an open forum at which anyone was encouraged to raise any concern about school operations so that issues could be raised and dealt with promptly” (R 48) and reactively, “Any issues are dealt with in a timely manner and leadership always ensure staff, parents and students feel supported and understand what happened and why” (R 1416), and expediently, “Problems are dealt with swiftly” (R 1177), and “Problems are addressed immediately” (R 1269). Similarly, “Stated problems from all shareholders are listened to and actioned almost immediately or as soon as possible after information gathering has occurred” (R 576).

4.5.6.5 Positive Environment

Whether “It is a consistent approach that makes a positive environment” (R 1525) or the “Positive and respectful relationships between teachers and parents being supported and modelled” (R 598) in schools performing better than expected, “The culture at the school demands a safe, supportive and caring environment and it is a pleasure to be in a community where care and compassion shine” (R 1568).

Caution and horror stories are expressed frequently in schools not performing as expected, “I haven’t heard of many occasions where the admin has supported the teacher” (R 314) and, “A parent tried to sue staff this year and we were told there was nothing we could do about her behaviour, she continued to spread lies and tarnish staffs’ good name and she was not approached re her behaviour” (R 238). Respondent 197 provides an indicative summary with:

There are issues between staff members which creates factions, i.e. those who are in favour v. those who are not, which does not reflect a positive environment and produces
undercurrents which are not aired nor resolved. This results in 'tip-toeing' around issues, sarcastic remarks and lack of real communication. Visiting teachers can pick this out easily.

**4.5.6.6 Learning Focus**

In schools performing better than expected “Interruptions to class are minimal” (R 918) because “Leadership ensures the environment is learning focused” (R 1525), and “When unwanted disruptions occur, returning to learning is the main goal” (R 1256).

In schools not performing as expected however, “Too many students are taken out of classes for too many different 'extras' and students most at risk do not cope well with this disruption to their classes” (R 282), and “Admin ensures that learning is not the focus because we can’t request students to show the work they have been doing and hence show the evidence that the student is indeed fulfilling their part in the teacher-student partnership towards learning” (R 311).

**4.5.6.7 Student Safety**

In schools performing better than expected, “Bullying or isolation of students is taken very seriously” (R 1049) because “Safety is spoken about frequently and regularly” (R 1464) and there is “Immediate response to any reports of 'bullying' behaviours” (R 341). In such schools “The behaviour management policy is based around respect and safety; really approachable admin who are easy to talk to and student problems always followed up with staff and parents” (R 823), and “Student protection is always of utmost importance at our school with the children explicitly made aware of the contact personnel if ever they need to access it” (R 549). Students were an active part of the process where “Surveys are conducted to gain insight in students opinions on safety etc” (R 1056), and “All classes have a covenant that is aligned to the school behaviour plan so that all student problems are followed up on” (R 40).

Inconsistency of process is evident in comments from schools not performing as expected, “I think that a more consistent approach to behaviour management could be implemented and kids would feel safer” (R 402), and “When leadership is more inclined to support the parent rather than the teacher it is counter-productive to a supportive environment and ultimately the safety of our children” (R 459). Similarly, “Staff often complain about the fact that there are very few serious consequences for students who behave in an aggressive manner” (R 855) so that “There is at times a feeling of very little to no support provided by leadership” (R 674). “Inconsistent behaviour management is a big issue and students are not respectful of any processes the school has in place” (R 1024).
4.5.6.8 Safe Supportive Environment

In schools performing better than expected,

A very effective and efficient support staff and structure for support exists. The principal meets weekly with pastoral workers and guidance councillor. STIE's are very student focused and support teachers and parents to a very high level. The parents are very clear on expectations about our parent code of conduct. Staff are very supportive and respectful to each other. (R 55)

And “An incredible amount of hard work goes into creating and maintaining a safe and supportive environment - essentially getting to know people well and building trusting relationships that support open communication channels” (R 1609). In these schools, “The message about school being a safe and supportive environment is one that the children hear regularly and would be able to tell any visitor to the school” (R 1469), and “Clear communication and physical presence by the leadership team within the school grounds before, during and after school helps develop the supportive environment” (R 1429) with “Reinforcement of the mantra: I have the right to feel safe at all times; School Vision and Mission and Motto is discussed and unpacked for their connections to our day to day learning on a weekly basis with students, staff and parents” (R 51).

In other schools,

No, it is neither safe nor supportive. There is a fear of speaking your mind and there is an established culture of being intimidated and bullied into doing what the principal wants. Question it and you will suffer at some future stage. There is a well-established pattern of some individuals reporting back any dissent to the principal. Many staff have left over the past five years for this reason. (R 288)

And “The staff do not feel at all supported by the administration, particularly the principal. When the principal openly discloses in a staff meeting that he cannot support staff, there is no way that they can feel safe at work - The staff do not see themselves as a valuable, much less valued” (R 326). Respondent 379 from a school not performing as expected notes “Bullying from one staff member whom leadership does not take action when it has been occurring for several years. This person is now in leadership and staff are told they perceive this person wrong, how can I feel safe?”. 
4.5.6.9 Occupational Health and Safety

Apart from respondent 54 who notes that there was “Regular WHS monitoring and prompt maintenance” no other comment regards occupational health and safety is captured by staff from schools performing better than expected.

In contrast, from respondents in schools not performing as expected, there is frequent and positive comment regards the health and safety personnel and processes. An indicative spread shows:

- “We have vigilant work place health and safety officers and audits” (R 279)
- “Health and safety officer is quite active” (R 324)
- “We are reminded regularly of always wearing the right footwear, no climbing on chairs but using supportive ladders” (R 544)
- “We have an active workplace health and safety team” (R 751)
- “Regular in-servicing on OH&S issues” (R 968)
- “There is a WHSO and WHS training to assist the staff to be compliant to safety regulations within the school” (R 1013)
- “Regular Occupational Health and Safety Meetings are held with both the Principal and staff Reps” (R 1029)
- “We have a compendium of OHS rules and consequences that is used consistently and to good effect” (R 1393).

4.5.6.10 Ensuring a Safe and Orderly Environment Summary

Deliberate striving towards consistency of teachers and students in the way they all worked with and treated each other, is most evident in schools performing better than expected. Collaboratively derived frameworks for common understandings and expectations are at the core of positive environments where issues between all kinds of stakeholders are seen to be resolved openly, equitably, quickly and fairly. Such schools frequently articulate high expectations for all, and deliberately create pastoral and professional structures to achieve this. Above all else, learning opportunity for students is the priority around which critical decisions are made.

Noticeably, in high performing schools, strong compliance processes such as occupational health and safety are quietly integrated into school operations and are not an ends in themselves. Noticeably in other levels of schools, such compliance is very codified and explicit.

4.5.7 Summary - Research Question 3

Research question 3 seeks to identify the actions associated with each of the six leadership behaviours of the Educational Leadership Practices Survey. In doing so, some 48 themes
emerge across some 2,720 useable comments, however when viewed as a whole rather than responses to six separate leadership behaviours, several commonalities and patterns emerge. In particular, ‘professional learning’ and ‘leadership’ occur frequently and especially in association with words or synonyms related to: collaborative; transparent; structure; priorities; expectations; and consistent.

Teacher comments from schools performing better than expected indicate that school leadership across all the domains of the school has an active presence that works openly with the school community to collaboratively identify their priorities, collaboratively design expectations and structures to bring these to life and then collaboratively lead the process of ensuring collaborative learning and consistency across the school.

4.6 Research Question 4 – leadership perceptions by demographics

The above sections have focused in turn on each of the respective six dimensions of leadership, and looked at teachers’ and principals perceptions and the links with school performance and leadership actions. This section now utilises demographic data to discern nuances in reports on the perceptions of leadership and any links between that perception and performance.

The initial assessment of the ELP (section 4.2) verified the reliability of the subscales of the respective six leadership dimensions. In this section those 40 subscale items are now reconsidered and the consistency of responses assessed on these items to justify the use of one overarching leadership construct known as Overall Leadership Practice (OLP).

4.6.1 ELP as Single Construct

When all 40 subscale items from across all six scales undergo collective reliability analysis, it is found that all item total correlations range from 0.618 to 0.797 with a Cronbach’s alpha of 0.975. This replicates the findings of Wylie and Hodgen (2010) who, with the New Zealand version of the ELP, confirmed that the scales could be treated as different aspects of a single underlying meta-construct – OLP. It is therefore possible to calculate a collective mean for overall leadership practice (OLP) from the combined scales which is seen in Table 27.

Table 27 - Reliability for combined scales as Overall Leadership Practice

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<thead>
<tr>
<th>Combined ELP Scales</th>
<th>Items</th>
<th>n</th>
<th>Alpha</th>
<th>Comment</th>
<th>Combined Scale Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Leadership Practice</td>
<td>40</td>
<td>1252</td>
<td>0.975</td>
<td>All item total correlations high &gt;.618</td>
<td>3.79</td>
</tr>
</tbody>
</table>
This single construct of Overall Leadership Practice (OLP) is used to illustrate research question 4 which asks: “Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years’ supervised by current principal?”.

Initially, each of these demographic factors is examined in turn using the context of school performance and OLP and then multivariate analysis is employed across these factors to see if there is any further relationship among the variables. Anova and t-tests on a range of background variables are summarised in Table 28 and discussed below.

Table 28 - Teacher demographic variables and school performance levels against OLP mean

<table>
<thead>
<tr>
<th>Gender</th>
<th>Overall</th>
<th>Below Expectation</th>
<th>At Expectation</th>
<th>Above Expectation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>3.80</td>
<td>3.30</td>
<td>3.79</td>
<td>4.34</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.74</td>
<td>3.13</td>
<td>3.76</td>
<td>4.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.79</td>
<td>3.26</td>
<td>3.78</td>
<td>4.35</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Overall</th>
<th>Below Expectation</th>
<th>At Expectation</th>
<th>Above Expectation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor</td>
<td>3.78</td>
<td>3.25</td>
<td>3.80</td>
<td>4.34</td>
<td></td>
</tr>
<tr>
<td>Grad Dip</td>
<td>3.73</td>
<td>3.19</td>
<td>3.72</td>
<td>4.29</td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>3.84</td>
<td>3.53</td>
<td>3.80</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td>Dual Masters</td>
<td>3.91</td>
<td>2.79</td>
<td>3.88</td>
<td>4.65</td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>3.99</td>
<td>-</td>
<td>3.99</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.79</td>
<td>3.27</td>
<td>3.78</td>
<td>4.35</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Overall</th>
<th>Below Expectation</th>
<th>At Expectation</th>
<th>Above Expectation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>4.02</td>
<td>2.81</td>
<td>4.07</td>
<td>4.52</td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>3.83</td>
<td>3.25</td>
<td>3.84</td>
<td>4.31</td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>3.78</td>
<td>3.34</td>
<td>3.76</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td>10-15</td>
<td>3.78</td>
<td>3.45</td>
<td>3.72</td>
<td>4.42</td>
<td></td>
</tr>
<tr>
<td>15+</td>
<td>3.77</td>
<td>3.24</td>
<td>3.78</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.79</td>
<td>3.27</td>
<td>3.78</td>
<td>4.35</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching experience at current school</th>
<th>Overall</th>
<th>Below Expectation</th>
<th>At Expectation</th>
<th>Above Expectation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>3.90</td>
<td>3.13</td>
<td>3.85</td>
<td>4.46</td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>3.75</td>
<td>3.26</td>
<td>3.77</td>
<td>4.29</td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>3.77</td>
<td>3.42</td>
<td>3.75</td>
<td>4.40</td>
<td></td>
</tr>
<tr>
<td>10-15</td>
<td>3.75</td>
<td>3.08</td>
<td>3.76</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td>15+</td>
<td>3.81</td>
<td>3.29</td>
<td>3.82</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.79</td>
<td>3.27</td>
<td>3.78</td>
<td>4.36</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current principal tenure at school</th>
<th>Overall</th>
<th>Below Expectation</th>
<th>At Expectation</th>
<th>Above Expectation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>3.80</td>
<td>3.16</td>
<td>3.85</td>
<td>4.28</td>
<td>F3, 1376=3.42 p=.024</td>
</tr>
<tr>
<td>2-5</td>
<td>3.75</td>
<td>3.38</td>
<td>3.76</td>
<td>4.33</td>
<td>Post hoc test, only 2-5 and 10-15 give sig diff (p=.014)</td>
</tr>
<tr>
<td>5-10</td>
<td>3.78</td>
<td>3.25</td>
<td>3.78</td>
<td>4.27</td>
<td></td>
</tr>
<tr>
<td>10-15</td>
<td>3.96</td>
<td>2.84</td>
<td>3.79</td>
<td>4.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.79</td>
<td>3.27</td>
<td>3.78</td>
<td>4.35</td>
<td></td>
</tr>
</tbody>
</table>

Because research question 4 addresses the perception of teachers, the analysis therefore excludes those 46 respondents who nominated their role as principal.
4.6.2 Gender

Of the 1,534 teacher participants who identify their gender, 1,169 are female and 365 are male. However, for statistical consideration 360 cases are excluded from the initial OLP calculation because they did not complete all 40 items of the subscales and are therefore precluded from consideration in calculations. However, when considering Gender- OLP cross-tabulation of all teacher cases are considered against the OLP mean.

Comparing the OLP means across gender, the degree of statistical significance is not less than 0.05 and therefore an OLP mean variation of 0.06 between gender groups is noted but not statistically significant (See Table 28).

This pattern of responses is repeated across school performance levels where it is noted that both male and female teachers in schools performing above expectations have higher means than those teachers from schools performing at expectation and below expectations, respectively. Whilst the gender difference between teacher means is greatest in schools performing below expectations, nevertheless, the OLP mean gender difference of 0.17 is not statistically significant (See Table 28).

That is to say, male and female teachers irrespective of school performance level have similar patterns of responses in their perceptions of prevalence of leadership behaviours.

4.6.3 Education Level

With respect to education levels per Table 28, there is a discernible pattern of teacher means increasing incrementally as they progress through qualification levels so that the net difference of means between Bachelor and Doctorate teachers is 0.21. That is to say, the more qualified the teacher, the slightly higher are their perceptions of prevalence of leadership behaviours.

However, when performance levels of schools is factored into this analysis, it is noted that in schools performing better than expected the trend is for the OLP mean to rise sharply in parallel with increase in qualifications, yet in schools performing below expectations this pattern is reversed so that the most qualified teachers in these schools have the lowest perceptions of prevalence of leadership behaviours (see Table 28). The data indicates that the more qualifications a teacher has, the more discerning they are about leadership behaviours.

4.6.4 Years of Teaching Experience

With respect to teacher experience per Table 28, there is a small but discernible pattern of teacher means decreasing incrementally as they gain more experience at teaching. Thus the
net difference of means between early career teachers with less than 2 years teaching experience and established educators with more than 15 years teaching experience is 0.25.

When performance levels of schools is factored into this analysis, it is noted that in schools performing below expectations the least experienced teachers in these schools have the lowest perceptions of prevalence of leadership behaviours across all school performance levels and experience levels, whilst in schools performing above expectations the least experienced teachers in these schools have the highest perceptions of prevalence of leadership behaviours across all school performance levels and experience levels. Nevertheless, the perceptions of teachers in schools performing above expectations, irrespective of experience, are consistently significantly higher than those of similar experience in other levels of school performance (see Table 28).

In schools performing above expectations there is a highest to lowest variation of OLP mean of 0.22, whilst in schools performing at expectations it is 0.64 and in schools performing below expectations it is 0.64. In high performing schools, teacher experience has little relationship to variations in perceptions of leadership behaviours whilst in schools performing below expectations there are consistently lower perceptual levels of OLP and greater variation of OLP means across the bands of experience. In high performing schools there is only a small variation against experience in perceiving leadership behaviours. In schools performing below expectations there is considerable variation and inconsistency across staff.

**4.6.5 Years of Tenure in School**

With respect to teacher tenure, teachers who have been at the school less than 2 years have the highest mean followed 0.09 later by teachers with more than 15 years tenure at the school, as shown in Table 28. The three bands of teachers 2-5 years; 5-10 years; 10-15 years have either an OLP mean of 3.75 or 3.77. The overall variation is however not greater than 0.15 across any of the means.

When performance levels of schools is factored into this analysis, it is noted that across all experience levels of teachers the pattern of perceptions of leadership behaviours holds true to the performance levels of the school (see Table 28). Years of teacher tenure at a school does not have a relationship with school performance.
4.6.6 Years Current Principal Tenure at the School

Table 28 when presenting Teacher OLP Means by Years Current Principal Tenure at the School, indicates that the highest OLP means are derived when principals have been at their school longer than 10 years, however the overall variation is 0.21 across any of the means.

When performance levels of schools is factored into this analysis, it is noted that in schools performing better than expected and as expected, teacher perceptions of leadership behaviours are approximately consistent irrespective of the number of years the current principal has been in the school (see Table 28). However, in schools performing below expectations, the longer the principal has been at the school, the lower the teacher perceptions of leadership behaviours. Under poor leadership the school gets worse over time.

4.6.7 Multivariate Analysis of Performance

To discern an OLP mean for years supervised by current principal it is necessary to conduct a multivariate analysis of years of teacher tenure in the school against years the current principal has been in the school. When viewing the OLP means it is apparent that irrespective of school performance level, where there is an experienced teacher already in the school, the longer the principal stays in the school, the higher the trend of teacher perceptions of leadership behaviours.

Teacher perceptions of leadership behaviours are generally at their highest in the respective school where both teacher and principal have been in the school for more than 5 and less than 15 years (see Table 29).

Table 29 - OLP means by school performance level by teacher experience at current school by principal tenure at current school

<table>
<thead>
<tr>
<th>School Performance Level</th>
<th>Teacher Experience at current school</th>
<th>Principal Tenure at current school</th>
<th>OLP Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Expectations</td>
<td>&lt; 2 years</td>
<td>&lt; 2 years</td>
<td>4.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5 years</td>
<td>4.46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 years</td>
<td>4.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15 years</td>
<td>4.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5 years</td>
<td>4.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 years</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15 years</td>
<td>4.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.84</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>&lt; 2 years</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5 years</td>
<td>4.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 years</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15 years</td>
<td>4.79</td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>&lt; 2 years</td>
<td>4.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5 years</td>
<td>4.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 years</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15 years</td>
<td>4.90</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>&lt; 2 years</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5 years</td>
<td>4.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-10 years</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15 years</td>
<td>4.48</td>
</tr>
</tbody>
</table>
### Table 30 - Bivariate correlation of teacher and principal years at same school

<table>
<thead>
<tr>
<th>School Performance Level</th>
<th>Teacher Experience at current school</th>
<th>Principal Tenure at current school</th>
<th>OLP Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Expectations</td>
<td>&lt; 2 years</td>
<td>&lt; 2 years</td>
<td>3.99</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.91</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>&lt; 2 years</td>
<td>3.67</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>&lt; 2 years</td>
<td>3.79</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>&lt; 2 years</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.76</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>&lt; 2 years</td>
<td>3.85</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>2-5 years</td>
<td>3.78</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>5-10 years</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>10-15 years</td>
<td>3.95</td>
</tr>
<tr>
<td>Below Expectations</td>
<td>&lt; 2 years</td>
<td>&lt; 2 years</td>
<td>2.48</td>
</tr>
<tr>
<td></td>
<td>&lt; 2 years</td>
<td>4.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 2 years</td>
<td>3.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 2 years</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>&lt; 2 years</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>3.39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>5-10 years</td>
<td>3.12</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>2.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>&lt; 2 years</td>
<td>3.30</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.59</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>3.26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>2.89</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>&lt; 2 years</td>
<td>2.99</td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>3.44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>&lt; 2 years</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>5-10 years</td>
<td>3.24</td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>3.39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15+ years</td>
<td>10-15 years</td>
<td>-</td>
</tr>
</tbody>
</table>

However, in utilising a bivariate correlation of teacher and principal years at the same school, the Pearson correlation of 0.005 and the 2-tailed correlation of 0.832 both indicate that there is no statistically significant correlation between the two variables. That is to say, there is no significant relationship to school performance arising from the length of time a principal has been supervising staff (See Table 30).
4.6.8 Summary - Research Question 4

The single overarching leadership construct known as OLP, is used to illustrate research question 4 which asks: “Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and years’ supervised by current principal?”

Examination of demographic factors indicates that male and female teachers, irrespective of school performance level, have similar patterns of responses in their perceptions of prevalence of leadership behaviours. Gender is not a leadership issue.

With respect to education levels, there is a general trend that the more qualified the teacher, the slightly higher his or her perceptions of prevalence of leadership behaviours. However, when performance levels of schools is factored into this analysis, it is noted that in schools performing better than expected the trend is for the OLP mean to rise sharply in parallel with increase in qualifications, yet in schools performing below expectations this pattern is reversed so that the most qualified teachers in these schools have the lowest perceptions of prevalence of leadership behaviours.

Years of teaching experience and years of tenure at a school generate very similar patterns of responses so that both demographic variables indicate consistency of high OLP perceptual levels in schools performing better than expected and wider variation of OLP at a much lower mean in schools performing below expectations.

Irrespective of teacher tenure at a school, in schools performing better than expected, the longer the principal has been at the school, the higher the OLP perceptual levels of teachers, whilst in schools performing below expectations the longer the principal has been at the school the lower the teacher perceptual levels of OLP. With high performing schools, the longer the principal is there, the better it performs. With low performing schools, the longer the principal is there, the worse it performs.

4.7 Research Findings Summary

Before addressing the specific questions of this research, this chapter initially examined participant demographics data and validated the reliability of utilisation of the ELP.

It was discerned that the demographic profiles of BCE teachers and principals are approximately consistent with national profiles with the exception that BCE principals and teachers are more qualified and BCE principals are more transient.
Research question 1, in examining the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance, identifies that neither the number of responses coming from a respective school nor the size of the school are factors of significance in determining the mean of responses from that school.

The data also evidences that schools that are performing above expectations consistently show much higher levels of leadership behaviours across the six dimensions and that conversely, schools that are performing below expectations, consistently evidence much lower levels of leadership behaviours across the six dimensions.

Research question 2, in examining the relationship between teacher and principal perceptions of the presence of the six specific leadership behaviours, indicates that across all six scales of the ELP, and school performance levels, teachers consistently have differing means than principals.

Research question 3, in seeking specific actions to which leadership behaviours are said to be attributed, identifies specific themes in each of the scales and utilises participant responses to illustrate behaviours across levels of school performance. Particularly, responses identify patterns of behaviour across the themes of a scale so that a general image of behaviours can be drawn from schools performing better than expected within that ELP scale.

An overall profile across all six ELP scales drawn from schools performing better than expected indicates that leadership has an active presence in these schools and the leadership works openly with the school community to collaboratively identify their priorities, collaboratively design expectations and structures to bring these to life and then collaboratively leads the process of ensuring collaborative learning and consistency across the school.

Research question 4 utilises the one overarching leadership construct known as OLP to examine whether specific demographic factors has any relationship with the patterns of responses of BCE teachers in their perceptions of prevalence of leadership behaviours.

The data indicates that within each of the demographic factors the response patterns are higher in schools performing better than expected than the response patterns of schools not performing as expected. With respect to gender there are no significant gender differences across response patterns, however, with respect to teacher education levels, in schools performing better than expected the trend is for the OLP mean to rise sharply in parallel with increase in qualifications and in schools performing below expectations this pattern is reversed.
so that the most qualified teachers in these schools have the lowest perceptions of prevalence of leadership behaviours.

For the demographic factors of both teacher experience and teacher tenure in a school, there is a discernible but only a small decline of OLP means in response patterns in each of the performance levels. Similarly, at the holistic level there is a small little but discernible difference in OLP means when examining the number of years a principal has been at a school and/or supervising staff. However, these data are significantly elaborated when viewed from the perspective of school performance levels in that in schools performing better than expected, the longer the principal has been at the school, the higher the OLP perceptual levels of teachers, whilst in schools performing below expectations, the longer the principal has been at the school, the lower the teacher perceptual levels of OLP.

Chapter five discusses the findings of each of the research questions before finally integrating the demography and quantitative and qualitative leadership data in making conclusions pertinent to this research. Chapter Six summarises the implications of this research, before advising of potential limitations and making recommendations for future research.
Discussion and Conclusions

The more leaders focus their influence, their learning, and their relationships with teachers on the core business of teaching and learning, the greater is their influence and impact in terms of improved student outcomes.

Robinson et al., 2009, p. 28

5.1 Introduction

This study has amongst other things, identified a statistical relationship between teacher perceptions of leadership behaviours and school performance. Specifically, these behaviours substantiate the dimensions identified by Robinson et al. (2009) as critical to successful instructional leadership and further, identify contemporary specific actions school leaders may conduct to maximise student learning through teacher efficacy and in doing so maintain the necessary focus on instructional leadership.

This chapter discusses the research findings and draws conclusions from the data.

5.2 Demographic extrapolation

As a generalisation, the profile of BCE teachers and principals is consistent with national profiles and therefore any conclusions generated with the data of this research may be extrapolated for consideration to the Australian teaching population generally.

5.3 Summary of the Study

This study uses the lens of Robinson et al. (2009) and leadership behaviours drawn from their Best Evidence Synthesis (BES) to qualitatively and quantitatively explore the research questions:

1. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and of school performance?
2. What is the relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours?
3. In schools where leadership behaviour or behaviours are said to be in evidence, what are the specific actions to which these are attributed?
4. Do the perceptions of leadership for Brisbane Catholic Education teachers differ with respect to demographic factors such as: gender, education level, years of teaching experience, years of tenure in school, and number of years supervised by current principal?
5.4 Research Question 1 Discussion

Research question 1 identified the relationship between teacher perceptions of the presence of the six specific leadership behaviours and school performance.

In doing so, school size literature which consistently indicates that teacher satisfaction tends to be lower in large schools (Capita, 2012; Schütz, 2006; Steiner, 2011; Stiefel et al., 2000) was considered, and consistent with that research, the means across the six leadership scales of this research tended to decline as the size of the school increased. Notwithstanding, neither the number of responses coming from a respective school nor the size of the school were contaminating factors in determining the mean of responses from that school, and such responses did not enhance or detract from the validity or integrity of the results. That is to say, regardless of the number of respondents from a particular school and also regardless of the size of the school, the collective perception of teachers in each school has statistical integrity and is considered reliable.

The process then of comparing collective teacher perceptions in a school, with the performance level established through longitudinal NAPLAN data and expert judgement, is reliable and valid.

5.4.1 Research Question 1 Conclusions

The perceptions of teachers regarding the prevalence of the presence of leadership behaviours have a strong relationship to the performance level of the school. Where teachers have collectively indicated lower levels of leadership behaviours, the school is also performing below expectations. Where teachers have collectively indicated higher levels of the leadership behaviours, the school is also performing above expectations.

As with previous research by Arocha-Gill (2010), Fisher (2010), Frawley et al. (2010), Hallinger (1983), Hannaford (2010), Harris and Willower (1998), Heldsinger and Humphry (2010; 2013), Louden et al. (2006), and Lowe (2010) this BCE research reinforces the consistency, accuracy and reliability of collective teacher perceptions about leadership behaviours.

This research confirms that the leadership dimensions conceptualised in the BES (Robinson et al., 2009) which shifts leadership to pedagogical leadership, does indeed make a difference to student achievement and particularly this research establishes that school leaders who consistently display these dimensions do, through teachers, make a difference to student outcomes.
5.5 Research Question 2 Discussion

Research question 2 discerned a relationship between teacher perceptions of the presence of the six specific leadership behaviours and principal perceptions of the presence of the six specific leadership behaviours.

Having proved as part of research question 1 that collective teacher judgement is reliable it is of interest to discern the alignment of teacher perceptions with those of principals given that Bates and Nettelbeck (2001) and also Hallinger (2008) remind us that teacher perceptions continue to constitute the preferred source of data on the principal’s instructional leadership for both research and evaluation purposes. Similarly, as the leaders of schools, principals are often called upon to make judgements and decisions regard the direction and priorities of the school, and in doing so, a valid understanding of the status of the school at that time is imperative.

5.5.1 Research Question 2 Conclusions

In accepting that the composite of teacher judgements in respective schools of this BCE research can be trusted as a valid representation of the leadership behaviours in those schools and hence the performance of those schools, it is interesting to note that data indicates that principals in the majority of schools display statistically different ratings than their teachers.

The principals’ perceptions are not the teachers’ reality. In most schools the perception of the principal is higher than the teachers in that school and in schools performing below expectations this perceptual discrepancy is quite marked.

Conversely however, in schools performing better than expected, the principal whilst still being out of alignment with the school staff, does not think the school is as good as it is.

Particularly with ensuring the quality of teaching in the school and promoting teacher learning and development, principals have a very different view to that of teachers regarding what actually happens.

5.6 Research Question 3

Research question 3 discerns the specific themes or actions attributed to the respective leadership behaviours said by teachers to be in evidence in their school leadership. Given the depth of data for each leadership dimension, these are discussed in turn.
5.6.1 Establishing Goals and Expectations Discussion

Teachers want to collaboratively establish the goals of the school so that they are explicit in terms of priorities and expectations and reflect clear links to both the school’s strategic plan and student learning outcomes. Once known, these goals, through a consistently applied process, should be apparent at an organisational level and personal level to deliberately link with professional learning. Integral to the consistency of process is embedding the individual goal setting process and within this, the desire for regular performance feedback using data and professional observation.

Robinson et al. (2009) have suggested that establishing goals and expectations requires that leaders establish the importance of the goals, ensure that the goals are clear, and develop staff commitment to the goals.

In encompassing the behaviours suggested as essential by Robinson et al. (2009), this research notes further that the establishment and commitment to clear important goals should particularly be conducted in a collaborative and transparent manner and that prioritisation of resources is evident so as to embed the goals at a personal level. Quite apparent is the desire to receive regular performance feedback from peers and to access professional learning tailored to teachers achieving their respective personal goals aligned to the school goals.

Critical behaviours for teachers are collaboration in school and personal goal setting and constant open communication about progress against an explicit and consistently applied process.

5.6.1.1 Establishing Goals and Expectations Best Practice

Within this research, schools performing better than expected have:

- a collaboratively created set of strategic learning priorities for the school;
- a transparent management structure that prioritised achieving these priorities; and
- an embedded approach to individual goal setting which was deliberately linked to:
  - regular performance feedback;
  - structured but informal peer observation and feedback;
  - tailored professional learning.

5.6.2 Strategic Resourcing Discussion

Teachers note that the three key assets of time, money and people should be handled transparently and be explicitly aligned to the collaboratively established strategic learning goals of the school.
Robinson et al. (2009) have suggested that when identifying and obtaining resources, leaders in high-performing schools should use clear criteria that are aligned to pedagogical and philosophical purposes, and ensure sustained funding for pedagogical priorities.

Whilst technology is the most cited example in commenting on strategic resourcing, this is done usually in the context of a tool to support student learning, which corroborates the behaviours suggested as essential by Robinson et al. (2009) of alignment to pedagogical purposes. Further, the remaining themes in *Resourcing Strategically* pick up and extend the concept of sustainment. Nevertheless, to be a successful part of student learning, technology has to have equal provision of hardware, software and professional learning with an accent on both, as a tool for teacher organisation and efficiency and also as a support for student learning.

Money in the context of budget support for provision of materials and equipment towards priorities also emerges as the vehicle for creating time as a resource and access to people through the allocation of teaching and non-teaching staff and also the involvement of parents in the life of the school.

### 5.6.2.1 Strategic Resourcing Best Practice

Within this research, schools performing better than expected evidence:

- collaborative processes across all resources involving staff and parents;
- selective minimisation of the number of school priorities;
- deliberate transparency and focus of assets applied across:
  - professional learning;
  - resource purchase;
  - technological integration and support;
- leadership acting as ‘gatekeepers to distractions’; and
- creation and maintenance of structures for uninterrupted periods of learning.

### 5.6.3 Ensuring Curriculum Quality Discussion

Teachers want the presence of the school leadership to be significant and apparent. When evident, it is greatly appreciated, however, in most cases teachers commented that care and control of the school’s curriculum is usually left to classroom teachers assisted by specialist teachers. Whilst teachers particularly appreciate the common strategy of planning time, particularly when it was in collaborative circumstances as teams, frequent note is made of a lack of published expectations around planning responsibilities, a considerable lack of consistency across teachers within the same school and particularly, a dearth of feedback.
about the quality or usefulness of teachers’ preparation and planning for teaching. Systemic data sets (such as NAPLAN) are frequently used at whole of school level, year level and class levels to discern areas of curriculum focus, however, internal school frameworks for consistently tracking student learning and growth across year levels using local data sets, whilst desired, are not often apparent.

Differentiation of curriculum occurs most often via collaborative processes across teachers at ‘support’ meetings where specialist teachers assist in both the confirming of ‘at-risk’ status of individual students and identification of strategies to address their needs.

Robinson et al. (2009) have suggested that in ensuring curriculum quality, leaders in high-performing schools: (a) display personal involvement in planning, coordinating, and evaluating curriculum; (b) promote collegial discussions of teaching and how to modify curriculum for student achievement; and (c) ensure systematic monitoring of student progress and use of assessment results for program improvement.

This research concurs with Robinson et al. (2009) and further elaborates the absolute desire for high levels of leadership presence in the collaborative design and preparation of curriculum at the whole school and individual teacher levels. Highly effective schools consistently express appreciation of collaboratively established guidelines and expectations for teacher preparation and planning and also a framework for consistently evaluating, assessing and reporting student learning and particularly, regular concerted discussion at a personal level with teachers regarding how these are put in place on behalf of the students they are teaching. Teachers in schools not performing as expected plaintively echo the absence of these behaviours, processes and documents to support their curriculum work.

5.6.3.1 Ensuring Curriculum Quality Best Practice

Within this research, high performing schools have:

- a collaboratively designed and published document of expectations regarding teacher planning;
- regular involvement and comment from school leadership regarding teacher planning appropriateness and quality;
- a collaboratively designed and published framework for consistently tracking and reporting student learning and growth across year levels; and
- dedicated time regularly reserved specifically for teachers to interrogate data sets, plan collaboratively, engage in learning from each other and utilise the expertise of internal and external personnel.
5.6.4 Ensuring Quality Teaching Discussion

Teachers seek opportunity to mentor each other around issues identified through student performance monitoring and relevant to their teaching at that time. Teachers want purposeful classroom support and invitational opportunities from leadership and other teachers as well as deliberate planning and resources to allow such interaction to occur.

Robinson et al. (2009) have suggested that in ensuring quality teaching, leaders in high-performing schools: (a) display personal involvement in planning, coordinating, and evaluating teaching and teachers; (b) promote collegial discussions of teaching and how it impacts on student achievement; (c) provide active oversight and coordination of the teaching program; (d) observe in classrooms and provide feedback that teachers describe as useful; (e) ensure systematic monitoring of student progress and use of assessment for program improvement.

The concerted presence of leadership and peer involvement in and around classrooms in schools performing better than expected in this research mirrors that described by Robinson et al. (2009). Leadership in particular is active in the formation of a sense of collegiate community to share best practices or observe as peer mentors for teaching but also with respect to deliberate intervention as needed in classrooms regarding either teaching strategies or student performance.

The leaders of these schools are explicit in structuring the collaborative reflection at a whole of school level of the elements of quality teaching in that school context. Teachers are very aware of the pedagogical approaches required and consistency of implementation on behalf of students is a frequent feature of the collective ownership of student performance.

5.6.4.1 Ensuring Quality Teaching Best Practice

Within this research, high performing schools have:

- classroom support as a high leadership priority;
- a consistent approach and expectations to what quality teaching “looks like, sounds like, feels like”;
- leadership teams invested in the 'deprivatisation' of the classroom;
- leadership actively involved in observations of teachers' pedagogy and regular provision of developmental feedback to teachers by other teachers and/or leadership;
- frequent structured but informal opportunity for staff to share ideas/concerns with each other;
- time allocated to work in other classrooms and share teacher expertise; and
- shared and collective ‘ownership’ of student performance across classrooms.
5.6.5 Promoting Teacher Professional Learning and Development Discussion

Teachers indicate they learn best in dialogue with peers around issues pertinent to themselves at that time. These issues are usually generated by the learning needs of their students but also are derived from the goals of the school which are derived from the system priorities.

Robinson et al. (2009) have suggested that in promoting and participating in teacher learning and development, leaders in high performing schools: (a) participate in the learning as leader and learner; (b) ensure an intensive focus on the teaching–learning relationship; (c) promote collective responsibility and accountability for student achievement and well-being; and (d) provide useful advice about how to solve teaching problems.

Whilst agreeing with the behaviours suggested by Robinson et al. (2009), this research places most emphasis on opportunities to learn collaboratively in concert with peers around issues aligned to the goals of the school and individuals but which are drawn from student needs. Leaders in schools performing better than expected constantly engage in learning dialogues and model learning behaviours for teachers. Of note is the minimisation of ‘administrivia’ whenever teachers gather in groups, choosing instead to create opportunity to collaboratively share learnings relevant to teaching or to discuss issues of direct relevance to teaching and learning.

5.6.5.1 Promoting Teacher Professional Learning and Development Best Practice

Within this research, high performing schools usually have:

- the school’s leadership team as genuine learners participating with and alongside staff as they engaged with the learning goals of the school; and
- teacher professional learning very apparent, highly structured, very explicit and very collaborative and generated from the goals of the school and school and systemic data about student learning needs. It was very biased toward learning and teaching.

5.6.6 Ensuring Safe and Orderly Environment Discussion

Consistency, fairness and positive relationships directed towards harmonious teaching and learning are at the core of teachers’ suggestions for ensuring a safe and orderly environment. Teachers want clear, collaboratively established and enforced expectations of staff, student and parent treatment of each other such that care, support and consequences result in a positive culture and work environment.
Robin et al. (2009) have suggested that in ensuring an orderly and supportive environment, leaders in high-performing schools (a) protect teaching time, (b) ensure consistent discipline routine, and (c) identify and resolve conflicts quickly and effectively.

In this research leadership again emerges as the critical element in ensuring a safe, orderly and supportive environment. Like Robinson et al. (2009) leadership is active particularly in the collaborative establishment of behavioural expectations for all (students, staff and parents) and then strong positive relationships are used to create the inculcation of a positive environment.

Particularly, issues resolution which is always open, equitable, quick, fair and consistent has constant feedback loops so that all parties concerned know the process and outcomes relevant for themselves, but especially the resolution of these issues are predicated not on rules but on the values articulated by the school, all of which have direct relevance to student learning. Additionally, the accent on values rather than rules is evidenced in the approach to compliance requirements, which are always met but in a manner supportive to teaching and learning not as an industry in themselves.

Similarly, leadership ensures that the organisation and daily flow of the school maximises engaged learning time for students.

5.6.6.1 Ensuring Safe and Orderly Environment Best Practice

Within this research, high performing schools have:

- visible strategic and personal presence by leadership across the school;
- ready accessibility to school leadership by staff and parents when needed;
- collaboratively derived frameworks for common understandings and expectations of how people treat each other;
- issues between stakeholders resolved openly, equitably, quickly and fairly with consistent feedback loops;
- frequently articulated high expectations for all;
- deliberate pastoral and professional support structures to build relationships and community;
- student learning as the priority around which school organisation and critical decisions were made; and
- values (not rules) as the guide for school operations and compliance.
5.6.7 Research Question 3 Summary Discussion

Across the behavioural scales of the Educational Leadership Practices Survey, some 2,720 useable comments articulate specific leadership actions. These, in being compared and contrasted with the BES (Robinson et al., 2009), show close alignment with those theorised by Robinson et al. (2009).

Camburn et al. (2003), Gronn (2003) and Spillane et al. (2004) confirm that central to the leadership of principals is enabling the activities and interactions that are distributed across people and situations. There are many leaders in a school (Spillane, 2006) but success in schools is defined by what principals do to share leadership to enable others (Day, 2013; Zellermayer & Margolin, 2005). Without the capacity of the principal to shape the school and classroom processes and practices (Day et al., 2009), there is no successful layering of other levels of leadership (Day & Leithwood, 2007).

In confirming Komives and Dugan (2010), Kellerman (2012) and Steffens and Haslam (2013), this research indicates that successful leaders were: (a) group-oriented; (b) focused on benefits to the group; and (c) follower-involving, distance-reducing and practical (leading by doing). These leaders ensure that the group has a vision they identify with and identify the leader with (Blanning, 2003; Dening 2004; Haslam et al., 2011; Komives et al., 2007) and initiate goals, activities and practices which translate the rhetoric of ‘us’ into lived experience and workplace reality (Steffens & Haslam, 2013).

These behaviours align with those of the Robinson et al. (2009) BES – School Leadership and Student Outcomes and further explicate these behaviours as tangible actions for utilisation by Australian school leaders.

These findings also indicate that successful school principals avoid using sanctions and threats since the utilisation of harsh powerbases is not likely to result in school effectiveness and instead, they rely on their pedagogical expertise and present a clear organisational vision while manifesting high interpersonal qualifications (Nir & Hameiri, 2014).

The data suggest that in high performing schools the principal is less of an authority figure and more a ‘first among equals’ (Wilkinson et al., 2010) so that pedagogical and curriculum practices are generative (Edwards-Groves & Ronnerman, 2013). The praxis-oriented practices are able to be locally shaped by teachers (Kemmis & Grootenboer, 2008) so that leading is seen as a practice of power-with others rather than power-over others (Smeed et al., 2009; Kemmis et al., 2014).
Leaders of schools performing better than expected are, as Duignan (2014, p. 162) has consistently noted, “authentic educational leaders who interpret and actualise their ethical, moral and authentic ideals within a complex and pressure-filled context and achieve their goals through webs of relationships, characterised by risks, constraints, pressures and human frailty”.

In the descriptors of preferred leadership behaviours, ‘professional learning’, ‘leadership’ and ‘collaboration’ occur frequently and especially in association with words or synonyms related to transparent, structure, priorities, expectations, alignment, and consistent. High performing schools consistently display the composite of behaviours below:

- student learning as the priority around which school organisation and critical decisions are made;
- a visible strategic and personal presence by leadership across the school with the first priority in mind;
- leadership acting as ‘gatekeepers to distractions’ to ensure selective minimisation of the number of priorities;
- leadership teams invested in the ‘deprivatisation’ of the classroom with classroom support a high leadership priority;
- frequently articulated high expectations for student achievement;
- shared and collective ‘ownership’ of student performance across classrooms;
- values (not rules) as the guide for school operations and compliance;
- organisation and daily flow of the school structured to maximise engaged learning time for students;
- collaboratively created:
  - set of strategic learning priorities for the school;
  - curriculum documents at the whole school and individual teacher levels;
  - guidelines and expectations for teacher preparation and planning;
  - approach and expectations to what quality teaching “looks like, sounds like, feels like”;
  - framework for consistently tracking and reporting student learning and growth over time
  - management structure involving staff and parents that prioritises the school’s time, money and people in achieving the learning priorities;
  - framework for how all students, staff and parents treat each other;
- an embedded approach to individual goal setting which is deliberately linked to:
  - school strategic plan;
- regular performance feedback;
- structured but informal peer observation and feedback; and
- tailored professional learning;
- leadership actively involved in observations of teachers' pedagogy and regular provision of developmental feedback to teachers by other teachers and/or leadership;
- teacher professional learning very apparent, highly structured, very explicit and very collaborative and generated from the goals of the school and school and systemic data about student learning needs;
- dedicated time regularly reserved specifically for teachers to interrogate data sets, plan collaboratively, engage in learning from each other and utilise the expertise of internal and external personnel;
- frequent structured but informal opportunity for staff to share ideas/concerns with each other with time also allocated to work in other classrooms and share teacher expertise;
- leaders constantly engaged in learning dialogues and modelling learning behaviours for teachers;
- regular involvement and comment from school leadership regarding teacher planning appropriateness and quality;
- ready accessibility to school leadership by staff and parents when needed;
- issues between stakeholders resolved openly, equitably, quickly and fairly with consistent feedback loops;
- leadership active in the deliberate formation of pastoral and professional structures to build relationships and community.

5.6.7.1 Research Question 3 Conclusion

In summarising all the descriptors of behaviours in schools performing better than expected, leadership is essential at both the macro and micro level. At the macro strategic level, leadership is critical in ensuring the collaborative design of a broad array of processes, policy, systems, relationships and partnerships so that there is opportunity for involvement, engagement, consistency and alignment across all stakeholders. Whilst there is an obligation on principals to exercise leadership, leading a school requires a collaborative and aligned effort by all (Gurr, 2014).

At the micro level, leadership is critical as a presence to model expected behaviours and to interact with individuals at the personal level and to actively intervene when necessary.

In all schools performing better than expected, school leadership has an active presence that works openly with the school community, which collaboratively identifies their priorities,
collaboratively designs expectations and structures to bring these to life and then collaboratively leads the process of ensuring collaborative learning and consistency across the school.

5.7 Research Question 4

Research question 4 utilises the one overarching leadership construct known as OLP to discern whether the perceptions of leadership for BCE teachers differ with respect to demographic factors.

5.7.1. Gender Discussion

Whilst slight means variation between the gender groups is noted, teachers evidence that gender as a demographic variable for teacher responses is not significant.

Additionally, when the concept of gender is also applied to the relationship between the gender of the school’s principal and OLP, there continues to be only a very small difference between teachers’ OLP means as discerned by the gender of the school’s principal. Table 31 below notes that consistent with work by Gross and Herriot (1965), Hallinger (1983), Howell (1989), Babcock (1991), Nogay (1995), Meek (1999), Prater (2004) and Sterrett (2005), female gender appears to be associated with slightly higher levels of instructional leadership activity among the sample of principals yet it is too small to be considered significant.

Even when considered by performance levels of schools as also displayed in Table 31 below, the difference in teacher OLP means, when also referenced against the gender of the school’s principal, is too small to be significant.

This research indicates that for both teachers and principals gender is not a significant demographic statistic in any of the response patterns.

| Table 31 - Teacher OLP means by performance level of school by gender of school’s principal |
|-----------------------------------------------|---|---|---|---|---|---|
| Overall | n  | Below Expectation Mean | n  | At Expectation Mean | n  | Above Expectation Mean | n  |
| F       | 3.81 | 542 | 3.24 | 53 | 3.86 | 323 | 4.31 | 72 |
| M       | 3.79 | 882 | 3.32 | 87 | 3.75 | 651 | 4.36 | 122 |

5.7.2 Education Level Discussion

Whilst it has been noted previously that BCE teachers have significantly higher qualification levels than across Australia when considered as a whole group, there is no statistically significant difference of OLP means between teachers with a Bachelor or Doctorate qualification.
However, when performance levels of schools is factored into this analysis, it is noted that in schools performing better than expected the trend is for the OLP mean to rise sharply in parallel with increase in qualifications, yet in schools performing below expectations this pattern is reversed so that the most qualified teachers in these schools have the lowest perceptions of prevalence of leadership behaviours.

Previous research (albeit in the early childhood sector) has come to the conclusion that higher teaching qualifications leads to better outcomes for children (Barnett, 2004; Bowman, Donovan, & Burns, 2001; Howes & Brown, 2000), not because of the degree (Hanushek & Rivkin, 2006) but because as Whitebook (2003) has noted, the more qualified a teacher is, the more sensitive they are to their environment.

As the qualification level of BCE teachers increases, so does their discernment such that irrespective of the level of the schools performance, there is a clear pattern of OLP means trending upwards for schools performing better than expected and trending downwards for schools performing below expectations.

When viewed against participant qualitative comments, in both schools performing better than expected and those schools not performing as expected, the comments are consistently around either an abundance or absence of communication, and particularly within this, an understanding of the rationale of the decisions and direction of the school. Highly qualified teachers in schools performing better than expected understand and are involved in the strategic direction and priorities of the school whilst in those schools not performing as expected, not only highly qualified teachers but all teachers are generally excluded, but highly qualified teachers become more critical with their comments when this occurred. The more qualified the teacher, the more discerning they become regards leadership.

5.7.3 Years of Teaching Experience Discussion

Teacher experience generally is not statistically significant with respect to perceptions of school performance.

When performance levels of schools is factored into this analysis, in schools performing above expectations this pattern continues, but for schools performing below expectations the breadth of variation of teacher perceptions becomes significant. In schools performing below expectations teacher response patterns indicate a fragmented and inconsistent environment.

Of interest is that in schools performing below expectations, the least experienced teachers in these schools have the lowest perceptions of prevalence of leadership behaviours across all school performance levels and experience levels. However in schools performing above
expectations the least experienced teachers in these schools have the highest perceptions of prevalence of leadership behaviours across all school performance levels and experience levels.

When viewed against participant qualitative comments, early career teachers in schools performing above expectations cite deliberate leadership intervention to create high levels of personal recognition, support and integration with the staff and structure of the school. Whereas in schools performing below expectations, the least experienced teachers in these schools consistently reported feelings of isolation and being constantly unsure of what is expected of them or how they are to do it.

Clearly in schools performing above expectations, those staff either new to teaching or new to the school experienced comprehensive and longitudinal induction programs orientated in the main towards classroom competence.

5.7.4 Years of School Tenure Discussion

With respect to teacher time at the current school, there is very little variation in the OLP means across the bands of tenure. Even when performance levels of schools is factored into this analysis, the pattern of perceptions of leadership behaviours holds true to the performance levels of the school but within each of these respective school performance bands there is very little variation. This research indicates that teacher tenure is non-linearly related to school quality.

5.7.5 Years Supervised by Current Principal Discussion

When considered generally, principals who have been at their school longer than 10 years, perform slightly better than principals within their first few years at the school.

When performance levels of schools are factored into this analysis, in schools performing below expectations, the longer the principal has been supervising staff at the school, the lower the teacher perceptions of leadership behaviours. However, in schools performing better than expected and as expected, teacher perceptions of leadership behaviours are approximately consistent irrespective of the number of years the current principal has been supervising staff in the school.

In schools not performing as expected, principal supervision time is negatively linearly related to quality of student outcomes whilst in schools performing better than expected and as expected, there is a non-linear relationship of quality of student outcomes to length of time supervised by the principal.
In essence, schools performing better than expected evidence consistently high performance, regardless of how long respective teachers have been supervised by the current principal.

This research also indicates that regardless of the level of school performance, the highest performance is generally reached when both the teacher and principal have been in the school for more than 5 and less than 15 years. That is, for both teachers and principals alike, a minimum tenure at a school should be 5 years and a maximum tenure should be 15 years with 10 years being the optimum.

5.7.6 Research Question 4 Conclusions

This study is one of very few role group perception studies or studies with demographic variables evidenced in instructional leadership in the Australian context, and given that the research data generated are representative of the entire BCE teaching population and similarly, because of statistical inference, applicable to the Australian teaching population generally, the trends discerned in this research are indicative of Australian schools.

This research indicates that:

- for both teachers and principals, gender is not a significant demographic factor with respective to leadership or student outcomes;
- as the qualification level of teachers increases, so does their discernment of leadership ability;
- for highly qualified teachers, leadership communication particularly regarding an understanding of the rationale of the strategic direction, priorities and decision-making of the school is critical;
- a comprehensive and longitudinal induction program orientated towards classroom competence is imperative for early career teachers and new staff to maximise performance; and
- for both teachers and principals alike, a minimum tenure at a school should be 5 years and a maximum tenure should be 15 years with 10 years being the optimum.

It is noted that there is a strong relationship between years of teacher experience and qualification levels, and in schools performing above expectations the leadership of the school deliberately utilises these staff to create leadership density and to have prominent carriage of activities and strategies to promote professional learning communities. This again replicates the findings of Day et al. (2009), who have provided positive associations between the increased distribution of leadership roles and responsibilities and the continuing improvement of pupil outcomes.
Research Summary and Recommendations

*Show me a good school, and I'll show you a good principal.*
Roland Barth, 1990, p. 64

6.1 Robinson et al. were right

Literally hundreds of research studies have focused on the importance of teachers for student achievement and one clear finding emerges – teachers are very important; no other measured aspect of schools is nearly as important in determining student achievement (Hanushek, 2010).

After this, school leadership is second only to classroom teaching as an influence on pupil learning and has been substantiated through key reviews of quantitative research linking leadership to student learning (e.g., Day et al., 2009; Hallinger & Heck, 1996a; Waters, Marzano & McNulty, 2003), along with individual quantitative studies such as Silins and Mulford (2002) and Leithwood and Jantzi (2005) and also a number of qualitative studies (Gezi 1990; Reitzug & Patterson, 1998).

It is noted that while the independent effects of school leadership are modest, these effects have to be interpreted in comparison with the effects of other school variables almost all of which have some small impact (Creemers & Rietzig, 1996). The challenge for school leaders is to create ‘synergistic effects’; the accumulation of the effects that make most difference and to have these effects going in the same direction (Day et al., 2009) because as Sammons et al. (2014) note: “school improvement is generally recognised not as a single activity but more as a series of overlapping processes that take place within a collective endeavour” (p. 565).

In this research, the composite of teacher judgements in respective schools can be trusted as a valid representation of the leadership behaviours in that school (Hallinger, 2008) but principals as a role group generally, and in the majority of schools specifically, display statistically significant higher ratings than reports from their teachers. In essence, the perception of the principal is not the lived reality of the teachers in that school and this is particularly so in schools performing below expectations.

There is most perceptual difference regarding both ‘ensuring the quality of teaching in the school’ and ‘promoting teacher learning and development’, where principals have a conflated view to that of teachers regarding what actually happens.

Underlying this research is the basic assumption that, central to but by no means the only task for school leadership, is to help improve teacher performance as the means of improving student learning.
Robinson et al. (2009) found significantly larger effects for ‘instructional’ as compared with ‘transformational’ leadership practices. Instructional leadership practices were those which engaged teachers (or engaged with teachers) in initiatives directly related to student learning. Transformational practices were described as those which were more teacher than student focused.

Whilst agreeing with Marks and Printy (2003), that to lead schools requires a full array of leadership practices and these leadership practices includes those associated with both transformational and instructional approaches (Wahlstrom & Louis, 2008), this research nevertheless confirms the leadership practices described by Robinson et al. (2009) as having influence on student learning and that such ‘instructional leadership’ focuses directly on teachers’ pedagogical capacities.

All of the schools studied in this research were noted to be evidencing leadership behaviours albeit at varying levels. No school had an absence of leadership behaviours. In combining the quantitative and qualitative data this research replicates the findings of Day et al. (2009), who observed that whilst leaders may draw on the same repertoire of leadership practices, it is the intensity or frequency of actions that differentiates between levels of school performance.

The data collected in this research support Robinson et al. (2009) who derived theorised leadership behaviours from a detailed quantitative synthesis of the research from instructional models within the 2009 Best Evidence Synthesis School Leadership and Student Outcomes. The BES correctly identifies school leadership behaviours that make a difference for student outcomes and this research presents evidence to connect these school leadership behaviours with student outcomes. It affirms that the level of presence in schools of this type of leadership, which prioritises pedagogical leadership, is directly related to the performance level of the school with respect to student learning outcomes.

The descriptors of leadership behaviours articulated by participants for each of the behavioural scales studied show close alignment with those theorised by Robinson et al. (2009) and further, this research significantly elaborates on the specific instructional leadership behaviours for school leaders to successfully enhance student learning outcomes.

Notably, for a school to be instructionally successful, leadership is critical at the macro level in ensuring the collaborative design of a broad array of processes, policy, systems, relationships and partnerships so that there is opportunity for involvement, engagement, consistency and alignment across all stakeholders. At the micro level, leadership is critical as a presence to model expected behaviours and to interact with individuals at the personal level and to actively intervene when necessary.
Generally, ‘professional learning’, ‘leadership’ and ‘collaboration’ occur frequently and especially in association with words or synonyms related to transparent, structure, priorities, expectations, alignment, and consistent.

For schools to perform better than expected, school leadership avoids using sanctions and threats, and works as a ‘first among equals’ (Wilkinson et al., 2010) so that pedagogical and curriculum practices are generative (Edwards-Groves & Ronnerman, 2013). Such school leaders have an active presence that works openly with the school community to collaboratively identify their priorities, collaboratively design expectations and structures to bring these to life and then collaboratively lead the process of ensuring collaborative learning and consistency across the school.

This is in alignment with Cunningham (2014) who reported his findings from an Australian case study on leadership decision-making in educational organisations. It indicated that teachers show a clear preference for collective, professional responsibility for decision-making and show an unwillingness to remain disenfranchised and powerless.

With respect to demographic factors, this research indicates that education level, years of teaching experience, and years’ supervised by current principal are pertinent only for some teachers. Education level is a significant demographic factor within highly qualified staff, who are very discerning around the communication and decision-making processes of the school. With years of teaching, it is the other end of the experience spectrum most demographically significant. Early career teachers are prominent with respect to levels of personal recognition, support and integration with the staff and structure of the school.

With respect to years’ supervised by current principal, this demographic has no direct correlation to school performance. Extended school tenure and supervision of staff by the principal does not have a relationship to student outcomes. However, the highest performance level (irrespective of what that level is) generally is reached when both the teacher and principal have been in the school for more than 5 and less than 15 years.

The schools performing better than expected in this research have shown themselves to be ‘high reliability organisations’ (Bellamy, Crawford, Marshall, & Coulter, 2005; Marzano, Warwick, & Simms, 2014; Stringfield, Reynolds, & Schaffer, 2012; Weick & Sutcliffe, 2007) where ongoing attention to potential significant failure is built into their practices (Weick & Sutcliffe, 2007).
Barber et al. (2012), Jensen et al. (2012) and Caldwell and Spinks (2013) in looking ahead to possibilities on how schools may best function into the future note that the core of professional knowledge for leaders should always include maintaining a focus on instruction.

6.2 Contribution to the field

Unlike any other previous work, this research clearly demonstrates that the theoretical meta-analysis conducted by Robinson et al. (2009) works in practice, and that the higher the presence of these behaviours in a school, the better than expected is the school performance. In doing so it contemporises and extends the scope, currency and depth of Robinson et al (2009).

This research also contemporises within the Australian context the finding that the composite of teacher judgements in respective schools can be trusted as a valid representation of that school. Similarly, as pioneer Australian research, it reinforces much earlier work in the European and American context that the perception of the principal is not the lived reality of the teachers in that school and this is particularly so in schools performing below expectations.

Whilst Robinson et al. (2009) theorised descriptors of leadership behaviours for each of the behavioural scales, this study whilst verifying close alignment, significantly elaborates on the specific instructional leadership behaviours for school leaders to successfully enhance student learning outcomes.

In doing so, this research adds to the growing evidence that principals play a significant role in developing and sustaining school improvement initiatives and that to be successful, school leaders must particularly be collaborative and work with and through others to create the kinds of positive, engaging school climates that increase the likelihood of improved student learning (Leithwood & Louis, 2012; Ylimaki & Jacobson, 2013).

This research as the only known role group perception study with demographic variables linked to instructional leadership and school performance, (which through the BCE teachers and principals consistency with national profiles), generates data which may be extrapolated to the Australian teaching population generally. In doing so, it particularly contemporises the understanding that whilst males are disproportionally represented in school leadership, gender is not significant in instructional leadership performance.

This research also introduces to the Australian context the notion that as the qualification level of teachers increases, so does their discernment of leadership ability.
Similarly, it verifies and makes relevant from the personal perspective of year 2013 graduate teachers, that comprehensive and longitudinal induction programs orientated towards classroom competence not only maximises performance of new staff but adds to staff motivation, morale and retention.

6.3 Limitations

The results of this study could potentially be limited by multiple factors. First, the variables are self-reported and despite assurances by Hallinger (2008) of reliability of teacher perceptions there may nevertheless be a proportion of inaccurate responses arising from reactions to the school climate or participants not understanding the survey questions or interpreting them differently. Also, some participants might have been inclined to answer the questions in a manner they believed would have pleased the researcher.

Second, differences in leadership behaviours could be attributed to other factors not measured in the study. Third, the cross-sectional design of this study provided a snapshot at a particular time instead of capturing the same data over an extended period or repeating the data capture for comparison.

A fourth potential limitation of this research could be in conducting the study without face-to-face, interactive contact with the researcher. Teachers from the study contacted the researcher by phone and by e-mail wanting to add further comments to their responses. These data were however not included in the study. This may have evidenced deeper insights beyond the qualitative and quantitative responses from the survey alone.

Another possible limitation is the number of principals and schools that did not participate despite being invited. Only approximately one-third of principals participated in the study (46 principals from a possible 137), 10 schools chose not to participate, and of the 127 that did, two principals did not identify their gender, and a different three principals chose not to identify their school. Whilst statistically the sample size is sufficient to generate reliability and validity, these results may need to be viewed with caution.

Finally, whilst acknowledging that it is not only the principal who is involved in the leadership of a school (Barber & Mourshed, 2007; Crowther, 2010), at the core of distributed leadership is the empowering relationship of the principal as ‘first leader’ with followers (Blasé, 1991; Crowther, 2010; Timperley & Robertson, 2011; Wallace Foundation, 2013). This research asked questions about school leadership yet ascribed the findings to the principal.
6.4 Potential Workplace Considerations

1. **Principal Tenure** - In schools performing better than expected, the longer the principal had been at the school, the higher the identified levels of leadership behaviours that make a difference to student learning outcomes. Given that in BCE the tenure of principals is usually less than 5 years, consideration could be given to examination of the rationale for principal mobility so that high performing principals stay longer in their respective settings.

2. **Teacher Qualifications** – With respect to education levels of teachers, there is the general trend that the more qualified the teacher, the slightly higher their perceptions of leadership behaviours. However, when performance levels of schools are factored into this analysis, in schools performing better than expected the trend is to rise sharply in parallel with increase in qualifications, yet in schools performing below expectations this pattern is reversed so that the most qualified teachers in these schools have the lowest perceptions of leadership behaviours. Teachers become more discerning of leadership behaviours as their education levels increase. Consideration could be given to rewarding teachers for additional qualifications so that they are more discerning of leadership behaviours and also to weighing the perceptions of staff by qualification levels in conducting leadership appraisals.

3. **Early Career Teacher Induction** – Given the critical difference a comprehensive and longitudinal induction program orientated towards classroom competence makes to the competency of early career teachers and new staff, consideration could be given to ensuring both the longitudinal quality and structured enactment of induction programs in schools.

4. **Leadership Learning** – Having substantiated the dimensions identified by Robinson et al. (2009) as critical to successful instructional leadership, and further, identified contemporary specific actions school leaders may conduct to maximise student learning through teacher efficacy, opportunity should be created to develop these understandings and skills with school leaders.

6.5 Recommendations for Future Research

This study chose a Queensland Catholic setting and despite demographic data indicating that the profile of BCE respondents generally reflects the national and international profile of most education systems and is also consistent with sectorial patterns across most Australian education systems, it would be useful to validate these findings in other educational settings.

It would also be valuable to test in other jurisdictions whether there is an association with length of time in school and perceptions of school leadership.
Similarly, because of the generalisation emerging from this research that the more qualified the teacher, the higher their perceptions of leadership behaviours, does the 27% of BCE teachers having Masters qualifications or higher, compared with Australian profiles of approximately 9% of teachers having a Masters level qualification, skew the perceptual means of teachers in any significant way?

It may also be useful to utilise the gender representation of principals within the respective performance levels of schools and discern whether there is any gender skewing when comparing actual and expected percentages of gender representation within each performance level.

Particularly, with respect to those schools not performing as expected, would an intervention focusing on the school’s leadership knowing and using the leadership behaviours of the BES, be over time related to an increase in student learning outcomes.

The specific context of each school was not able to be addressed because of the masked identity of each school; hence there was therefore an inability to bring socio-economic factors into consideration with respect to levels of school performance and evidence of extent of leadership behaviours. It would useful if further research could address this potential.

Similarly, it would be interesting to discern the relationship between NAPLAN discernment and NAPLAN & expert judgement discernment, as a comparison of results against the level of school performance.

In all schools performing better than expected, the teaching staff has higher perceptual levels than those of principals (See Table 26). For schools performing as expected, there is closer parity of principal and teacher perceptions although principals are more optimistic than teachers. There are few schools where principals and teachers perceptions coincide however these are a very small number. Noticeably, in schools performing below expectations the principals’ perceptions are considerably different (and higher) to teaching staff. As a generalization, Principals consistently report different view cf. teachers. Whether such a finding is replicated in further research, warrants investigation.
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### Appendix 1 – Complete list of quantitative studies of the BES

<table>
<thead>
<tr>
<th>Reference</th>
<th>Schools</th>
<th>Leadership theory</th>
<th>Leadership measure</th>
<th>Who is leader?</th>
<th>Measure of student outcomes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alig-Mielcarek &amp; Hoy (2005), US.</td>
<td>A representative sample of 146 elementary schools</td>
<td>Instructional leadership</td>
<td>Survey of teacher perceptions of instructional leadership</td>
<td>Principal only</td>
<td>Average school scores over 2 years in grade 4 reading and maths (Ohio proficiency exams)</td>
</tr>
<tr>
<td>Andrews &amp; Soder (1987), US.</td>
<td>33 elementary schools</td>
<td>Instructional leadership</td>
<td>18-item instructional leadership survey</td>
<td>Principal only</td>
<td>Gains over 2 years in individual, normal-curve equivalent scores on CAT in reading and maths</td>
</tr>
<tr>
<td>*Bamburg &amp; Andrews (1991), US.</td>
<td>10 otherwise comparable high achieving and 10 low-achieving elementary schools</td>
<td>Instructional leadership</td>
<td>19 strategic interactions of principal assessed by teachers S23</td>
<td>Principal only</td>
<td>Gain scores on CAT in maths only</td>
</tr>
<tr>
<td>*Brewer (1993), US.</td>
<td>A representative national sample of 1100 high schools</td>
<td>Instructional leadership</td>
<td>Administrator and teacher surveys, plus principal ranking of academic excellence</td>
<td>Principal only</td>
<td>Gain scores over a 2-year period on test of verbal and quantitative ability</td>
</tr>
<tr>
<td>Cheng (1994), Hong Kong.</td>
<td>A sample of 164 elementary schools</td>
<td>The four leadership frames of Bolman and Deal (1991)</td>
<td>30-item teacher survey comprising four generic leadership frames and one additional educational leadership dimension</td>
<td>Principal only</td>
<td>Student survey about self-concept and attitude towards School, teachers, and learning.</td>
</tr>
<tr>
<td>*Eberts &amp; Stone (1986), US.</td>
<td>A nationally representative sample of approximately 300 elementary schools</td>
<td>Instructional leadership</td>
<td>Teacher and principal surveys</td>
<td>Principal only</td>
<td>Pre- and post-test scores on standardised maths test</td>
</tr>
<tr>
<td>*Friedkin &amp; Slater (1994), US.</td>
<td>20 Californian elementary schools</td>
<td>Social network theory</td>
<td>Teacher survey of persons in school (i) with whom issues are discussed, (ii) from whom advice is sought, (iii) who are close personal friends</td>
<td>Both principal and teachers can be included in network.</td>
<td>4-year average of school maths, reading, and language scores on CAP, adjusted for SES</td>
</tr>
<tr>
<td>Reference</td>
<td>Schools</td>
<td>Leadership theory</td>
<td>Leadership measure</td>
<td>Who is leader?</td>
<td>Measure of student outcomes?</td>
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<tr>
<td>Goldring &amp; Pasternak (1994), Israel.</td>
<td>34 elementary schools</td>
<td>Principal’s (P’s) control and coordination of the teaching programme</td>
<td>Principal’s allocation of time to set tasks, degree of influence over teaching, importance attached to certain goals; Teacher reports of degree of goal consensus</td>
<td>Principal only</td>
<td>Scores for grade 5 maths and reading and grade 6 reading</td>
</tr>
<tr>
<td>Griffith (2004), US.</td>
<td>117 urban elementary schools</td>
<td>Transformational leadership</td>
<td>3 domains of transformational leadership: charisma, individualised consideration, intellectual stimulation</td>
<td>Principal only</td>
<td>(i) Individual-level analysis: student report of grade levels achieved, converted to GPA; (ii) School-level analysis: residual standardised test scores</td>
</tr>
<tr>
<td>Hallinger, Bickman, &amp; Davis (1996), US.</td>
<td>87 Tennessee elementary schools participating in a state programme</td>
<td>Instructional leadership</td>
<td>18 items on instructional leadership as part of CSEQ</td>
<td>Principal only</td>
<td>Gain scores on grades 3 and 6 reading tests (BSFT)</td>
</tr>
<tr>
<td>*Heck (1992), US.</td>
<td>23 high-achieving elementary schools and 17 high achieving high schools</td>
<td>Instructional leadership</td>
<td>Teacher survey of 3 domains of instructional leadership</td>
<td>Principal or designee</td>
<td>CAP scores</td>
</tr>
<tr>
<td>Heck (2000), US (Hawaii).</td>
<td>122 elementary schools, comprising all eligible schools in Hawaii</td>
<td>Instructional leadership</td>
<td>Teacher survey includes instructional leadership</td>
<td>Principal plus</td>
<td>Total scaled scores for reading, language, and maths on SAT</td>
</tr>
<tr>
<td>*Heck, Larsen, &amp; Marcoulides (1990), US.</td>
<td>30 otherwise comparable high and low-achieving elementary and high schools</td>
<td>Instructional leadership</td>
<td>Teachers reported on frequency of implementation of 22 instructional leadership behaviours.</td>
<td>Principal or designee</td>
<td>CAP scores on combined maths and reading (and language in high schools)</td>
</tr>
<tr>
<td>*Heck &amp; Marcoulides (1996), Singapore.</td>
<td>A convenience sample of 26 high schools</td>
<td>Transformational leadership</td>
<td>Leadership as part of managerial processes, including resource availability, responsiveness to teachers’ (unspecified) problems, and visionary and collaborative Leadership</td>
<td>School administrators</td>
<td>Administrators A national test on a variety of curriculum areas</td>
</tr>
<tr>
<td>*Heck, Marcoulides, &amp; Lang (1991), US &amp; Marshall Islands.</td>
<td>32 elementary &amp; high schools (US); 3 elementary and 1 high school (Marshall Islands)</td>
<td>Instructional leadership</td>
<td>Teachers reported on frequency of implementation of 22 instructional leadership behaviours.</td>
<td>Principal or designee</td>
<td>California: CAP scores; Marshall Islands: national test scores in reading and maths</td>
</tr>
<tr>
<td>Reference</td>
<td>Schools</td>
<td>Leadership theory</td>
<td>Leadership measure</td>
<td>Who is leader?</td>
<td>Measure of student outcomes?</td>
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</tr>
<tr>
<td>*Hoy, Tarter, &amp; Bliss (1990), US.</td>
<td>58 high schools</td>
<td>Neither</td>
<td>(i) Principal supportiveness and directiveness (within OCDQ-RS); (ii) Principal influence, academic emphasis, consideration, initiating structure, resource</td>
<td>Principal only</td>
<td>Reading and maths achievement, New Jersey HSPT</td>
</tr>
<tr>
<td>Leithwood &amp; Jantzi (1999), Canada.</td>
<td>94 elementary schools</td>
<td>Transformational and transactional leadership</td>
<td>53-item teacher survey</td>
<td>Principal only for transformational leadership</td>
<td>Student identification with and participation in school as measured by the Student Engagement and Family Educational Culture Survey</td>
</tr>
<tr>
<td>Leithwood &amp; Jantzi (2000), Canada.</td>
<td>110 elementary and high schools</td>
<td>Transformational and transactional leadership</td>
<td>Teacher survey</td>
<td>Principal and teacher leadership, separately assessed</td>
<td>Student engagement with school measured by Student Engagement and Family Educational Culture Survey</td>
</tr>
<tr>
<td>Leithwood &amp; Jantzi (2006), UK.</td>
<td>256 elementary schools for literacy and 258 for numeracy</td>
<td>Transformational leadership</td>
<td>Teacher survey tailored to implementation of literacy and numeracy strategies</td>
<td>Distributed: ‘those in positions of responsibility in your school’</td>
<td>Gain scores on Key Stage 2 tests</td>
</tr>
<tr>
<td>*Leitner (1994), US.</td>
<td>27 urban elementary schools</td>
<td>Instructional leadership</td>
<td>Measured by Hallinger’s PIMRS</td>
<td>Principal only</td>
<td>Gain scores over one year for reading, maths, and language</td>
</tr>
<tr>
<td>Marks &amp; Printy (2003), US.</td>
<td>24 elementary, middle, and high schools</td>
<td>Integrated leadership comprising high transformational and high-shared instructional leadership</td>
<td>Indices of each leadership type derived from items in teacher survey and coding of interviews and Observations Instructional leadership measure includes degree of focus on and influence over teaching, curriculum, and assessment</td>
<td>Transformational Leadership mostly principal only</td>
<td>Student achievement on maths and social studies assignments, marked against three standards of intellectual quality</td>
</tr>
<tr>
<td>Reference</td>
<td>Schools</td>
<td>Leadership theory</td>
<td>Leadership measure</td>
<td>Who is leader?</td>
<td>Measure of student outcomes?</td>
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<tr>
<td><em>May &amp; Wagemaker (1993), NZ.</em></td>
<td>175 primary schools</td>
<td>Instructional leadership</td>
<td>Principal’s involvement in evaluation and development of teachers with respect to reading</td>
<td>Principal only</td>
<td>IEA (1990) measure of reading achievement and extent of voluntary reading activities</td>
</tr>
<tr>
<td>Ogawa &amp; Hart (1985), US.</td>
<td>124 elementary and 151 high schools</td>
<td>Leadership as incumbent</td>
<td>Change in principalship</td>
<td>Principal only</td>
<td>Maths and reading scores on CAP achievement test over a 6-year period</td>
</tr>
<tr>
<td>Pounder, Ogawa, &amp; Adams (1995), US.</td>
<td>35 elementary and 25 high schools</td>
<td>Leadership as an organisational quality</td>
<td>Amount of influence exercised by people in 4 different leadership roles</td>
<td>Principal only, school secretary, single staff member, collective group of staff</td>
<td>(i) SAT-adjusted school average over the previous 3 years; (ii) Student absenteeism.</td>
</tr>
<tr>
<td>Silins &amp; Mulfroid (2002), Australia.</td>
<td>96 high schools</td>
<td>Transformational leadership</td>
<td>Survey of teacher perceptions of their principal’s transformational leadership skills</td>
<td>Principal and teacher Leadership measured Separately</td>
<td>(i) Student participation in school; (ii) Student engagement with school; (iii) Academic self</td>
</tr>
<tr>
<td>Van de Grift &amp; Houtveen (1999), Netherlands.</td>
<td>383 elementary schools completed the survey; 174 elementary schools assessed students</td>
<td>Instructional leadership</td>
<td>Teacher survey of instructional leadership using 15-item Rasch scale</td>
<td>Principal only</td>
<td>Student achievement on 180-item test of language, arithmetic, and information processing</td>
</tr>
<tr>
<td><em>Wellisch, MacQueen, Carriere, &amp; Duck (1976), US.</em></td>
<td>9 successful and 13 unsuccessful Elementary schools, based on number of grades/subjecs showing improvement in one year</td>
<td>Instructional leadership</td>
<td>Teachers’ reports of principal’s concern about instruction, coordination of instructional programme, and feedback on teacher performance</td>
<td>Principal plus</td>
<td>Grades 3, 4, and 5 in reading and maths over 2 years on CAT</td>
</tr>
</tbody>
</table>
Wilson School

Please read the following instructions carefully before you start this survey.

- Most sections in the survey ask you to rate the effectiveness of the school's leadership across a series of effectiveness indicators. For each indicator you respond by choosing: "Ineffective", "Minimally Effective", "Satisfactorily Effective", "Highly Effective", or "Outstandingly Effective". You are also asked to identify the source or sources of evidence that led to your rating for each indicator. The sources you can choose from are: "Personal Observations"; "Other Sources"; and "No Evidence". Other Sources refers to things like school documents, meeting notes, and others' comments.

- Please answer each question in terms of your own experience and knowledge. The aim of this survey is to provide your school with an honest collective picture of its school leadership as a whole, that can be used formatively for leadership and school development. Leadership includes syndicate and departmental leadership, as well as senior school management and the principal.

- You can omit any question where you think you have no experience or knowledge.

- All teacher response data included in the reports is aggregated, and cannot be used to identify individual teachers.

- Reports are generated with and without principal data included, so that principals may choose which version of the reports to share with teachers in their school.

- The questions at the end of the survey about your teaching experience are not used in individual school reports. This information is only used for research analysis to provide a high-level national picture of NZ school leadership. Before any data is used to provide national pictures, all features that could possibly identify an individual or school are removed.

- The survey takes about 25 minutes to complete. It is not necessary to complete the survey at a single sitting - use the Complete later button to save what you have done, and then log on again using your password.

- At the end of the survey a review page allows you to look back and change your responses if you wish.

- Once you have clicked on the Submit button, you cannot change your responses.
Wilson School

My Pedagogical Leadership Context

1. Please rate your agreement with the following statements about your work.

- The school has no difficulty recruiting and retaining effective teachers.
- The school has good access to effective advice about how to tackle issues that I encounter in leading change.
- Student welfare issues significantly erode the time I can spend on pedagogical leadership.
- Financial and property management matters significantly erode the time I can spend on pedagogical leadership.
- Managing staff employment issues significantly erodes the time I can spend on pedagogical leadership.
- Ensuring the school paperwork meets external agency standards (e.g. ERO) significantly erodes the time I can spend on pedagogical leadership.
- The school has access to the assessment tools needed to set and monitor our goals for student learning.
- The school has the data management and analysis systems in place to set and monitor our school learning goals.
- The school has access to the data management expertise it needs to generate analyses of our student assessment data.
- When teachers need help to raise student achievement, the school has affordable access to good quality external expertise.
- I get good guidance about the most effective and affordable ways to raise achievement in this school.
- My board is fully supportive of my giving priority to pedagogical leadership in my workload.
- My last performance appraisal gave me useful insight into how I could strengthen my leadership of teaching and learning.
- Trustees on the board bring good understanding and insight to their discussion of the academic and social achievement of our students.
I am able to schedule enough time for the educational leadership part of my job.

My community is open to new ideas about curriculum, teaching and learning.

My workload is manageable.

My workload is sustainable.
Leadership through Goal Setting

Scale Description
This scale includes the setting and communicating of learning goals, standards, and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals and priorities.

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal observations</td>
<td>Ineffective</td>
</tr>
<tr>
<td>Other sources</td>
<td>Minimally effective</td>
</tr>
<tr>
<td>No evidence</td>
<td>Satisfactorily effective</td>
</tr>
<tr>
<td></td>
<td>Highly effective</td>
</tr>
<tr>
<td></td>
<td>Outstandingly effective</td>
</tr>
</tbody>
</table>

2. How effective is the leadership of your school in ensuring that...

- the school's strategic/long-term goals promote high standards and expectations for all students?

- the school's strategic/long-term goals are communicated in clear, concrete terms?

- the school's strategic/long-term goals are important to Maori students and their whānau?

- school targets are based on information about what students currently know and are able to do?

- school targets promote high standards and expectations for all students?

- all the staff are fully aware of the targets?
in the school’s annual plan that are relevant to their area of responsibility?

there are clear school-wide targets for the academic achievement of Māori students?

there is honest non-blaming evaluation of progress towards school targets for student learning?

everyone has high expectations for the learning of all their students?

everyone is expected to teach in ways that ensure that students at risk of academic failure catch up?

challenging (stretch) learning goals are set for each student?
## Leadership through Strategic Resourcing

### Scale Description
This scale includes aligning resource selection and allocation to priority teaching goals.

### Sources of Evidence
- Personal observations
- Other sources
- No evidence

### Effectiveness Rating
- Ineffective
- Minimally effective
- Satisfactory effective
- Highly effective
- Outstandingly effective

### 3 How effective is the leadership of your school in ensuring that...

- **Effective teaching resources aligned to school goals are readily available?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

- **There is ready access to teaching and learning resources that engage students at risk of failure?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

- **The timetable reflects the school's priorities for teaching and learning?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

- **School routines maximise all students' opportunities to learn?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

- **Students at risk of failure get additional high quality opportunities to learn?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

- **There is ready access to teaching and learning resources that engage Māori students?**
  - □ □ □  
  - □ □ □  
  - □ □ □  
  - □ □ □  

---

nzcersurvey.org.nz/survey_ELPT.php
the expertise of families/community is used in ways that serve the school's priority learning goals?

resources are allocated to support the development of school-home partnerships that serve student learning?
## Leadership through Ensuring Curriculum Quality

**Scale Description**

This scale describes leadership through direct involvement in planning, coordinating and evaluating the teaching programme.

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal observations</td>
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<tr>
<td>Other sources</td>
<td></td>
</tr>
<tr>
<td>No evidence</td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td></td>
</tr>
<tr>
<td>Minimally effective</td>
<td></td>
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<tr>
<td>Satisfactorily effective</td>
<td></td>
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<td>Highly effective</td>
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</tr>
<tr>
<td>Outstandingly effective</td>
<td></td>
</tr>
</tbody>
</table>

### 4 How effective is the leadership of your school in ensuring that...

**systematic monitoring of each student's progress occurs?**

### How effective is the leadership of your school in ensuring that...

**there is a school/departmental assessment plan to collect the information needed to monitor progress on priority learning goals?**

**every student experiences a challenging programme?**

**students at risk of failure are identified early and plans made to accelerate their progress?**

**discussions of student assessment data focus on the relationship between what was taught and what students learned?**
Appendix 2 - NZCER ELP Survey - Principals version

3/03/2011

The curriculum in all learning areas includes content relevant to the identity of Māori students?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

The curriculum in all learning areas includes content relevant to diverse learners?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Rigorous feedback is given to teachers about the quality of their schemes/unit plans?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Strategies are used that maximise the engagement of all students in all classes?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

There is routine discussion of the results of common tests or tasks in teaching teams, and staff use these discussions to inform their curriculum planning?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

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Leadership through Ensuring the Quality of Teaching

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal observations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other evidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No evidence</td>
<td></td>
</tr>
</tbody>
</table>

5. How effective is the leadership of your school in ensuring that...

- everybody shares the responsibility for students' academic and social learning?

- How effective is the leadership of your school in ensuring that...

- those with particular expertise are used to help other teachers in the school to develop their knowledge and skills?

- there is challenge and support to improve teaching for those teachers whose students remain disengaged?

- early identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals?

- appraisal focuses on improving teaching practice and student outcomes?
assessment data are used to improve teaching?  □  □  □  □  □  □  □  □

students provide feedback to teachers on the effectiveness of their teaching?  □  □  □  □  □  □  □  □

any teaching problems are discussed with a colleague with relevant expertise?  □  □  □  □  □  □  □  □

mandated procedures such as attestation and appraisal are used as serious opportunities for the improvement of teaching?  □  □  □  □  □  □  □  □
Leadership through Promoting Collaborative Teacher Learning and Development

Scale Description
This scale describes leadership that promotes systematic, collaborative teacher learning that focuses on the improvement of student outcomes.

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal observations</td>
<td>Ineffective</td>
</tr>
<tr>
<td>Other sources</td>
<td>Satisfactorily effective</td>
</tr>
<tr>
<td>No evidence</td>
<td>Highly effective</td>
</tr>
<tr>
<td></td>
<td>Outstandingly effective</td>
</tr>
</tbody>
</table>

6 How effective is the leadership of your school in ensuring that...

- Student achievement patterns are analysed and used to plan professional learning priorities?

- There is open discussion of students' results, and teachers help each other develop more effective teaching strategies?

- Adequate opportunities are provided for teachers to discuss why they might need to change their practice?

- Staff meetings include serious discussions about how to improve teaching and learning?

- Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of...
through observing the teaching of effective colleagues?

decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students?

a range of evidence sources is used by teachers to evaluate the effectiveness of their teaching?

professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners?

professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for diverse learners?

professional development and learning is evaluated in terms of its impact on students?
## Leadership through Ensuring a Safe and Orderly Environment

**Scale Description**
This scale describes leadership through creating a positive, safe and supportive environment for both staff and students.

<table>
<thead>
<tr>
<th><strong>Sources of Evidence</strong></th>
<th><strong>Effectiveness Rating</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal observations</td>
<td></td>
</tr>
<tr>
<td>Other sources</td>
<td></td>
</tr>
<tr>
<td>No evidence</td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td>Highly effective</td>
</tr>
<tr>
<td>Minimally effective</td>
<td>Quotably effective</td>
</tr>
<tr>
<td>Satisfactorily effective</td>
<td></td>
</tr>
</tbody>
</table>

### 7 How effective is the leadership of your school in ensuring that...

- **staff work in a safe, supportive and orderly environment?**

- **staff views about the school culture and how to improve it are taken seriously?**

- **problems between teachers and students are resolved in a fair and timely way?**

- **problems between teachers and parents are resolved in a fair and timely way?**

- **there is a consistent school-wide approach to student behaviour management?**

- **timely support with student behaviour issues is given to staff?**
student views about the school culture and how to improve it are taken seriously?

the school is a positive environment in which student learning is the central focus?

there is regular monitoring of the extent to which students feel safe at school?

the school is a positive environment for everyone, whatever their culture?
Wilson School

Leadership through Ensuring Educationally Powerful Connections with Families, Whanau and Community

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>This scale describes leadership by creating a mutually responsive partnership that is focused on how to support children's learning.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8 How effective is the leadership of your school in ensuring that...

- Class programmes are discussed with parents so that parents understand what their child is being taught?
  - [ ] [ ] [ ]
  - Ineffective
  - Effectiveness Rating

- The school provides parents with opportunities to learn how to support their child's school learning?
  - [ ] [ ] [ ]
  - Ineffective
  - Effectiveness Rating

- Parents understand the achievement levels of their children in relation to national benchmarks?
  - [ ] [ ] [ ]
  - Ineffective
  - Effectiveness Rating

- Staff are responsive to families' views about their child's learning needs?
  - [ ] [ ] [ ]
  - Ineffective
  - Effectiveness Rating

- There are systematic processes for gaining parent and community feedback about the school?
  - [ ] [ ] [ ]
  - Ineffective
  - Effectiveness Rating
the school works in partnership with local Māori leaders to support Māori aspirations?

accurate information about school academic and social learning performance is available to the community?

school/community relations are focused on enhancing educational outcomes for students?
<table>
<thead>
<tr>
<th>Statement</th>
<th>Ineffective</th>
<th>Minimally effective</th>
<th>Satisfactorily effective</th>
<th>Highly effective</th>
<th>Outstandingly effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>using research on teaching and learning to inform important school decisions?</td>
<td></td>
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</tr>
<tr>
<td>learning alongside teachers about how to improve teaching and learning?</td>
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<tr>
<td>serving the interests of the whole school rather than of particular interest groups?</td>
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<tr>
<td>leading useful discussions about the improvement of teaching and learning?</td>
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<tr>
<td>identifying and resolving conflict quickly and fairly?</td>
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<tr>
<td>promoting and modelling the values of this school?</td>
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<tr>
<td>maintaining integrity in difficult situations?</td>
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<tr>
<td>showing both personal and professional respect for staff?</td>
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<tr>
<td>earning the respect of all of the staff?</td>
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<tr>
<td>earning the respect of the wider community?</td>
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<tr>
<td>earning the respect of the different ethnic communities served by the school?</td>
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<tr>
<td>seeking high quality information about the situation before making a final decision?</td>
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<tr>
<td>being open to learning and admitting mistakes?</td>
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<td></td>
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<tr>
<td>saying what I think and explaining why?</td>
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<tr>
<td>actively seeking others’ views?</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>making tough decisions when necessary?</td>
<td></td>
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</tbody>
</table>
Wilson School

About You

The questions below will be used ONLY for the national picture. Your anonymity is assured. No individual can be identified in the school report you will receive, or in the national reports.

10 How long have you been a principal?
- □ 0-2 years
- □ 3-5 years
- □ 6-10 years
- □ 11-15 years
- □ More than 15 years

11 How long have you been a principal at this school?
- □ 0-2 years
- □ 3-5 years
- □ 6-10 years
- □ 11-15 years
- □ More than 15 years

12 How many years were you a senior manager before you became a principal?
- □ 0-2 years
- □ 3-5 years
- □ 6-10 years
- □ 11-15 years
- □ More than 15 years
13 How many years did you teach in the classroom before you became a principal?
   □ 0-2 years
   □ 3-5 years
   □ 6-10 years
   □ 11-15 years
   □ More than 15 years

14 Have you completed the First Time Principals programme?
   □ Yes
   □ No
   □ Currently participating in the FTP
   □ Not eligible

15 Please indicate your gender:
   □ Female
   □ Male

16 Please indicate your age:
   □ Under 40
   □ 40-49
   □ 50-59
   □ 60+

17 Please indicate the ethnic group/s with which you identify:
   □ Pākehā/European
   □ Māori
   □ Pacific
   □ Asian
   □ Other (please describe) __________________________

18 How many teachers does the school currently employ?

__________ full time

nzcersurvey.org.nz/survey_ELPT.php
19 How many of these teachers are new to the school this year?

20 How many management positions and management units do you have?
   - senior management positions (DPs, APs)
   - middle management positions (e.g. HoDs, syndicate or curriculum leaders)
   - total number of management units

21 Which, if any, of the ELP dimensions was a focus in your ELP project?
   - Curriculum quality
   - Quality of teaching
   - Teacher learning and development
   - Māori success
   - Educationally powerful connections
   - Safe and orderly environment
   - Strategic resourcing
   - Goal setting

22 Were there any issues or events occurring for you or the school that made it difficult to maintain your intended EPD focus or attention to your EPD project?
   - Yes
   - No

23 If yes, what was it?
Wilson School

Review

Click on any of the headings below to review/change your responses. Please press Submit when you are ready to finish this survey.

**My Pedagogical Leadership Context**
0 out of 18 answered

**Leadership through Goal Setting**
0 out of 11 answered

**Leadership through Strategic Resourcing**
0 out of 8 answered

**Leadership through Ensuring Curriculum Quality**
0 out of 10 answered

**Leadership through Ensuring the Quality of Teaching**
0 out of 9 answered

**Leadership through Promoting Collaborative Teacher Learning and Development**
0 out of 10 answered

**Leadership through Ensuring a Safe and Orderly Environment**
0 out of 10 answered

**Leadership through Ensuring Educationally Powerful Connections with Families, Whānau and Community**
0 out of 8 answered

**Effectiveness of Principal Leadership**
0 out of 16 answered

**About You**
0 out of 14 answered
Demo School

Welcome to the Educational Leadership Practices Survey

This survey is designed to provide a robust picture of how teachers perceive the effectiveness of their school’s educational leadership. The survey covers key aspects of leadership that our current evidence shows are most likely to have an impact on teaching and learning. Its main purpose is formative, to support ongoing school leadership development.

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Demo School

Please read the following instructions carefully before you start this survey.

- Most sections in the survey ask you to rate the effectiveness of the school's leadership across a series of effectiveness indicators. For each indicator you respond by choosing: "Ineffective", "Minimally Effective", "Satisfactorily Effective", "Highly Effective", or "Outstandingly Effective". You are also asked to identify the source or sources of evidence that led to your rating for each indicator. The sources you can choose from are: "Personal Observations", "Other Sources", and "No Evidence". Other Sources refers to things like school documents, meeting notes, and others' comments.

- Please answer each question in terms of your own experience and knowledge. The aim of this survey is to provide your school with an honest collective picture of its school leadership as a whole, that can be usedformatively for leadership and school development. Leadership includes syndicate and departmental leadership, as well as senior school management and the principal.

- You can omit any question where you think you have no experience or knowledge.

- All teacher response data included in reports returned to your school is aggregated, and cannot be used to identify individuals.

- The questions at the end of the survey about your teaching experience are not used in individual school reports. This information is only used for research analysis to provide a high-level national picture of NZ school leadership. Before any data is used to provide national pictures, all features that could possibly identify an individual or school are removed.

- The survey takes about 25 minutes to complete. It is not necessary to complete the survey at a single sitting - use the Complete later button to save what you have done, and then log on again using your survey link.

- At the end of the survey a review page allows you to look back and change your responses if you wish.

- Once you have clicked on the Submit button, you cannot change your responses.
Leadership through Goal Setting

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>This scale includes the setting and communicating of learning goals, standards, and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals and priorities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. How effective is the leadership of your school in ensuring that...

   - the school's strategic/long-term goals promote high standards and expectations for all students? [☐ ☐ ☐]
   - the school's strategic/long-term goals are communicated in clear, concrete terms? [☐ ☐ ☐]
   - the school's strategic/long-term goals are important to Māori students and their whānau? [☐ ☐ ☐]
   - school targets are based on information about what students currently know and are able to do? [☐ ☐ ☐]
   - school targets promote high standards and expectations for all students? [☐ ☐ ☐]
all the staff are fully aware of the targets in the school's annual plan that are relevant to their area of responsibility?

there are clear school-wide targets for the academic achievement of Māori students?

there is honest non-blaming evaluation of progress towards school targets for student learning?

everyone has high expectations for the learning of all their students?

everyone is expected to teach in ways that ensure that students at risk of academic failure catch up?

challenging (stretch) learning goals are set for each student?
Leadership through Strategic Resourcing

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</thead>
<tbody>
<tr>
<td>This scale includes aligning resource selection and allocation to priority teaching goals.</td>
<td>Personal observations</td>
<td>Ineffective</td>
</tr>
</tbody>
</table>

2. How effective is the leadership of your school in ensuring that...

- Effective teaching resources aligned to school goals are readily available? □ □ □

- There is ready access to teaching and learning resources that engage students at risk of failure? □ □ □

- The timetable reflects the school's priorities for teaching and learning? □ □ □

- School routines maximise all students' opportunities to learn? □ □ □

- Students at risk of failure get additional high quality opportunities to learn? □ □ □

- There is ready access to teaching and learning resources that engage Māori students? □ □ □

pg. 256
<table>
<thead>
<tr>
<th>The expertise of families/community is used in ways that serve the school's priority learning goals?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources are allocated to support the development of school-home partnerships that serve student learning?</td>
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</tbody>
</table>

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Leadership through Ensuring Curriculum Quality

- **Scale Description**
  This scale describes leadership through direct involvement in planning, coordinating and evaluating the teaching programme.

- **Sources of Evidence**
  - Personal observations
  - Other sources
  - No evidence

- **Effectiveness Rating**
  - Ineffective
  - Minimally effective
  - Satisfactorily effective
  - Highly effective
  - Outstandingly effective

3. How effective is the leadership of your school in ensuring that...

   - systematic monitoring of each student's progress occurs?

   - there is a school/departmental assessment plan to collect the information needed to monitor progress on priority learning goals?

   - every student experiences a challenging programme?

   - students at risk of failure are identified early and plans made to accelerate their progress?

   - discussions of student assessment data focus on the relationship between what was taught and what students learned?
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Possibly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum in all learning areas includes content relevant to the identity of Māori students?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Curriculum in all learning areas includes content relevant to diverse learners?</td>
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<td></td>
</tr>
<tr>
<td>Rigorous feedback is given to teachers about the quality of their schemes/unit plans?</td>
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<tr>
<td>Strategies are used that maximise the engagement of all students in all classes?</td>
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<tr>
<td>There is routine discussion of the results of common tests or tasks in teaching teams, and staff use these discussions to inform their curriculum planning?</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Leadership through Ensuring the Quality of Teaching

Scale Description
This scale describes leadership through evidence-based evaluation of the quality of teachers and teaching and the provision of effective feedback and support.

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal observations</td>
<td></td>
</tr>
<tr>
<td>Other sources</td>
<td></td>
</tr>
<tr>
<td>No evidence</td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td></td>
</tr>
<tr>
<td>Minimally effective</td>
<td></td>
</tr>
<tr>
<td>Satisfactory effective</td>
<td></td>
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<tr>
<td>Highly effective</td>
<td></td>
</tr>
<tr>
<td>Outstandingly effective</td>
<td></td>
</tr>
</tbody>
</table>

4 How effective is the leadership of your school in ensuring that...

everybody shares the responsibility for students' academic and social learning?

those with particular expertise are used to help other teachers in the school to develop their knowledge and skills?

there is challenge and support to improve teaching for those teachers whose students remain disengaged?

eyearly identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals?

appraisal focuses on improving teaching practice and student outcomes?
<table>
<thead>
<tr>
<th>Question</th>
<th>Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment data are used to improve teaching?</td>
<td></td>
</tr>
<tr>
<td>Students provide feedback to teachers on the effectiveness of their teaching?</td>
<td></td>
</tr>
<tr>
<td>Any teaching problems are discussed with a colleague with relevant expertise?</td>
<td></td>
</tr>
<tr>
<td>Mandated procedures such as attestation and appraisal are used as serious opportunities for the improvement of teaching?</td>
<td></td>
</tr>
</tbody>
</table>
Leadership through Promoting Collaborative Teacher Learning and Development

Scale Description
This scale describes leadership that promotes systematic, collaborative teacher learning that focuses on the improvement of student outcomes.

Sources of Evidence | Effectiveness Rating
--- | ---
Personal observations | ![Evidence Rating](image)
Other sources | ![Evidence Rating](image)
No evidence | ![Evidence Rating](image)
Ineffective | ![Effectiveness Rating](image)
Minimally effective | ![Effectiveness Rating](image)
Satisfactory effective | ![Effectiveness Rating](image)
Highly effective | ![Effectiveness Rating](image)
Outstandingly effective | ![Effectiveness Rating](image)

5 How effective is the leadership of your school in ensuring that...

- student achievement patterns are analysed and used to plan professional learning priorities?
- there is open discussion of students' results, and teachers help each other develop more effective teaching strategies?
- adequate opportunities are provided for teachers to discuss why they might need to change their practice?
- staff meetings include serious discussions about how to improve teaching and learning?
systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues?

decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students?

a range of evidence sources is used by teachers to evaluate the effectiveness of their teaching?

professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners?

professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for diverse learners?

professional development and learning is evaluated in terms of its impact on students?
Demo School

Leadership through Ensuring a Safe and Orderly Environment

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>This scale describes leadership through creating a positive, safe and supportive environment for both staff and students.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. How effective is the leadership of your school in ensuring that...

- Staff work in a safe, supportive and orderly environment?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- Staff views about the school culture and how to improve it are taken seriously?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- Problems between teachers and students are resolved in a fair and timely way?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- Problems between teachers and parents are resolved in a fair and timely way?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- There is a consistent school-wide approach to student behaviour management?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- Timely support with student behaviour issues is given to staff?
  - [ ] [ ] [ ] [ ] [ ] [ ] [ ]
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>student views about the school culture and how to improve it are taken</td>
<td></td>
</tr>
<tr>
<td>seriously?</td>
<td></td>
</tr>
<tr>
<td>the school is a positive environment in which student learning is the</td>
<td></td>
</tr>
<tr>
<td>central focus?</td>
<td></td>
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<tr>
<td>there is regular monitoring of the extent to which students feel safe</td>
<td></td>
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<tr>
<td>at school?</td>
<td></td>
</tr>
<tr>
<td>the school is a positive environment for everyone, whatever their culture?</td>
<td></td>
</tr>
</tbody>
</table>
### Leadership through Ensuring Educationally Powerful Connections with Families, Whānau and Community

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Sources of Evidence</th>
<th>Effectiveness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>This scale describes leadership by creating a mutually responsive partnership that is focused on how to support children’s learning.</td>
<td>Personal observations</td>
<td>Ineffective</td>
</tr>
<tr>
<td></td>
<td>Other sources</td>
<td>Minimally effective</td>
</tr>
<tr>
<td></td>
<td>No evidence</td>
<td>Satisfactory effective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Highly effective</td>
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<tr>
<td></td>
<td></td>
<td>Outstandingly effective</td>
</tr>
</tbody>
</table>

#### 7 How effective is the leadership of your school in ensuring that...

- **class programmes are discussed with parents so that parents understand what their child is being taught?**
  - [ ] [ ] [ ]
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- **the school provides parents with opportunities to learn how to support their child’s school learning?**
  - [ ] [ ] [ ]
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- **parents understand the achievement levels of their children in relation to national benchmarks?**
  - [ ] [ ] [ ]
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- **staff are responsive to families’ views about their child’s learning needs?**
  - [ ] [ ] [ ]
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- **there are systematic processes for gaining parent and community feedback about the school?**
  - [ ] [ ] [ ]
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<p>| | | | | | | | | | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>the school works in partnership with local Maori leaders to support Maori aspirations?</td>
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<tr>
<td>accurate information about school academic and social learning performance is available to the community?</td>
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<tr>
<td>school/community relations are focused on enhancing educational outcomes for students?</td>
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</table>

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## Effectiveness of Principal Leadership

### Scale Description

This scale is about the effectiveness of aspects of the leadership of your principal, as you have experienced these.

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Ineffective</th>
<th>Minimally effective</th>
<th>Satisfactory effective</th>
<th>Highly effective</th>
<th>Outstandingly effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>using research on teaching and learning to inform important school decisions?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>learning alongside teachers about how to improve teaching and learning?</td>
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<tr>
<td>serving the interests of the whole school rather than of particular interest groups?</td>
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<tr>
<td>leading useful discussions about the improvement of teaching and learning?</td>
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<tr>
<td>identifying and resolving conflict quickly and fairly?</td>
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<tr>
<td>promoting and modelling the values of this school?</td>
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<tr>
<td>maintaining integrity in difficult situations?</td>
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<tr>
<td>showing both personal and professional respect for staff?</td>
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<tr>
<td>earning the respect of all of the staff?</td>
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<tr>
<td>earning the respect of the wider community?</td>
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<tr>
<td>earning the respect of the different ethnic communities served by the school?</td>
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<tr>
<td>seeking high quality information about the situation before making a final decision?</td>
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<tr>
<td>being open to learning and admitting mistakes?</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>saying what s/he thinks and explaining why?</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>actively seeking others' views?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>making tough decisions when necessary?</td>
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</tr>
</tbody>
</table>

8. **How effective is the principal of your school in...**

---

**Complete 70%**

---

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Your Teaching Work and Experience

9 Please rate your agreement with the following statements about your workload and job satisfaction.

I enjoy my job.
I get the support I need to do my job effectively.
My workload is fair.
My workload is manageable.
The level of work-related stress in my job is manageable.
My workload is sustainable.
My overall morale is good.
About You

The questions below will be used ONLY for the national picture. Your anonymity is assured. No individual can be identified in the school report your principal will receive, or in the national reports.

10 How long have you been teaching?
   - 0-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - More than 15 years

11 How long have you been teaching at this school?
   - 0-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - More than 15 years

12 How many years have you been teaching at this school, with this principal?
   - 0-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - More than 15 years

13 What are your roles in the school? [Please click all that apply]
☐ Assistant/Deputy Principal
☐ Syndicate/Faculty leader/HOD
☐ Class/subject teacher
☐ Specialist classroom teacher
☐ Dean
☐ Holder of management unit
☐ Guidance counsellor
☐ Careers advisor/transition teacher
Other (Please list)

14 Is your position permanent?
☐ Permanent
☐ Fixed term
☐ Relieving

15 Do you work full-time?
☐ Full-time
☐ Part-time

16 Please indicate your gender:
☐ Female
☐ Male

17 Please indicate the ethnic group/s with which you identify:
☐ Pākehā/European
☐ Māori
☐ Pacific
☐ Asian
Other (please describe)

18 Do you receive a management unit?
☐ Yes
Appendix 3 - NZCER ELP Survey - Teachers version

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Contact us
Demo School

Review

Click on any of the headings below to review/change your responses. Please press **Submit** when you are ready to finish this survey.

**Leadership through Goal Setting**
0 out of 11 answered

**Leadership through Strategic Resourcing**
0 out of 8 answered

**Leadership through Ensuring Curriculum Quality**
0 out of 10 answered

**Leadership through Ensuring the Quality of Teaching**
0 out of 9 answered

**Leadership through Promoting Collaborative Teacher Learning and Development**
0 out of 10 answered

**Leadership through Ensuring a Safe and Orderly Environment**
0 out of 10 answered

**Leadership through Ensuring Educationally Powerful Connections with Families, Whānau and Community**
0 out of 8 answered

**Effectiveness of Principal Leadership**
0 out of 16 answered

**Your Teaching Work and Experience**
0 out of 7 answered

**About You**
0 out of 9 answered

**Submit**
Thank you for completing the Educational Leadership Practices Survey.

Your responses will be combined with responses from the other teachers in the school to provide a series of reports that give a whole school picture. The reports will be sent directly to your principal. Please note, the reports do not allow individuals to be identified.

If you have any concerns or questions please email leadershipsurvey@nzcer.org.nz.
Brisbane Catholic Education Teacher ELP Survey

1. Leadership through Goal Setting - This includes the setting and communicating of learning goals, standards, and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals and priorities.

1.1. How effective is the leadership of your school in ensuring that...
1.1.1. The school has long-term goals which are clearly communicated?
1.1.2. The school's long-term goals promote high standards and expectations for all students?
1.1.3. There is honest non-blaming evaluation of progress towards school targets for student learning?
1.1.4. Everyone is expected to teach in ways that ensure that students at risk of academic failure are catered for?
1.1.5. Challenging yet achievable learning goals are set for each student?

2. Leadership through Strategic Resourcing - This includes aligning resource selection and allocation to priority teaching goals.

2.1. How effective is the leadership of your school in ensuring that...
2.1.1. Effective teaching resources aligned to school goals are readily available?
2.1.2. There is ready access to teaching and learning resources that engage students at risk of failure?
2.1.3. The timetable reflects the school's priorities for teaching and learning?
2.1.4. School routines maximise all students' opportunities to learn?
2.1.5. Students at risk of failure get additional high quality opportunities to learn?
2.1.6. Resources are allocated to support the development of school-home partnerships that serve student learning?

3. Leadership through Ensuring Curriculum Quality - This describes leadership through direct involvement in planning, coordinating and evaluating the teaching program.

3.1. How effective is the leadership of your school in ensuring that...
3.1.1. Systematic monitoring of each student's progress occurs?
3.1.2. There is a school assessment plan to collect the information needed to monitor progress on priority learning goals?
3.1.3. Every student experiences a challenging program?
3.1.4. Students at risk of failure are identified early and plans made to accelerate their progress?
3.1.5. Curriculum in all learning areas includes content relevant to diverse learners?
3.1.6. Rigorous feedback is given to teachers about the quality of their planning?
3.1.7. Strategies are used that maximise the engagement of all students in all classes?
3.1.8. There is routine discussion of the results of student data in teaching teams, and staff use these discussions to inform their curriculum planning?
Appendix 4 Modified ELP Survey for Brisbane Catholic Education

4. Leadership through Ensuring the Quality of Teaching - This describes leadership through evidence-based evaluation of the quality of teachers and teaching and the provision of effective feedback and support.

4.1. Everybody shares the responsibility for students' academic and social learning?
4.2. Those with particular expertise are used to help other teachers in the school to develop their knowledge and skills?
4.3. There is support to improve teaching for those teachers whose students are disengaged?
4.4. Early identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals?
4.5. Classroom assistance focuses on improving teaching practice and student outcomes?
4.6. Assessment data are used to improve teaching?

5. Leadership through Promoting Collaborative Teacher Learning and Development - This describes leadership that promotes systematic, collaborative teacher learning that focuses on the improvement of student outcomes.

5.1. Student achievement patterns are analysed and used to plan professional learning priorities?
5.2. There is open discussion of students’ results, and teachers help each other develop more effective teaching strategies?
5.3. Staff meetings include serious discussions about how to improve teaching and learning?
5.4. Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues?
5.5. Decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students?
5.6. A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching?
5.7. Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for diverse learners?

6. Leadership through Ensuring a Safe and Orderly Environment - This describes leadership through creating a positive, safe and supportive environment for both staff and students.

6.1. Staff works in a safe, supportive and orderly environment?
6.2. Staff views about the school culture and how to improve it are taken seriously?
6.3. Problems between teachers and students are resolved in a fair and timely way?
6.4. Problems between teachers and parents are resolved in a fair and timely way?
6.5. There is a consistent school-wide approach to student behaviour management?
6.6. The school is a positive environment in which student learning is the central focus?
6.7. There is regular monitoring of the extent to which students feel safe at school?
6.8. The school is a positive environment for everyone?
Appendix Five - word version of NZCER Teacher ELP Survey

1. Leadership through Goal Setting - This scale includes the setting and communicating of learning goals, standards, and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals and priorities.

1. How effective is the leadership of your school in ensuring that...
   1.1. The school’s strategic/long-term goals promote high standards and expectations for all students?
   1.2. The school’s strategic/long-term goals are communicated in clear, concrete terms?
   1.3. The school’s strategic/long-term goals are important to Maori students and their whānau?
   1.4. School targets are based on information about what students currently know and are able to do?
   1.5. School targets promote high standards and expectations for all students?
   1.6. All the staff are fully aware of the targets in the school’s annual plan that are relevant to their area of responsibility?
   1.7. There are clear school-wide targets for the academic achievement of Maori students?
   1.8. There is honest non-blaming evaluation of progress towards school targets for student learning?
   1.9. Everyone has high expectations for the learning of all their students?
   1.10. Everyone is expected to teach in ways that ensure that students at risk of academic failure catch up?
   1.11. Challenging (stretch) learning goals are set for each student?

2. Leadership through Strategic Resourcing - This scale includes aligning resource selection and allocation to priority teaching goals.

2. How effective is the leadership of your school in ensuring that...
   2.1. Effective teaching resources aligned to school goals are readily available?
   2.2. There is ready access to teaching and learning resources that engage students at risk of failure?
   2.3. The timetable reflects the school’s priorities for teaching and learning?
   2.4. School routines maximise all students’ opportunities to learn?
   2.5. Students at risk of failure get additional high quality opportunities to learn?
   2.6. There is ready access to teaching and learning resources that engage Maori students?
   2.7. The expertise of families/community is used in ways that serve the school’s priority learning goals?
   2.8. Resources are allocated to support the development of school-home partnerships that serve student learning?
3 How effective is the leadership of your school in ensuring that...

3.1. Systematic monitoring of each student’s progress occurs?
3.2. There is a school/departmental assessment plan to collect the information needed to monitor progress on priority learning goals?
3.3. Every student experiences a challenging program?
3.4. Students at risk of failure are identified early and plans made to accelerate their progress?
3.5. Discussions of student assessment data focus on the relationship between what was taught and what students learned?
3.6. Curriculum in all learning areas includes content relevant to the identity of Māori students?
3.7. Curriculum in all learning areas includes content relevant to diverse learners?
3.8. Rigorous feedback is given to teachers about the quality of their schemes/unit plans?
3.9. Strategies are used that maximise the engagement of all students in all classes?
3.10. There is routine discussion of the results of common tests or tasks in teaching teams, and staff uses these discussions to inform their curriculum planning?

4. Leadership through Ensuring the Quality of Teaching - This scale describes leadership through evidence-based evaluation of the quality of teachers and teaching and the provision of effective feedback and support.

4 How effective is the leadership of your school in ensuring that...

4.1. Everybody shares the responsibility for students’ academic and social learning?
4.2. Those with particular expertise are used to help other teachers in the school to develop their knowledge and skills?
4.3. There is challenge and support to improve teaching for those teachers whose students remain disengaged?
4.4. Early identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals?
4.5. Appraisal focuses on improving teaching practice and student outcomes?
4.6. Assessment data are used to improve teaching?
4.7. Students provide feedback to teachers on the effectiveness of their teaching?
4.8. Any teaching problems are discussed with a colleague with relevant expertise?
4.9. Mandated procedures such as attestation and appraisal are used as serious opportunities for the improvement of teaching?
5. Leadership through Promoting Collaborative Teacher Learning and Development - This scale describes leadership that promotes systematic, collaborative teacher learning that focuses on the improvement of student outcomes.

5 How effective is the leadership of your school in ensuring that...

5.1. Student achievement patterns are analysed and used to plan professional learning priorities?
5.2. There is open discussion of students' results, and teachers help each other develop more effective teaching strategies?
5.3. Adequate opportunities are provided for teachers to discuss why they might need to change their practice?
5.4. Staff meetings include serious discussions about how to improve teaching and learning?
5.5. Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues?
5.6. Decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students?
5.7. A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching?

5.8. Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Maori learners?
5.9. Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for diverse learners?
5.10. Professional development and learning is evaluated in terms of its impact on students?

6. Leadership through Ensuring a Safe and Orderly Environment - This scale describes leadership through creating a positive, safe and supportive environment for both staff and students.

6. How effective is the leadership of your school in ensuring that...

6.1. Staffs works in a safe, supportive and orderly environment?
6.2. Staff views about the school culture and how to improve it are taken seriously?
6.3. Problems between teachers and students are resolved in a fair and timely way?
6.4. Problems between teachers and parents are resolved in a fair and timely way?
6.5. There is a consistent school-wide approach to student behaviour management?
6.6. Timely support with student behaviour issues is given to staff?
6.7. Student views about the school culture and how to improve it are taken seriously?
6.8. The school is a positive environment in which student learning is the central focus?
6.9. There is regular monitoring of the extent to which students feel safe at school?
6.10. The school is a positive environment for everyone, whatever their culture?
Appendix Five - word version of NZCER Teacher ELP Survey

1. Leadership through Goal Setting - This scale includes the setting and communicating of learning goals, standards, and expectations, and the involvement of staff and others in the process so that there is clarity and consensus about goals and priorities.

1. How effective is the leadership of your school in ensuring that...
   1.1. The school's strategic/long-term goals promote high standards and expectations for all students?
   1.2. The school's strategic/long-term goals are communicated in clear, concrete terms?
   1.3. The school's strategic/long-term goals are important to Maori students and their whanau?
   1.4. School targets are based on information about what students currently know and are able to do?
   1.5. School targets promote high standards and expectations for all students?
   1.6. All the staff are fully aware of the targets in the school's annual plan that are relevant to their area of responsibility?
   1.7. There are clear school-wide targets for the academic achievement of Maori students?
   1.8. There is honest non-blaming evaluation of progress towards school targets for student learning?
   1.9. Everyone has high expectations for the learning of all their students?
   1.10. Everyone is expected to teach in ways that ensure that students at risk of academic failure catch up?
   1.11. Challenging (stretch) learning goals are set for each student?

2. Leadership through Strategic Resourcing - This scale includes aligning resource selection and allocation to priority teaching goals.

2. How effective is the leadership of your school in ensuring that...
   2.1. Effective teaching resources aligned to school goals are readily available?
   2.2. There is ready access to teaching and learning resources that engage students at risk of failure?
   2.3. The timetable reflects the school's priorities for teaching and learning?
   2.4. School routines maximise all students' opportunities to learn?
   2.5. Students at risk of failure get additional high quality opportunities to learn?
   2.6. There is ready access to teaching and learning resources that engage Maori students?
   2.7. The expertise of families/community is used in ways that serve the school's priority learning goals?
   2.8. Resources are allocated to support the development of school-home partnerships that serve student learning?
3 How effective is the leadership of your school in ensuring that...

3.1. Systematic monitoring of each student’s progress occurs?
3.2. There is a school/departmental assessment plan to collect the information needed to monitor progress on priority learning goals?
3.3. Every student experiences a challenging program?
3.4. Students at risk of failure are identified early and plans made to accelerate their progress?
3.5. Discussions of student assessment data focus on the relationship between what was taught and what students learned?
3.6. *Curriculum in all learning areas includes content relevant to the identity of Maori students?*
3.7. Curriculum in all learning areas includes content relevant to diverse learners?
3.8. Rigorous feedback is given to teachers about the quality of their schemes/unit plans?
3.9. Strategies are used that maximise the engagement of all students in all classes?
3.10. There is routine discussion of the results of common tests or tasks in teaching teams, and staff uses these discussions to inform their curriculum planning?

4. Leadership through Ensuring the Quality of Teaching - This scale describes leadership through evidence-based evaluation of the quality of teachers and teaching and the provision of effective feedback and support.

4 How effective is the leadership of your school in ensuring that...

4.1. Everybody shares the responsibility for students’ academic and social learning?
4.2. Those with particular expertise are used to help other teachers in the school to develop their knowledge and skills?
4.3. There is challenge and support to improve teaching for those teachers whose students remain disengaged?
4.4. Early identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals?
4.5. Appraisal focuses on improving teaching practice and student outcomes?
4.6. Assessment data are used to improve teaching?
4.7. Students provide feedback to teachers on the effectiveness of their teaching?
4.8. Any teaching problems are discussed with a colleague with relevant expertise?
4.9. *Mandated procedures such as attestation and appraisal are used as serious opportunities for the improvement of teaching?*
5. Leadership through Promoting Collaborative Teacher Learning and Development - This scale describes leadership that promotes systematic, collaborative teacher learning that focuses on the improvement of student outcomes.

5 How effective is the leadership of your school in ensuring that...

5.1. Student achievement patterns are analysed and used to plan professional learning priorities?
5.2. There is open discussion of students' results, and teachers help each other develop more effective teaching strategies?
5.3. Adequate opportunities are provided for teachers to discuss why they might need to change their practice?
5.4. Staff meetings include serious discussions about how to improve teaching and learning?
5.5. Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues?
5.6. Decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students?
5.7. A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching?

5.8. Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners?

5.9. Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for diverse learners?

5.10. Professional development and learning is evaluated in terms of its impact on students?

6. Leadership through Ensuring a Safe and Orderly Environment - This scale describes leadership through creating a positive, safe and supportive environment for both staff and students.

6 How effective is the leadership of your school in ensuring that...

6.1. Staffs works in a safe, supportive and orderly environment?
6.2. Staff views about the school culture and how to improve it are taken seriously?
6.3. Problems between teachers and students are resolved in a fair and timely way?
6.4. Problems between teachers and parents are resolved in a fair and timely way?
6.5. There is a consistent school-wide approach to student behaviour management?
6.6. Timely support with student behaviour issues is given to staff?
6.7. Student views about the school culture and how to improve it are taken seriously?
6.8. The school is a positive environment in which student learning is the central focus?
6.9. There is regular monitoring of the extent to which students feel safe at school?
6.10. The school is a positive environment for everyone, whatever their culture?
### Demographic Details (Principal)

<table>
<thead>
<tr>
<th>1. Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="male.png" alt="Male" /></td>
<td><img src="female.png" alt="Female" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Years of teaching prior to principalship</th>
<th>Less than 2 Yrs.</th>
<th>2 - 5 Yrs.</th>
<th>5 - 10 Yrs.</th>
<th>More than 10 Yrs.</th>
<th>More than 15 Yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="l2yrs.png" alt="Less than 2 Yrs." /></td>
<td><img src="25yrs.png" alt="2 - 5 Yrs." /></td>
<td><img src="510yrs.png" alt="5 - 10 Yrs." /></td>
<td><img src="mt10yrs.png" alt="More than 10 Yrs." /></td>
<td><img src="mt15yrs.png" alt="More than 15 Yrs." /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Years’ experience as principal</th>
<th>Less than 2 Yrs.</th>
<th>2 - 5 Yrs.</th>
<th>5 - 10 Yrs.</th>
<th>More than 10 Yrs.</th>
<th>More than 15 Yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="l2yrs.png" alt="Less than 2 Yrs." /></td>
<td><img src="25yrs.png" alt="2 - 5 Yrs." /></td>
<td><img src="510yrs.png" alt="5 - 10 Yrs." /></td>
<td><img src="mt10yrs.png" alt="More than 10 Yrs." /></td>
<td><img src="mt15yrs.png" alt="More than 15 Yrs." /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Years at current school</th>
<th>Less than 2 Yrs.</th>
<th>2 - 5 Yrs.</th>
<th>5 - 10 Yrs.</th>
<th>More than 10 Yrs.</th>
<th>More than 15 Yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="l2yrs.png" alt="Less than 2 Yrs." /></td>
<td><img src="25yrs.png" alt="2 - 5 Yrs." /></td>
<td><img src="510yrs.png" alt="5 - 10 Yrs." /></td>
<td><img src="mt10yrs.png" alt="More than 10 Yrs." /></td>
<td><img src="mt15yrs.png" alt="More than 15 Yrs." /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Highest education qualification</th>
<th>Bachelor</th>
<th>Grad Diploma</th>
<th>Masters</th>
<th>Dual Masters</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="bachelor.png" alt="Bachelor" /></td>
<td><img src="graddiploma.png" alt="Grad Diploma" /></td>
<td><img src="masters.png" alt="Masters" /></td>
<td><img src="dualmasters.png" alt="Dual Masters" /></td>
<td><img src="doctorate.png" alt="Doctorate" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. School type</th>
<th>Primary</th>
<th>Secondary</th>
<th>P-12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="primary.png" alt="Primary" /></td>
<td><img src="secondary.png" alt="Secondary" /></td>
<td><img src="p12.png" alt="P-12" /></td>
</tr>
</tbody>
</table>

| 7. School size | Less than 100 | 100 - 300 | 300 - 600 | 600 - 900 | 900+ |
|                | ![Less than 100](l100.png) | ![100 - 300](100300.png) | ![300 - 600](300600.png) | ![600 - 900](600900.png) | ![900+](900plus.png) |

<table>
<thead>
<tr>
<th>8. School (Choose from the drop down menu)</th>
<th><img src="dropdown.png" alt="Drop Down Menu" /></th>
</tr>
</thead>
</table>

This is optional but would be very helpful to the research. Absolutely anonymity is assured. All data is aggregated at the school level and system level.
# Appendix 7 – Demographic details teachers’ BCE ELP survey

## Demographic Details (Teacher)

1. **Gender**
   - Male
   - Female

2. **Teaching experience**
   - Less than 2 Yrs.
   - 2 - 5 Yrs.
   - 5 - 10 Yrs.
   - More than 10 Yrs.
   - More than 15 Yrs.

3. **Teaching experience in this school**
   - Less than 2 Yrs.
   - 2 - 5 Yrs.
   - 5 - 10 Yrs.
   - More than 10 Yrs.
   - More than 15 Yrs.

4. **Years current principal has been at the school**
   - Less than 2 Yrs.
   - 2 - 5 Yrs.
   - 5 - 10 Yrs.
   - More than 10 Yrs.
   - More than 15 Yrs.

5. **Highest education qualification**
   - Bachelor
   - Grad Diploma
   - Masters
   - Dual Masters
   - Doctorate

6. **Teaching area**
   - Primary
   - Secondary

7. **School size**
   - Less than 100
   - 100 - 300
   - 300 - 600
   - 600 - 900
   - 900+

8. **School (Choose from the drop down menu)**

   This is optional but would be very helpful to the research. Absolutely anonymity is assured. All data is aggregated at the school level and system level.
Appendix 8 - Brisbane Catholic Education Research Approval

A11.096 WB:cf ref:53
27 November 2012

Mr Ken Avenell
199 Montague Road
WEST END QLD 4101

The Brisbane Catholic Education Research Committee met on 26 November 2012 and considered your request to conduct the research project, "Principal and Teacher perspectives of Leadership Practices as indicators of school effectiveness." Approval was granted by the committee to contact principals of all schools administered by Brisbane Catholic Education seeking their involvement in the project.

Please note that participation in a project is at the discretion of each individual school principal. You will need to provide the principal of the schools you contact with a copy of this approval letter as evidence that your research request has been approved.

You are reminded that there is a requirement of all researchers to provide a full research report to this office when it is finalised.

I wish you every success in your research.

If you have any further queries, please contact me on (07) 3033 7427.

Warren Bath
Professional Officer (Governance and Policy)
Catholic Education
Archdiocese of Brisbane
Dear Dr Kliewe

I write further to the additional information provided in relation to the conditional approval granted to your application for ethical clearance for your project "NR: Principal and Teacher Perspectives of Leadership Practices as Indicators of School Effectiveness." (GU Ref No: EDN/A2/12/HREC).

This is to confirm receipt of the remaining required information, assurances or amendments to this protocol.

Consequently, I reconfirm my earlier advice that you are authorised to immediately commence this research on this basis.

The standard conditions of approval attached to our previous correspondence about this protocol continue to apply.

Regards

Ms Kristie Westerlaken
Policy Officer
Office for Research
Bray Centre, Nathan Campus
Griffith University
ph: +61 (0)7 373 58043
fax: +61 (07) 373 57994
email: k.westerlaken@griffith.edu.au
web:

Cc:

Researchers are reminded that the Griffith University Code for the Responsible Conduct of Research provides guidance to researchers in areas such as conflict of interest, authorship, storage of data, & the training of research students.

You can find further information, resources and a link to the University's Code by visiting
http://policies.griffith.edu.au/pdf/Code%20for%20the%20Responsible%20Conduct%20of%20Research.pdf

PRIVILEGED, PRIVATE AND CONFIDENTIAL
This email and any files transmitted with it are intended solely for the use of the addressee(s) and may contain information which is confidential or privileged. If you receive this email and you are not the addressee(s) [or responsible for delivery of the email to the addressee(s)], please disregard the contents of the email, delete the email and notify the author immediately.
Ken Avenell

From: Warren Bath
Sent: Tuesday, 27 November 2012 3:52 PM
To: All Principals
Subject: Research Approval Advice

Dear Principal

The Brisbane Catholic Education Research Committee has approved a research request from Mr Ken Avenell to conduct a research project titled, "Principal and Teacher perspectives of Leadership Practices as indicators of school effectiveness." Mr Avenell has identified your school as a proposed participant in this study.

You may be approached by Ken or a member of the research group relating to participation early in the new year.

All researchers have been advised that school participation in any research is always at the discretion of the school principal. All researchers have been requested to provide you with a copy of the approval letter from this office as evidence that the research project has been approved.

Should you have any queries, please feel free to contact me.

Kind regards.

Warren Bath | Professional Officer (Governance and Policy)
Office of the Executive Director
Brisbane Catholic Education Office
243 Gladstone Road, Dutton Park | GPO Box 1201, Brisbane Q 4001
p. (07) 3033 7427 | f. (07) 3846 7897 | e. wbath@bce.catholic.edu.au

Teaching Challenging Transforming
Appendix 11 - Individual email to principals with request for research assistance

Ken Avenell

Subject: Request for research assistance
Attachments: 53 Ken Avenell Griffith approval.pdf

From: Ken Avenell
Sent: Tuesday, 28 May 2013 8:34 PM
To: 
Subject: Request for research assistance

Dear Principals,

I am seeking to anonymously gather perceptions regarding the presence of leadership practices across schools. The web-based survey will be managed through the Griffith University Survey Research Centre and is supervised by Professor Neil Dempster, Associate Professor Howard Middleton and Dr Helen Klieve. I believe the research will be very useful to our school leaders in identifying what works in schools.

With the permission of individual principals, I would like in the near future to send an email to each school principal and every full time continuing teacher in the Archdiocese asking for their participation. The email will provide information on the study and assure anonymity and that respondents would not be compromised in any way. The 45 questions of the survey will take about ten minutes to complete.

In order to do so I require both your permission and a list of all current teaching staff. I have endeavoured to obtain staff lists from K-Web, however I am finding it quite inaccurate and I don’t want to spam everybody.

Could I please ask for your forbearance in providing the names of those teaching staff (including school leaders) currently on active duty at school in Term 2. I would not require staff on any form of paid or unpaid leave. I am happy to receive this information in any format convenient to you.

My intention is to leave the survey open for the last 2 weeks of Term Two, the 2 weeks of the Winter Holidays and the 2 weeks back into Term Three so that staff will opportunity to complete it without feeling overwhelmed. I have enclosed a copy of the approval for this survey.

Thank you, and please do not hesitate to contact me should you require any further information.

Yours in Education,

Ken Avenell.
Appendix 12 – Individual email request to teachers in participating schools for research assistance

Letter to Participants

Dear [Name]

Doctoral Research Project – Leadership and School Performance

My name is Ken Avenell, a doctoral student at Griffith University. You may know me from my role in Brisbane Catholic Education where I am manager of Professional Learning and Leadership Development. I am writing to you in a private capacity as a student wishing to carry out research on leadership and school performance.

This academic interest has developed out of my work where I am trying to verify good practice in schools and share it in order to help all schools. The research seeks to gather perceptions with regards to the presence of leadership practices in schools and whether there is a relationship to school performance.

Identification of leadership practices will be through a web-based survey.

Discernment of school performance will be a combination of Naplan data compared across ‘like schools’ to simply ascertain whether a respective school is doing better than expected within their socio-economic band. The expert judgement of area supervisors will be used to assist in this discernment.

The web-based survey will comprise of two separate parts:

1. Demographics data which includes optional identification of the school for all participants
2. Thirty nine questions which will be answered by placing a mark on a scale as well as six questions where you may provide comment if desired.

The survey will be managed through the Griffith University Survey Research Centre which has developed a Lime-Survey web-based solution for researchers within the university.

In the near future emails will be sent to each school principal and every full time continuing teacher in the Archdiocese asking for their participation via the Griffith web-based survey. The email will again provide information on the study and assure anonymity and that respondents would not be compromised in anyway.

The 45 questions of the survey will take about ten minutes to complete.

The study is supervised by Professor Neil Dempster, Associate Professor Howard Middleton and Dr Helen Klieve. Please feel free to seek further clarification as needed.

Yours Sincerely

Ken Avenell

07 3033 7466
0418 713 861
kavenell@bne.catholic.edu.au
Ken Avenell

Subject: Leadership Practices Survey

From: Ken Avenell
Sent: Wednesday, 5 June 2013 1:59 PM
To: [Redacted]
Subject: Leadership Practices Survey

Dear [First Name],

you have received a previous email advising of a forthcoming request to participate in this Doctoral research through Griffith University.

My name is Ken Avenell a member of Catholic Education and also a doctoral student at Griffith University. I seek your anonymous assistance in carrying out research through the Griffith University Survey Research Centre. **When complete, this research will be useful to our leaders, our schools, our staff and the learning of our children.**

Although we are asking you for your perceptions and demographic data, your responses will be de-identified and aggregated. The research seeks to anonymously gather perceptions regarding the presence of leadership practices in schools. The web-based survey will comprise of two separate parts:

1. Demographics data which includes optional identification of the school for all participants
2. Thirty nine questions which are answered by placing a mark on a scale as well as six questions where you may provide comment if desired.

The 45 questions of the survey will take about ten minutes to complete. Your participation is taken as your given permission for your responses to be used in the research.

The study is supervised by Dr Helen Kliese (h.kliese@griffith.edu.au); Associate Professor Howard Middleton (h.middleton@griffith.edu.au); and Professor Neil Dempster (n.dempster@griffith.edu.au).

If you wish to know more about the research or are having difficulty in completing the survey, please contact Ken Avenell. If you have any concerns about the ethical conduct of this study please contact the Griffith University Human Research Ethics Committee on (07) 3735 5585 or research-ethics@griffith.edu.au citing protocol number EDN/A2/12/HREC. At the conclusion of the research, a summary of the results will be posted in the public announcements section of the BCE Kweb for all staff to peruse.

**Please read the following instructions carefully before you start the survey.**

- This survey is designed to capture perceptions of aspects of leadership. Leadership includes Principal, AP, APRE, DP’s, Heads and PAR’s.
- Most sections in this survey ask you to note the presence of leadership behaviours across a series of frequency indicators.
- At the end of each section you are invited to describe or comment on this section in detail.
- Please answer each question in terms of your own experience and knowledge.
- You can omit any question where you think you have no experience or knowledge.
- Once the survey has commenced individual participants can discontinue their participation at any time with impunity.
- All teacher response data is aggregated and cannot be used to identify individuals.
Appendix 13 - Individual email to staff in participating schools with research link

- The questions about demographic data are not used in individual reports. This information is only needed for research analysis to provide a high-level picture. Before any data is used, all features that could identify an individual are removed.
- There are 45 questions and the survey takes about ten minutes to complete.
- At the end of the survey a review page allows you to look back and change your responses if you wish.

When ready to commence the survey, please click on the link below:

Educational Leadership Practices Survey

Yours in Education,

Ken Avenell.

Ken Avenell | Manager Professional Learning and Leadership Development
Employee Services Directorate
Brisbane Catholic Education Office
139 Montague Rd, West End | GPO Box 1201, Brisbane Q 4001
p. (07) 3333 7400 | m. 0418 713 861 | f. (07) 3844 5101 | e. kavenell@bne.catholic.edu.au

Teaching Challenging Transforming
Subject: Leadership Practices Survey Reminder

From: Sue Martin  On Behalf Of Ken Avenell
Sent: Sunday, 14 July 2013 10:17 AM
To: Sharon Wharton
Subject: Leadership Practices Survey Reminder

Dear [First Name],

I recently contacted you, seeking your participation in a survey. This survey will support my doctoral studies at Griffith University. I seek your anonymous assistance in carrying out research through the Griffith University Survey Research Centre. When complete, this research will be useful to our leaders, our schools, our staff and the learning of our children.

If you have already completed the survey, then please disregard this email. However, if you have not yet completed the survey, I ask that you consider participation. The survey will close on 26 July 2013.

All responses are anonymous, and cannot be identified in any way. There are 45 questions in the survey, and completion should take approximately 10 minutes.

I thank you in advance for your time and participation.

When ready to commence the survey, please click on the link below:

Educational Leadership Practices Survey

Yours in Education

Ken Avenell
Appendix 15 - Reliability validation of each of the respective ELP scales

Scale One: Establishing Goals and Expectations

Across the five items of Scale One – Establishing Goals and Expectations, the corrected item total correlation ranged from 0.665 to 0.762 giving a Cronbach alpha of 0.873. Factor analysis determined that the five subscales addressed only one factor which was identified as explaining 66.6% of the variation. See Table below - Establishing Goals and Expectations - Reliability Statistics. In essence, it is statistically defensible and valid to merge the five subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Establishing Goals and Expectations - Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Item-Total Correlation</td>
</tr>
<tr>
<td>1. Long term goals clearly communicated</td>
</tr>
<tr>
<td>2. Long term goals set high expectations for students</td>
</tr>
<tr>
<td>3. Evaluation of progress towards student targets</td>
</tr>
<tr>
<td>4. Expected to cater for ‘at risk’ students</td>
</tr>
<tr>
<td>5. Students set challenging and achievable goals</td>
</tr>
<tr>
<td>n = 1,584 valid, 28 excluded, total 1,612</td>
</tr>
</tbody>
</table>

Cronbach alpha 0.873

Scale Two: Resourcing Strategically

Across the six items of Scale Two – Resourcing Strategically, the corrected item total correlation ranged from 0.698 to 0.763 giving a Cronbach alpha of 0.897. Factor analysis determined that the six subscales addressed only one factor which was identified as explaining 66.2% of the variation. See Table below - Resourcing Strategically - Reliability Statistics. In essence, it is statistically defensible and valid to merge the six subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Resourcing Strategically - Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Item-Total Correlation</td>
</tr>
<tr>
<td>1. Teaching resources aligned to school goals</td>
</tr>
<tr>
<td>2. Ready resources for ‘at risk’ students</td>
</tr>
<tr>
<td>3. Timetable reflects teaching and learning priorities</td>
</tr>
<tr>
<td>4. Routines maximise student learning opportunities</td>
</tr>
<tr>
<td>5. At risk students get extra learning opportunity</td>
</tr>
<tr>
<td>6. Resources support home school partnerships</td>
</tr>
<tr>
<td>n = 1,492 valid, 120 excluded, total 1,612</td>
</tr>
</tbody>
</table>

Cronbach alpha 0.897

pg. 302
Appendix 15 - Reliability validation of each of the respective ELP scales

Scale Three: Ensuring Curriculum Quality
Across the eight items of Scale Three – Ensuring Curriculum Quality the corrected item total correlation ranged from 0.685 to 0.774 giving a Cronbach alpha of 0.912. Factor analysis determined that the eight subscales addressed only one factor which was identified as explaining 63.0 % of the variation. See Table below - Ensuring Curriculum Quality – Reliability Statistics. In essence, it is statistically defensible and valid to merge the eight subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Ensuring Curriculum Quality – Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Item-Total Correlation</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>1. Systematic monitoring of student progress occurs</td>
</tr>
<tr>
<td>2. School assessment plan aligned to learning goals</td>
</tr>
<tr>
<td>3. Every student has a challenging program</td>
</tr>
<tr>
<td>4. At risk students identified early and supported</td>
</tr>
<tr>
<td>5. Curriculum includes diverse learners</td>
</tr>
<tr>
<td>6. Rigorous feedback given about teacher planning</td>
</tr>
<tr>
<td>7. Strategies to maximise student engagement</td>
</tr>
<tr>
<td>8. Routine data discussion informs planning</td>
</tr>
<tr>
<td>n = 1432 valid, 180 excluded, total 1612</td>
</tr>
</tbody>
</table>

Scale Four – Ensuring Quality Teaching
Across the six items of Scale Four – Ensuring Quality Teaching the corrected item total correlation ranged from 0.688 to 0.843 giving a Cronbach alpha of 0.923. Factor analysis determined that the six subscales addressed only one factor which was identified as explaining 72.2 % of the variation. See Table below - Ensuring Quality Teaching – Reliability Statistics. In essence, it is statistically defensible and valid to merge the six subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Table ?? - Ensuring Quality Teaching – Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Item-Total Correlation</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>1. All staff share responsibility for student learning</td>
</tr>
<tr>
<td>2. Teachers with expertise help other teachers</td>
</tr>
<tr>
<td>3. Teachers are helped with disengaged student</td>
</tr>
<tr>
<td>4. Teachers having difficulty are helped early</td>
</tr>
<tr>
<td>5. Classroom help focuses on teaching and students</td>
</tr>
<tr>
<td>6. Assessment data are used to improve teaching</td>
</tr>
<tr>
<td>n = 1,443 valid, 169 excluded, total 1,612</td>
</tr>
</tbody>
</table>

pg. 303
Appendix 15 - Reliability validation of each of the respective ELP scales

Scale Five - Promoting Teacher Professional Learning and Development
Across the seven items of Promoting Teacher Professional Learning and Development the corrected item total correlation ranged from 0.680 to 0.800 giving a Cronbach alpha of 0.914. Factor analysis determined that the seven subscales addressed only one factor which was identified as explaining 66.4% of the variation. See Table below - Promoting Teacher Professional Learning and Development – Reliability Statistics. In essence, it is statistically defensible and valid to merge the seven subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student achievement informs teacher PL</td>
<td>.714</td>
</tr>
<tr>
<td>2. Teachers discuss student results to help each other</td>
<td>.763</td>
</tr>
<tr>
<td>3. Staff meetings discuss teaching and learning</td>
<td>.730</td>
</tr>
<tr>
<td>4. Teachers observe each other teach</td>
<td>.717</td>
</tr>
<tr>
<td>5. Teaching changes through student evidence</td>
<td>.800</td>
</tr>
<tr>
<td>6. Teachers evaluate their teaching effectiveness</td>
<td>.777</td>
</tr>
<tr>
<td>7. PL enables quality teaching for all students</td>
<td>.680</td>
</tr>
<tr>
<td>n = 1,414 valid, 198 excluded, total 1,612</td>
<td>Cronbach alpha 0.914</td>
</tr>
</tbody>
</table>

Scale Six – Ensuring Safe and Orderly Environment
Across the eight items of Scale Six – Ensuring Safe and Orderly Environment the corrected item total correlation ranged from 0.658 to 0.809 giving a Cronbach alpha of 0.930. Factor analysis determined that the eight subscales addressed only one factor which was identified as explaining 68.2% of the variation. See Table below - Ensuring Safe and Orderly Environment – Reliability Statistics. In essence, it is statistically defensible and valid to merge the eight subscale items and treat the scale as a single item with a single mean for the scale.

<table>
<thead>
<tr>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work environment is safe and supportive</td>
<td>.790</td>
</tr>
<tr>
<td>2. Staff views about culture taken seriously</td>
<td>.795</td>
</tr>
<tr>
<td>3. Teacher-student problems resolved fast and fair</td>
<td>.809</td>
</tr>
<tr>
<td>4. Teacher-parent problems resolved fast and fair</td>
<td>.801</td>
</tr>
<tr>
<td>5. Consistent school wide behaviour management</td>
<td>.686</td>
</tr>
<tr>
<td>6. Positive environment focuses on learning</td>
<td>.786</td>
</tr>
<tr>
<td>7. Regular monitoring of student safety</td>
<td>.658</td>
</tr>
<tr>
<td>8. School is positive environment for all</td>
<td>.798</td>
</tr>
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### Appendix 18 - Means of schools against performance levels

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**Legend:**
- Above Expectations: Green
- Below Expectations: Red
- At Expectations: Orange

**Notes:**
- The table above shows the means of schools against performance levels for each expectation level.
- The values are likely to represent scores or metrics relevant to educational performance.

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## Appendix 18 - Means of schools against performance levels

<table>
<thead>
<tr>
<th>School</th>
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Range 1.79  Range 2.19  Range 2.06  Range 2.58  Range 2.42  Range 1.87
### Teacher and Principal Variance across Leadership Subscales

<table>
<thead>
<tr>
<th>Establishing Goals and Expectations</th>
<th>Chi Sq df</th>
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<tr>
<td>1. Long term goals are clearly communicated</td>
<td>0.159 ns</td>
</tr>
<tr>
<td>2. Long term goals set high expectations for students</td>
<td>0.039 *</td>
</tr>
<tr>
<td>3. Evaluation of progress towards student targets</td>
<td>0.749 ns</td>
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<tr>
<td>4. Expected to cater for ‘at risk’ students</td>
<td>0.184 ns</td>
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<tr>
<td>5. Students are set challenging and achievable goals</td>
<td>0.828 ns</td>
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<tr>
<th>Resourcing Strategically</th>
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<tbody>
<tr>
<td>1. Teaching resources aligned to school goals</td>
<td>0.353 ns</td>
</tr>
<tr>
<td>2. Ready resources for ‘at risk’ students</td>
<td>0.107 ns</td>
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<tr>
<td>3. Timetable reflects teaching and learning priorities</td>
<td>0.006 **</td>
</tr>
<tr>
<td>4. Routines maximise student learning opportunities</td>
<td>0.012 *</td>
</tr>
<tr>
<td>5. At risk students get extra learning opportunity</td>
<td>0.042 *</td>
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<tr>
<td>6. Resources support home school partnerships</td>
<td>0.149 ns</td>
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<table>
<thead>
<tr>
<th>Ensuring Curriculum Quality</th>
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<tbody>
<tr>
<td>1. Systematic monitoring of student progress occurs</td>
<td>0.304 ns</td>
</tr>
<tr>
<td>2. School assessment plan aligned to learning goals</td>
<td>0.030 *</td>
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<tr>
<td>3. Every student has a challenging program</td>
<td>0.004 **</td>
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<tr>
<td>4. ‘At risk’ students identified early and supported</td>
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<tr>
<td>5. Curriculum includes diverse learners</td>
<td>0.212 ns</td>
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<tr>
<td>6. Rigorous feedback given about teacher planning</td>
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<tr>
<td>7. Strategies to maximise student engagement</td>
<td>0.001 ***</td>
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<tr>
<td>8. Routine data discussion informs planning</td>
<td>0.096 ns</td>
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</table>

<table>
<thead>
<tr>
<th>Ensure Teacher Quality</th>
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<tbody>
<tr>
<td>1. All staff share responsibility for student learning</td>
<td>0.024 *</td>
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<tr>
<td>2. Teachers with expertise help other teachers</td>
<td>0.038 *</td>
</tr>
<tr>
<td>3. Teachers are helped with disengaged students</td>
<td>0.020 *</td>
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<tr>
<td>4. Teacher having difficulty are help early</td>
<td>0.011 *</td>
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<tr>
<td>5. Classroom help focusses on teaching and students</td>
<td>0.001 ***</td>
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<tr>
<td>6. Assessment data are used to improve teaching</td>
<td>0.016 *</td>
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<table>
<thead>
<tr>
<th>Promoting Teacher Professional Learning and Development</th>
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<tr>
<td>1. Student achievement informs teacher PL</td>
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<tr>
<td>2. Teachers discuss student results to help each other</td>
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<tr>
<td>3. Staff meetings discuss teaching and learning</td>
<td>0.005 **</td>
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<tr>
<td>4. Teachers observe each other teach</td>
<td>0.119 ns</td>
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<tr>
<td>5. Teaching changes through student evidence</td>
<td>0.112 ns</td>
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<tr>
<td>6. Teachers evaluate their teaching effectiveness</td>
<td>0.108 ns</td>
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<tr>
<td>7. PL enables quality teaching for all students</td>
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<thead>
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<tbody>
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<td>1. Work environment is safe and supportive</td>
<td>0.143 ns</td>
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<tr>
<td>2. Staff views about culture taken seriously</td>
<td>0.002 **</td>
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<tr>
<td>3. Teacher-student problems resolved fast and fair</td>
<td>0.093 *</td>
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<tr>
<td>4. Teacher-parent problems resolved fast and fair</td>
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<tr>
<td>5. Consistent school wide behaviour management</td>
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<tr>
<td>6. Positive environment focuses on learning</td>
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<tr>
<td>7. Regular monitoring of student safety</td>
<td>0.410 ns</td>
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<td>8. School is positive environment for all</td>
<td>0.198 ns</td>
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ns = not significant; * = significant; ** = very significant; *** = extremely significant