COLLABORATIVE PROFESSIONAL LEARNING: Investigating Impact and Sustainability

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Statement of Originality

I, Lorraine Ann Beveridge, hereby certify that:

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository**, subject to the provisions of the Copyright Act 1968.

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Abstract

This thesis examines the sustainability of collaborative professional learning in schools and its reported impact on teacher dispositions and school culture. Existing research has considered how teacher professional learning is sustained in the short term, but less attention has been paid to longer-term sustainability. One of the most vexing, lingering issues in the field of education is how meaningful educational change can be sustained such that teacher quality is ensured and impact on student learning is maximised.

This work investigates a significant funded professional learning project in NSW government schools from 2006 to 2010. The particular project, *Quality Teaching Action Learning*, focused on improving teacher quality through the implementation of the NSW model of pedagogy and action learning, with a dual emphasis on both process and content.

The study consisted of an initial survey sent to the 160 schools that received project funding during the time period specified and designed to inform the selection of cases; and multiple case studies that involved interviews, observations, and document studies in four case study schools.

Results of the study were classified under three broad areas. The first of these related to school culture. Schools where there existed high levels of collaboration, professional trust, and shared practice, were more likely to sustain changes associated with collaborative professional learning. Second, where school infrastructure was in place to support sustainability, including time, funding, and other enabling conditions, learning
was more likely to be sustained. Third, in those schools where learning was sustained and professional learning communities were established, leadership was distributed and the group shared a collective theoretical understanding and language with which to reflect on their practice. Learning in this instance was focused on improving student outcomes.

This research resulted in the development of a framework which identifies factors that sustain professional learning over the longer term, all of which relate to building school capacity. The study contributes to a growing body of research on collaborative professional learning, increasingly considered as a “cornerstone” of school improvement and reform.
Chapter 1: Introduction

Change in education is easy to propose, hard to implement and extraordinarily difficult to sustain.

— Hargreaves and Fink (2006, p. 1)

Research context

Education systems and governments, through a steady barrage of policies and reports, have placed a high priority on teachers continually learning and improving their skills and knowledge. By engaging in ongoing professional learning, it is argued that teachers are better prepared to meet the challenges of teaching in the twenty-first century (Chong & Kong, 2012; Heppell, 2011; Wei, Darling-Hammond, Andre, Richardson, & Orphanos, 2009).

However, as a profession we still know little about what sustains teacher professional learning in schools, particularly in the longer term. Research has outlined factors that might sustain learning over the short term, with the majority of these considering effects around six months following an intervention (Aubusson, Brady, & Dinham, 2005; Hoban, Herrington, Ewing, Kervin, Anderson, & Smith, 2005; Ingvarson, 2005), while less attention has been paid to longer-term sustainability (Barber, 2005; Wright, Konza, Hearne, & Okely, 2008). In fact, one of the most enduring issues in the field of education is how meaningful educational change can be sustained such that teacher quality is ensured and impact on student learning is maximised.
This research addresses the compelling issue of achieving and maintaining effective change associated with professional learning in schools. The problem I set out to investigate was the impact of schools’ involvement in collaborative professional learning on teachers’ dispositions and school learning culture, and the degree to which any identified changes are sustained over the longer term. With prior research predominantly focused on the short-term impact of the sustainability of professional learning initiatives, and less emphasis placed on the longer term, a gap exists in the current literature which this study attempts to address.

**Rationale, aims and research focus**

The title of this thesis is *Collaborative Professional Learning: Investigating Impact and Sustainability*. In the context of substantial attention being paid to the issue of “teacher quality” on a national and global level, as well as significant government investment, this study explores the process and substance of collaborative professional learning to determine whether any reported changes can be sustained over the longer term.

The study aims to contribute to a critical understanding of the sustainability of professional learning. Findings will be shared with schools and education systems in relation to how collaborative professional learning can be effectively designed, implemented, and supported in schools.

**Defining key terms**

For the purposes of this study, “collaborative professional learning” is defined as professional learning activities that involve teachers working together in groups with the aim of progressing their practice. Collaborative professional learning encompasses a
A wide range of practices including mentoring, peer coaching, critical friends, action learning, action research, and lesson study (Duncombe & Armour, 2004). The “longer term” is defined as a period from two to seven years following the cessation of specific professional learning project funding. I define “impact” as reported changes in teacher practices, beliefs, and/or classroom practice which link with teachers’ involvement in specific professional learning activities (Loucks-Horsley, Stiles, Mundry, Love, & Hewson, 2010). I follow Aubusson, Ewing and Hoban (2009), Hargreaves and Fink (2006), and Fullan (2005) in defining “sustainability” as the continuation of policies and practices that were implemented during a prior reform initiative, to include the conditions that are evident in schools which support this. Additionally, I define teacher dispositions as those deeply held beliefs based on teachers’ personal and professional histories that guide behaviour (Thornton, 2006; Sunley & Locke, 2009; Borko, Liston & Whitcomb, 2007).

**Research questions**

The major research question relates to whether participation in collaborative professional learning impacts on teacher dispositions, teaching practice, and school culture:

In what ways, if any, does participation in collaborative professional learning projects contribute to sustained changes in teacher dispositions and school professional learning culture?

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1 Following on from the work of Senge (1990) and Costa and Kallick (1993), a “critical friend” is defined as a trusted external person who actively listens, asks clarifying questions, and seeks to deeply understand in order to assist learners in viewing their work from multiple perspectives, with a view to improvement.
Three subsidiary questions guided the investigation of the major research question in this study. These were:

1. In what ways do collaborative professional learning projects impact upon teachers’ dispositions in relation to:
   - professional learning and collaboration;
   - classroom teaching practice; and
   - whole-school professional learning practices?

2. In what ways do schools’ involvement in collaborative professional learning projects impact upon professional learning culture, in terms of:
   - the approaches to and processes of professional learning; and
   - the ways in which teachers’ work and professional learning are organised?

3. If there is evidence of change in either 1 or 2 above, what indication is there that those changes have been embedded, sustained and/or modified over time?

**Research significance**

The question of the sustainability of teacher professional learning has been addressed in prior research studies in terms of short-term sustainability, but to a lesser degree in terms of longer-term sustainability. This study is premised on the view that sustainability needs to be examined over a longer period in order to clearly identify the enabling conditions that are in place in schools where changes associated with professional learning have been adopted and sustained.
Underpinning the question of what sustains professional learning over the longer term is the acknowledgement that professional learning is seen as a “cornerstone” of school reform (Cameron, Mulholland, & Branson, 2013; NSW Department of Education and Training [NSW DET], 2009), and as such attracts significant, ongoing government funding. The Commonwealth Government continues to allocate large sums of time and money for major reforms in professional learning and teacher development, as seen in the “Quality Teaching Action Learning (QTAL) Project”, which was a small part of the wider Australian Government Quality Teacher Program (AGQTP) between 2003 and 2010. Action learning was the inquiry-based method used for collaborative professional learning within the QTAL project, and focused on improving the skills and knowledge of teachers with reference to the Quality Teaching model (NSW DET, 2003c).

From 2003 to 2010, 193 government primary and secondary schools participated in the project, with a budget of around $3 million (Groundwater-Smith, Mitchell, Mockler, Ponte, & Ronnerman, 2012). Although QTAL funding was available to participating schools from 2003, only the 160 schools that received funding from 2006 onwards were included in the study. The sample was limited in this way so as the collective knowledge and experience of teachers in schools—sometimes referred to as “corporate memory”—may not have been readily available prior to that time. This may have possibly been due to staff mobility. The factor of staff mobility has been identified previously as having the potential to undermine the sustainability of reforms (Florian, 2000; Fullan, 2007; Goldberg, 2000). QTAL funding was meant to cease in 2009 but additional funding was provided to schools in the 2009 cohort, and the program was extended to 2010. This timeframe defines the boundaries of the research.
QTAL evaluative studies

A number of evaluative studies were commissioned by the New South Wales Department of Education and Training, as it was previously known, in relation to the QTAL project funding (Aubusson et al., 2005; Ewing et al., 2010; Ewing et al., 2004; Hoban et al., 2005), with a range of different emphases. The first evaluative study, *Teachers as Learners* (Ewing et al., 2004) reviewed 50 QTAL projects in NSW government schools which received funding during 2003 and 2004. Data for the evaluations included final project reports, case studies, and school visits. Academic partners were also interviewed as part of this evaluation.

Findings of the Ewing et al. (2004) study indicated that the results of projects varied considerably. Those projects which appeared to be the more successful were characterised by schools that had a history of positive involvement with previous school-based change projects, staff working collaboratively in teams to achieve locally identified outcomes, and a school culture focused on individual as well as collective teacher learning. Supportive, distributed leadership was also an identified factor in successful school projects, as was flexibility in the design and implementation of professional learning activities which best suited the particular needs of individual schools. Although the study by Ewing et al. (2004) focused on the first round of the QTAL funding (2003 to 2004) as opposed to the later rounds on which the current study is focused, the findings are relevant as they identify the characteristics of the successful projects at that time.

Additionally, although their findings concluded that action learning was “a useful professional learning model to generate learning and reflection” (p. 29), which concurs with the wider literature (Dinham et al., 2008; Fletcher, 2005; McCormack et al., 2006;
In contrast, a second QTAL evaluative study that followed (Hoban et al., 2005) did address the question of sustainability, six months following the cessation of QTAL project funding. As with the Ewing et al. (2004) review, this second evaluation also examined the QTAL project prior to the timeframe addressed in my study. A mixed-mode methodology was employed, incorporating a survey in conjunction with follow-up qualitative data gathering. Thirteen case study schools were included in the evaluative study. Hoban et al. (2005) identified that schools sustained their professional learning in different ways and to varying degrees. Some schools focused on the Quality Teaching framework; others focused on action learning. A third group of schools focused on both the content of the NSW Quality Teaching framework and the action learning process in their projects.

A model that identified factors which sustain professional learning was included in the evaluation of QTAL undertaken by Hoban et al. (2005), as outlined above. The model classified factors under three main headings, these being workplace conditions, process, and content. The workplace conditions identified in Hoban’s research were leadership, antecedents which he defines as previous involvement in successful change projects, as well as a supportive school culture, funding, and time to release teachers to work together and jointly plan and reflect on practice. The process factors that sustained learning, as identified in the Hoban study, were those which were involved in action learning: reflecting, sharing, action, planning, questioning, observing, and facilitating. The third broad area identified in the Hoban et al. (2005) evaluation of QTAL included content factors. As with later iterations of QTAL, the initial content was the
implementation of the Quality Teaching framework, in addition to a locally identified project focus.

Factors that inhibited sustainability, as identified by Hoban et al. (2005), were the negative attitudes of some staff who were not involved in QTAL. Although the exact cause of this negativity was thought to stem from resistance to change in relation to the Quality Teaching framework, it was also thought that there was a level of resentment in relation to the additional resources that were allocated to project teams. According to Hoban et al. (2005), sharing new knowledge across the school and keeping all staff informed of project activities contributed towards the successful scaling up of small-group learning to the remainder of the staff, and increased whole-school awareness of project activities. The importance of scaling up innovations from the small group to include all staff is widely acknowledged as being required to increase the likelihood that learning is sustained (Coburn, 2003; Cohen & Ball, 2000; Marrongelle, Sztajn, & Smith, 2013).

Similarities are evident in the findings of the aforementioned evaluative study of QTAL (Hoban et al., 2005) in relation to factors that sustain learning and Newmann’s work on factors influencing school capacity and student achievement (Newmann & Associates, 1996; Newmann et al., 2000; Newmann et al., 1995; Newmann & Wehlage, 2005), particularly in relation to the importance of leadership, professional community, and resources that support professional learning and teachers’ knowledge, skills, and dispositions. The work of Newmann et al. on building school capacity forms a major theoretical underpinning of this study, and is further outlined in Chapter Three.
A quantitative study that evaluated four prior studies of professional learning projects under the umbrella of the Australian Government Quality Teacher Program, of which QTAL was a small part, was undertaken by Ingvarson et al. (2005) for the Australian Council of Educational Research. Regression analysis was used in this study to determine the impact of professional learning programs on teacher learning, and results indicated that process variables had a large effect on individual program outcomes. Additionally, a focus on content was identified by Ingvarson et al. as having a positive impact on teacher learning across all four studies. In other words, teachers learned more when the content of the professional learning supported their daily classroom work. Consistent with findings by Ewing et al. (2004) and Hoban et al. (2005), the importance of time for teachers to jointly plan and provide collegial feedback when trialling new skills was also reported by Ingvarson et al. (2005). Teachers were surveyed three months after participation in professional learning projects, which links with the focus of my study, both in relation to sustainability and the impact of professional learning projects on teacher learning. An evaluation of action learning in QTAL was also commissioned by the New South Wales Department of Education and Training in 2005, which provided further evidence of the usefulness of action learning for facilitating ongoing change in teachers’ practice (Aubusson et al., 2005).

The final evaluation of QTAL was a meta-analysis of QTAL project funding from 2003 to 2009 (Ewing et al., 2010), although schools in this group did receive additional project funding in 2010 to extend their projects. The study identified a number of enablers of sustained, school-based change in QTAL, some of which had been identified in previous evaluative studies. It was found that QTAL was an integrated school-based model for professional learning using action learning processes, with potential for significant pedagogical and school cultural change. However, this study
found little evidence of sustainability of changes initiated by QTAL, and it was therefore concluded that this issue required further research.

While there have been a number of prior studies directly oriented at evaluating QTAL projects as outlined above, none have systematically investigated its impact beyond the short term of six months, or examined QTAL as a means of investigating the broader question of the sustainability of collaborative professional learning in schools over the longer term. Commissioned evaluative studies have examined the short-term impact and sustainability of teacher professional learning (Atelier Learning Solutions, 2005; Ewing et al., 2010; Ewing et al., 2004; Ingvarson et al., 2005), and found that action learning in QTAL (Bettison, 2003) positively impacted on teacher professional learning in the short term. My research builds on what is already known regarding the sustainability of QTAL in the short term and aims to further investigate evidence of sustainability in the longer term, from two to seven years following the cessation of QTAL funding.

It is hypothesised that schools’ engagement with forms of collaborative professional learning, like action learning, can build individual and school capacity for improvement by helping teachers to better understand their practice through reflection and action, which leads to improved student learning in a potentially transformative cycle (Aubusson et al., 2009; Bruce et al., 2010; Chou, 2011). Further details of previous QTAL evaluative studies are outlined in Appendix 1.

QTAL is one example of a professional learning project that was based on what is identified in the literature to be effective professional learning principles. QTAL was collaborative: teachers worked in groups to improve their practice with a clear focus on improving student learning. They planned their projects using an action learning
process, based on their identified school needs. Learning was cyclic and ongoing. The Quality Teaching framework, “a system-wide pedagogical initiative” (Gore & Ladwig, 2006, p. 3), was used by teachers to improve the quality of the teaching in their classrooms and to provide collegial feedback to peers in relation to their practice (NSW DET, 2003b).

The Quality Teaching framework has its intellectual origins in the esteemed work of Newmann and Associates (1996) on “authentic achievement”, and related work on building school capacity (Newmann, King, & Youngs, 2000). The Quality Teaching framework is a pedagogical framework, introduced in NSW public schools in 2003. The framework comprises three dimensions and eighteen elements that are linked to improved student outcomes through a considerable body of research (NSW DET, 2003a).

As an extension of the ongoing emphasis on teacher quality in education and its links to improving student learning, the Australian Government continues to focus on school improvement through major reform initiatives. Therefore, it is both timely and important to understand whether special programs designed to improve student learning outcomes do in fact change teacher dispositions and school professional learning culture, and whether any identified changes are sustained in the longer term.

Furthermore, the current political emphasis on school improvement targeting teacher quality has manifested in education systems which focus on professional standards and accountability measures, seen by some as a managerial discourse (Groundwater-Smith & Mockler, 2009; Kemmis, 2011; Power, 2003), with teachers possibly having limited agency to plan and implement professional learning experiences that best meet local
needs and the needs of their students. Teachers learning with and from each other in a potentially sustainable model of professional learning is an area in the literature identified as worthy of further investigation (Borko, 2004; Cameron et al., 2013; Meirink, Meijer, & Verloop, 2007).

My interest in the field of teacher professional learning stems from my own professional experiences. For the past two decades I have been curious about my own professional learning and that of others, throughout my various roles held within government primary schools across NSW, Australia. My experiences cross a wide range of practices, from one-off professional development courses that focus on specific aspects of schooling and professional learning activities delivered by visiting experts in the workplace, to working with teachers in collaborative groups with the aim of improving their individual and collective practice.

Both the literature and my own broad experience suggest that school-based approaches to professional learning, which encourage teachers to learn in collaborative groups with ongoing support, are among the more effective professional learning practices (Easton, 2008; Elmore, 2004; Wei et al., 2009). An important part of teachers learning together in a cyclic model of planning, acting, observing, and reflecting, is building positive professional relationships based on trust whereby teachers become comfortable sharing their practice and receiving feedback from their colleagues. Collaborative professional learning has the potential to link classroom practice and ongoing school improvement by increasing schools’ “capacity to engage in continuous development” (West, 2005, p. 98).
Collaboration on its own does not guarantee improved teacher or student learning. Notwithstanding the widely accepted claim that collaborative professional learning leads to improved student learning (Aubusson et al., 2009; Duncombe & Armour, 2004; Wei et al., 2009), the superiority of collaborative professional learning is contested in the literature. Bowe and Gore (2012), for example, suggest that dominant collaborative professional learning approaches can privilege group processes and relationships over substance, following Little’s (1990) view that professional learning needs to be clearly linked to student learning to sustain school improvement.

Additionally, although it is accepted that “job-embedded learning” (Fullan, 2005; Hawley & Valli, 2000) ensures that teacher learning is teachers’ everyday work (Hawley & Valli, 2000; Porter, 2011), some claim that it may be disruptive in terms of school organisation and student learning for teachers to meet during school hours to participate in collaborative professional learning (Aminudin, 2012; Wayne, Yoon, Zhu, & Cronen, 2008), and professional learning may be better timetabled outside of regular school hours.

Furthermore, without guidance, school teams may become too celebratory (Bowe & Gore, 2012; Mockler, 2013), strengthening the case for engaging some form of external assistance to support school teams in continuing their focus on specific professional learning agendas. The addition of a skilled “academic partner”, “critical friend” or knowledgeable professional, a person external to the school who facilitates teacher learning, has the potential to enrich collaborative professional learning practices, by guarding against school teams only reporting “victory narratives” (Lee, 2010, p. 17), where teams reinforce existing practices rather than address difficulties related to the adoption of change processes (Ainscow, 2005). A level of critical analysis is thus
required to embed new learning into existing practice, move knowledge forward, and sustain change (Bowe & Gore, 2012; Elmore, 2004).

The question of what sustains teacher learning has remained a puzzling issue for the education profession, and it is widely regarded that professional learning initiatives have not been particularly successful (Melbourne Graduate School of Education, 2012; Ladwig, 2014; Webster-Wright, 2010). There exists a well-documented history of schools and systems swapping and changing innovations based on a range of socio-political influences with limited success (Avalos, 2011; Boardman & Woodruff, 2004; Jones, Stanley, McNamara, & Murray, 2011).

A range of factors has been linked to sustained school change (Kilbane, 2009; Richmond & Manokore, 2011; Timperley, Wilson, Barrar, & Fung, 2007). Evidence is increasing that practices such as distributed leadership (Dinham, Aubusson, & Brady, 2008; Kennedy, Deuel, Nelson, & Slavit, 2011; King, 2011), the development of professional learning communities (DuFour, Eaker, & DuFour, 2010; Hall & Hord, 2011; Hipp, Huffman, Pankake, & Olivier, 2008), peer feedback on teaching practice (City, Elmore, Fiarmann, & Teitel, 2009; Gore, Bowe, Clement, Ellis, & Miller, 2012; Newmann et al., 2000), and supportive school cultures (Colley, 1999; Kennedy et al., 2011; Lavie, 2006) all impact on the likelihood of sustained change associated with professional learning in schools and underpin a fairly recent and widespread move towards more collaborative forms of professional learning (Dinham et al., 2008; Groundwater-Smith et al., 2012; King, 2011).

New South Wales government schools have recently moved away from a centralised finance structure and towards school-based decision making and finance management,
known as the “Resource-Based Allocation Model” or RAM (PricewaterhouseCoopers, 2013). The RAM finance model is part of Local Schools, Local Decisions, a current education reform that provides NSW public schools with increased authority to decide how best to meet the needs of their students (NSW Department of Education and Communities [NSW DEC], 2013). The RAM model provides schools with access to funding that was allocated centrally in the past, so they are now able to make funding decisions to address local issues and better align with school-based identified areas of need. Schools now have access to resources to fund locally driven professional learning initiatives, such as those embodied in projects like QTAL, should they choose to do so. QTAL may therefore provide a useful professional learning model for schools to draw on in order to address local issues.

Increased funding for teacher professional learning, along with increased accountability for the quality of teaching in schools, contributed to the implementation of a framework of professional teaching standards in 2005 by the NSW Institute of Teachers, as it was then known. The goal was to eventually accredit teachers across different stages of their careers (NSW Institute of Teachers, 2009). The standards within each stage describe teachers’ work in terms of professional knowledge, professional practice, and professional commitment. In 2011, a set of national teaching standards emerged that more closely align the various state teacher accreditation systems (Australian Institute for Teaching and School Leadership [AITSL], 2012a). The standards reinforce the relationship between professional learning and the quality of teaching in classrooms by “making explicit the elements of high quality teaching” (AITSL, 2012a). Project-based professional learning, like QTAL, potentially assists schools in addressing targeted, local school needs, while at the same time assisting teachers in meeting systems’ accreditation and accountability requirements under the national teaching standards by
accruing hours engaged in professional learning to achieve specified amounts of professional learning to be undertaken by teachers, as outlined in the *Australian Professional Standards for Teachers* (AITSL, 2012).

My study examines a particular and substantial government-funded professional learning project as an example of collaborative professional learning to determine the ways in which participation in such collaborative professional learning contributes to sustained change associated with professional learning in schools. As previously outlined, QTAL drew upon inquiry-based collaborative professional learning in the form of action learning, as well as a substantive pedagogic framework in the form of the Quality Teaching framework. The amalgamation of these two perspectives and the investigation of the teacher professional learning that resulted from schools’ participation in QTAL, up to seven years hence, is the basis of this research.

Central to the QTAL professional learning project was having teachers provide collegial feedback on each other’s practice, based on the Quality Teaching framework. In addition, they were funded to work on their projects over a considerable period of time, usually around two years. School teams were also supported in their learning by academic partners and state coordinators. QTAL had all the dimensions in place that prior research identifies as most likely to produce sustainable change. As such, the research questions previously outlined can be well addressed by investigating schools that participated in QTAL.

As outlined, the research significance of this thesis relates to the identified need to address the longer term impact and sustainability of collaborative teacher professional learning. In this thesis I argue that sustainability needs to be addressed in the longer
term in order to identify the enabling conditions in those schools where changes associated with collaborative professional learning have been adopted and sustained so that schools and systems maximise the benefits of significant sums of time and money outlaid for major reforms in professional learning and teacher development, to positively impact on student learning in schools.

Thesis overview

The following section overviews my thesis by outlining the contents of each chapter, and how the chapters cohere to address the research questions. A review of the professional learning literature in Chapter Two led to a focus on a number of areas because they are most pertinent to addressing my research questions. These areas include effective professional learning, pedagogical reform, and collaborative professional learning.

Additionally in Chapter Two, I explore professional learning communities, which are widely regarded as a powerful strategy for building teacher capacity, leading to successful and sustained school change (Chou, 2011; Darling-Hammond & Richardson, 2009; DuFour, Eaker, et al., 2010; Hipp et al., 2008; Schmoker, 2004). As noted previously, two key terms in relation to collaborative professional learning research are “impact” and “sustainability”, and these concepts set the direction for the critical analysis of the literature in Chapter Two.

In Chapter Three, I outline my theoretical framework and methodology for my study. My theoretical framework draws on the work of Newmann (Newmann & Associates, 1996; Newmann et al., 2000; Newmann, Marks, & Gamoran, 1995; Newmann & Wehlage, 2005), Fullan (Fullan, 2000, 2005, 2007, 2008, 2010; Fullan, Cuttress, &
Kilcher, 2009; Fullan & Hargraves, 1991, 1996; Fullan & Pomfret, 1977), and Hord (Hall & Hord, 2006, 2011; Hord, 2004). Teacher dispositions are examined, as well as the collective dispositions that constitute school culture and often summarised as “the way we do things around here” (Deal & Kennedy, 1982; Fullan & Hargraves, 1991; Reeves, 2009; Schuck, Aubusson, Buchanan, & Russell, 2012; Stoll, 1999). My study has been constructed as a multiple case study. An initial school survey was designed to inform the selection of cases and administered to all schools that received QTAL government funding from 2006 to 2010—a total of 160 schools. I provide a brief analysis of this initial survey data. Additionally in Chapter Three I present an overview of the case study research, which consisted of interviews, document study, and observation of professional learning meetings in case study schools.

In Chapters Four, Five, Six, and Seven, I outline the qualitative data reported in each of the case study schools, including interview data, document study and my observations of professional learning meetings. I provide “portraits” (Lightfoot, 1983) of findings in relation to collaborative school culture and the reported sustainability of reforms connected with their QTAL projects. I identify patterns in the data, comparing them with what is already known about the sustainability of professional learning. The school portraits outlined in Chapters Four, Five, Six, and Seven provide “insider glimpses”, privileging the voices of teachers to explain factors that impacted on the sustainability of collaborative professional learning in these particular schools.

In Chapter Eight, I analyse and discuss the main themes that emerged in the four case study schools and connect similarities across cases that assist in answering the research questions. In this chapter I seek evidence of the extent to which learning from QTAL was sustained in schools. I use my theoretical framework developed in Chapter Three to
draw conclusions based on the findings, as derived from the data. This chapter culminates in a summative framework that identifies factors which sustain professional learning over the longer term in schools, as revealed in this research.

Finally, in Chapter Nine, I discuss the findings in relation to my research questions, and outline the contribution of this study to the knowledge base in the field. I situate my findings in relation to the significant recent changes in education in Australia, in particular the burgeoning “performance and development” (Australian Institute for Teaching and School Leadership [AITSL], 2012b) movement, earmarked by some as an “age of compliance” (Groundwater-Smith & Mockler, 2009, p. 11) whereby the current professional learning agenda could be seen as being more focused on teacher accountability and competition rather than on support. Recent developments in education that are linked to the findings of this research include national professional standards for teachers and increased autonomy of NSW government schools to make local decisions that address local teacher and student needs.

**Summary**

In this introductory chapter I have outlined my investigation of schools’ participation in collaborative professional learning projects, after more than two years post intervention. Understanding the impact and sustainability of collaborative professional learning projects is important to inform policy and decision making in relation to individual teacher professional learning, school professional learning practices, and systems approaches to professional learning and educational change. The study aims to contribute to a critical understanding of the impact of professional learning on teacher dispositions and school culture, and the influences that sustain such learning. Findings
will add to the body of knowledge relating to how collaborative professional learning can be sustained in schools in the longer term.

Having overviewed the contents of my thesis in this chapter, in the next chapter I examine the scholarly literature related to the impact and sustainability of collaborative professional learning that I draw upon to address my research questions and synthesise the results of my research findings in later chapters.
Chapter 2: Literature Review

The following review of scholarly literature synthesises the results of research related to the impact and sustainability of collaborative professional learning. Collaborative professional learning is regarded as a form of teacher professional development that is increasingly considered as “a central component in improving education” (Guskey, 2002, p. 381). Professional development is foregrounded in most school improvement plans and policies (AITSL, 2012a; American Federation of Teachers, 2008; Department of Education Employment and Workplace Relations [DEEWR], 2010; NSW DET, 2008), because teacher quality is widely regarded as an important contributor to student achievement. The particular collaborative professional learning project investigated in this study is outlined in Chapter One. The project, QTAL, which provided funding for schools to participate in collaborative professional learning in the form of action learning, addressed identified local, school-based issues related to the Quality Teaching framework.

This chapter is organised around themes evident in the professional learning literature which relate to the impact and sustainability of collaborative professional learning, including effective professional learning, pedagogical reform, and professional learning communities. I then explore the literature in relation to the impact and sustainability of collaborative professional learning, particularly as it relates to teacher dispositions and school learning culture, as these themes link to my research questions. Finally, I identify gaps in the existing body of literature in order to locate my research within the field of teacher professional learning.
**Professional learning and related terms**

Professional learning can be, but is not always, an outcome of professional development. Some arguments put forward by teachers that professional development does not necessarily result in teacher learning are that professional development can be burdensome due to the constant pressure on teachers to move forward, resulting in professional development overload (Aubusson et al., 2009; Hargreaves & Fink, 2006; Le Fevre, 2014), professional development not being tailored to teachers’ needs (Cameron et al., 2013), and teacher concerns in relation to disruptions caused by them being absent from their regular classes, causing a degree of discomfort that negatively impacts on teacher learning (Wayne et al., 2008).

Notwithstanding these arguments which suggest that involvement in professional development does not guarantee that teachers necessarily learn from it, the differing views come about as a consequence of people having different understandings of the terms, “professional development” and “professional learning”. “Training and development”, “in-service education”, “professional development and training”, “professional development”, and “professional learning” are some of the terms used in the literature to describe approaches to teachers’ participation in professional development activities. Specific definitions are contentious. The terms “professional learning” and “professional development”, for instance, are often used interchangeably (McRae, Ainsworth, Groves, Rowland, & Zbar, 2001). Professional learning emphasises the personal career-long learning that is required for teachers to be effective in their role, while professional development is commonly used if the learning is managed at a systemic level (Kleinhenz, 2007; Kleinhenz & Ingvarson, 2004). Easton (2008) and Timperley (2011) consider professional learning as the more suitable term
because teachers need to continually learn to prepare students to live and work in an ever-changing and increasingly complex world: “It is clearer today than ever that educators need to learn, and that’s why ‘professional learning’ has replaced ‘professional development’. Developing is not enough. Educators must be knowledgeable and wise” (Easton, 2008, p. 756).

Similarly, Groundwater-Smith and Kemmis (2005) also prefer the term professional learning to professional development, because it implies that teachers own their learning and they are involved in a collective pursuit, with the aim of improving their individual and combined practice: “We prefer the term professional learning to professional development since the latter sometimes seems like something done to teachers rather than with them” (Groundwater-Smith & Kemmis, 2005, p. 165).

Irrespective of the various definitions in relation to professional development and professional learning, there is general agreement that participation in professional development is a crucial and highly beneficial facet of teachers’ professional work (Avalos, 2011; Borko, 2004), fuelled by the established link between teacher quality and improved student outcomes (Darling-Hammond, 1999; King & Newmann, 2001; Wei et al., 2009). In fact, efficacious professional development is regarded as a “cornerstone of school reform” (Cameron et al., 2013, p. 377) and a means for teachers to stay abreast of current, relentless educational change (Aminudin, 2012).

Two broad types of professional development are identifiable in the literature. These are the traditional, deficit professional development model, designed to fill gaps in teachers’ knowledge that are typically external to the school and are reported to have little impact on classroom practice (Garet, Porter, Desimone, Birman, & Yoon, 2001; Loucks-
Horsley & Matsumoto, 1999), and more recently, a growth model of professional development that moves teachers from replication of technical skills and strategies to reflection on classroom practice in which professional development is job-embedded, supported, collaborative, and extends over time (DuFour, Eaker, et al., 2010; Lieberman, 2000; Timperley, 2011). For sustained changes in teachers’ practice to occur, the latter forms of professional development are increasingly regarded as the more useful of the two (Cordingley, 2008; Fullan, 2007; Hall & Hord, 2011; Timperley, 2011), although some research evidence suggests that a wide range of professional development activities ensures that schools have a broad education platform on which to draw in order to enrich teachers’ professional learning opportunities (Corcoran, McVay, & Riordan, 2003; Guskey, 2002, 2003; Parise & Spillane, 2010). An over-reliance on traditional professional development such as external workshops and visiting experts may result in schools becoming dependent on external resources (Florian, 2000; Fullan, 2005, 2007). In contrast to this, collaborative forms of professional development increase teacher involvement and ownership and have been found to have a positive impact on sustained school improvement (DuFour, DuFour, & Eaker, 2009; DuFour, Eaker, et al., 2010; Duncombe & Armour, 2004; Hall & Hord, 2006).

Although collaborative forms of professional development aim to improve teacher performance and skills, access to external support ensures that schools have a range of educational resources available to them and that professional development meets locally identified needs. A significant review of teacher professional development in science and mathematics teaching by the Consortium for Policy Research in Education across four states in the US (Corcoran et al., 2003; Guskey, 2002), found that when professional development was mostly school-based, teachers tended not to focus on
research and activities were often similar to what they had done previously, limiting new knowledge and hindering schools from moving forward. It seems that a mix of collaborative, site-based professional development that meets locally identified needs and external professional development that provides a broad perspective on current educational issues increases the breadth and depth of professional development opportunities for teachers and schools.

While acknowledging that collaborative professional learning in which teachers set the direction and pace of learning may be more likely to facilitate sustained changes in classroom practice (Fullan, 2005, 2010; Hall & Hord, 2011; Hord, 2004; Louis, Marks, & Kruse, 1996), it also seems that a broad range of professional learning opportunities may optimise teacher learning and build collective school capacity. A two-year empirical study by Parise and Spillane (2010) across 30 urban elementary schools in the US found that both formal, traditional professional development and “on the job learning opportunities” (p. 323) positively impacted on elementary teachers’ instructional practice. Parise and Spillane (2010) reported that as collaborative, school-based professional learning was considerably more cost-effective than formal professional development and as collaborative professional learning strategies were found to be highly effective in improving the knowledge and skills of teachers, schools would benefit from allocating time for teachers to collaborate.

An extensive, worldwide review of professional learning literature by Stoll, Bolam, McMahon, Wallace, and Thomas (2006), identified that successful schools shared key collaborative practices, including collective values and responsibility, reflective inquiry, and the privileging of group as well as individual teacher learning. Similarly to Parise and Spillane (2010), Stoll et al. (2006) found that a willingness to draw on resources
outside the school built school capacity and also increased the likelihood that learning was sustained.

The above studies have implications for my research, because QTAL was built on similar principles. As described by Corcoran et al. (2003), “having a shared vision of good practice and a common language to discuss it facilitates the improvement of classroom practice…spreading inquiry methods within schools” (p. 36). These findings and that of others (DuFour, Eaker, et al., 2010; Duncombe & Armour, 2004; Hamel, Dufour, & Fortin, 1993; Vescio, Ross, & Adams, 2008) are further evidence supporting the use of collaborative professional learning practices for professional development. It is also argued however that a broad range of professional development activities can also build school capacity, optimise teacher learning, and ultimately improve student learning (Corcoran et al., 2003; Guskey, 2002; Parise & Spillane, 2010; Stoll et al., 2006).

Consistent with Easton (2008), Timperley (2011), Groundwater-Smith and Kemmis (2005), this study is concerned with local, job-embedded, collaborative teacher professional learning in which teachers set the content and pace of their learning based on identified needs. As such, the term professional learning will be used in the discussion that follows.

**Collaborative professional learning**

Professional learning practices take on many forms. Despite a continuing prevalence of traditional forms of professional development such as discrete, external courses and visiting experts in the workplace which are designed to fill gaps in teacher knowledge,
the literature suggests that some forms of professional learning might be more valuable than others (Aminudin, 2012; Kleinhenz, 2007; Wayne et al., 2008).

Professional learning increasingly embodies a “new professionalism” (Hargreaves, 2000; Hargreaves, 1994; Hargreaves & Goodson, 2006) involving teachers problematising their practice and in so doing, opening up communicative spaces for conversations that lead to collaborative decision making, problem solving, and planning professional learning that addresses local needs. Activities that provide opportunities for teachers to learn together in teams that build on existing knowledge and strengths are recognised as powerful forms of professional learning (Bowe & Gore, 2012; DuFour, Eaker, et al., 2010; Easton, 2008). Positive professional relationships that encourage collaborative practices based on trust potentially enable a comfortable sharing of practice and collegial feedback. Hargreaves et al. (2005), Wei et al. (2009), and Chong and Kong (2012), among others, report that collaborative, participatory professional learning can generate successful and sustainable change through the cultivation of professional learning communities that build individual and collective capacity for school improvement.

An extension of the concept of the new professionalism is put forward by Sachs (2007) who describes the current political pressures on teachers as formulaic and controlling. According to Sachs (2007), the prevailing managerial discourse is such that education systems increasingly value a regulated, skilled, and compliant teacher workforce. She identifies the need for a strong and autonomous teaching profession, where teachers have agency and flexibility in relation to their professional learning needs. This view is further elaborated by Bourke, Ryan, and Lidstone (2013) and Mockler (2013), who suggest that education is increasingly infiltrated by teacher standards that place teachers
as compliant objects to be measured. A focus on technical skills and increased systemic accountability then results in “controlled professionalism” (Bourke et al., 2013, p. 12), in contrast to the emancipatory new professionalism described above by Hargreaves (1994) and Hargreaves and Goodson (2006). The potential dissonance between the concept of new professionalism as described by Hargreaves and that offered by Sachs, Cameron et al., and Mockler has relevance for my research. Collaborative professional learning project funding, although appearing to target locally identified school-based issues, may have deeper systems implementation agendas with which schools must comply in order to fulfil their obligations under project guidelines and policy frameworks.

Notwithstanding the shift away from one-off, external professional development courses and the move toward ongoing, collaborative forms of professional learning, it is questionable as to whether collaboration in itself is sufficient inducement to elicit sustained changes in classroom practice, with some arguing that there exists a lack of “substance” (e.g., Bowe & Gore, 2012, p. 2) in some forms of collaborative professional learning (Garet et al., 2001; Timperley et al., 2007). As well as a focus on content in professional learning, the substance also refers to developing teachers’ shared understanding of what constitutes quality teaching that they can draw upon as a basis for professional discussion and reflection.

A shared understanding of what constitutes high quality pedagogy is needed at the local level to provide teachers with a common language for talking about and providing useful peer feedback regarding classroom practice (Avalos, 2011; Bowe & Gore, 2012; Elmore, City, Fiarman, & Teitel, 2009). An agreed pedagogical model potentially guides teachers in the formation of shared understandings of what constitutes high-
quality teaching and student learning, although the issue is not the existence of a model per se but the use to which it is put and by whom. A number of pedagogical models, which were formed with the intention of providing a common language for teachers to improve their teaching through reflection, increasingly codify and evaluate teachers’ practice as of the result of a wider certification and accountability process (Danielson, 2009; Peel, 2005), judging teacher performance. Pedagogical models can potentially provide a basis of shared understanding and reflection of what constitutes “quality” in teacher practice, but they can also be used to judge teachers as part of a wider “audit education culture” (Power, 2003).

**Pedagogical frameworks**

The use of pedagogical models or frameworks is part of a growing movement towards standards-based teaching and teacher accreditation, evidenced by the increased compliance and accountability in our education systems at large (Apple, 2005; Mockler, 2013; Peel, 2005; Power, 2003). Pedagogical frameworks can be used for development and formation, or for the purposes of compliance. Used for development, pedagogical frameworks can potentially scaffold teachers in describing aspects of their practice which improve student learning, by providing shared understanding and a common language for teachers to discuss, reflect on, and improve their teaching.

The work of Newmann et al. (Newmann & Associates, 1996; Newmann et al., 2000), outlined in Chapter One, provides a pedagogical framework known as “authentic pedagogy”. This model was established using a comprehensive educational research base of over thirty years which summarised the constitution of effective teaching and assessment. Authentic pedagogy focuses on raising the intellectual quality of work for
all students. Newmann and Associates (1996) identified three criteria for authentic intellectual work. First, intellectual work uses empirical knowledge to analyse, interpret, synthesise, and evaluate, rather than simply reproduce knowledge; second, authentic pedagogy focuses on gaining in-depth understanding of topics; and third, learning is authentic and has significance beyond the classroom.

In 1998, the Queensland Government commissioned the Queensland School Reform Longitudinal Study (Lingard et al., 2001). As a result of this study, Productive Pedagogies pedagogical framework was developed. The team designed an instrument to examine pedagogy based on the authentic pedagogy model. A curriculum reform initiative known as The New Basics Project originated as a result of the Queensland School Reform Longitudinal study, which focused on curriculum, pedagogical and assessment reform in Queensland schools (Lingard et al., 2001). This model was further refined to develop the NSW Model of Pedagogy, also known as the Quality Teaching framework in NSW Public Schools. The Quality Teaching framework has strong connections with authentic pedagogy (Newmann & Associates, 1996), and as previously outlined, was also the pedagogical model that underpinned QTAL. QTAL funding was classified as a seeding grant designed to encourage schools to engage with and implement the Quality Teaching framework (Ewing et al., 2010; Ewing, Smith, Anderson, Gibson, & Manuel, 2004).

**Action learning**

Collaborative professional learning has been defined in Chapter One as an umbrella term that describes a range of professional learning activities involving teachers working together in collegial groups to improve their practice. Collaborative
professional learning practices include mentoring, peer coaching, critical friends, lesson study, action research, and action learning (Duncombe & Armour, 2004). As previously stated, the particular collaborative professional learning approach investigated in my study was action learning, where teams of teachers at the local school level learned with and from each other (Revens, 1982), with collegial support from external coordinators and academic partners, in a cyclic model of potential improvement.

Action learning is related to action research. Although they are linked concepts in that they both involve active learning, problem solving and inquiry, they have different origins and purposes. Action learning is attributed to Reg Revens, a German Jew who fled to England from Germany at the beginning of World War Two to avoid persecution. Revens assisted workers in the coal mines in England in the 1940s (Revens, 1982; Zuber Skerritt, 2002). The term, “action research” is attributed to Kurt Lewin (Lewin, 1947; Aubusson, Ewing & Hoban, 2009), who was also a German Jew who fled Germany at the beginning of World War Two. However, his destination was the United States of America where he investigated ways to improve the human condition through working with underprivileged groups. Action research is generally regarded as the more rigorous method in which action learning is extended and scrutinised through a process of collective self-reflection and publication (Aubusson et al., 2009; Ellis, Armstrong, & Groundwater-Smith, 2010). Findings are either confirmed or refuted in practice and, through reflection, the cycle of improvement continues (Zuber-Skerritt, 2001, 2002, 2009).

Like action research, action learning is a form of experiential learning “drawing learning from experience” (Dick, 1997), and is attributed to Kolb’s theory of experiential learning, which emphasises the important role of experience and active
learning in the learning process (Kolb, 1984). There is an expectation of some form of intervention based on evidence (Ewing et al., 2010) that requires a degree of criticality, which is described by Kemmis (2006) as the sharing of “unwelcome truths” (p. 461). Kemmis (2006) and others (Groundwater-Smith & Mockler, 2009) have expressed the view that the intended critical edge of action research may have been lost in some expressions of action learning, rendering it little more than an implementation tool. Notwithstanding the abovementioned similarities between action learning and action research—these being collaboration, reflective practice, and experiential learning—this critical dimension seems absolutely necessary in order for the work to hold emancipatory and transformative possibilities.

A preoccupation in the current education climate with technical and functional knowledge, “techne” (Hardy et al., 2008, p. 249), is thought to be responsible for diminishing the criticality of action research, depriving teachers of deep knowledge and understanding of their practice which occurs through communicative action. Action learning, used simply as an implementation tool for school improvement projects, may lack the critical edge that is achieved through teachers’ collaborative reflection on practice, which is seen as necessary to move learning forward (Groundwater-Smith & Mockler, 2009; Kemmis, 2011; Mockler, 2011, 2013). The emphasis in action research that may or may not be present in action learning is that the research is opened up for public criticism, providing communicative spaces (Habermas, 1984) for reflection on education and schooling in order to improve it (Groundwater-Smith et al., 2012; McCormack, Reynolds, & Ferguson-Patrick, 2006; Tiller, 1999).

Notwithstanding the identified similarities and differences between the two processes, the critical dimension of action learning and action research may be diminished when
inquiry-based professional learning practices are adopted by organisations that push neoliberal and audit culture agendas in which student outcomes are narrowly measured as part of stringent testing regimes thus resulting in a loss of teacher judgement and, ultimately, an overall disempowerment of the profession (Groundwater-Smith & Mockler, 2009; Kemmis, 2011; Mockler, 2013; Sachs, 2007).

Teachers learning with and from each other underpins the action learning process and demonstrates the ongoing and collaborative nature of action learning. In the reflection phase of the action learning cycle, the team reviews its progress based on collected data before deciding on the next phase of action in the cycle. Action informs reflection, and in turn is informed by it, in an intended critical and reflexive process. In other words, “the action is changed as a result of the learning that, in turn, leads to further learning” (Dick, 1997). The commonly accepted cycle of action learning can be seen in Figure 1 below.
In QTAL, action learning teams used the action learning cycle to plan, implement, and refine their projects. Action learning is becoming increasingly utilised as a preferred vehicle for local, project-based professional learning, often with support from external facilitators (Bruce, Esmonde, Ross, Dookie, & Beatty, 2010; Chou, 2011; Faulkner, 2012). Faulkner (2012) reported on action learning projects in Western Australia that were part of the National Partnerships Literacy Project, which resulted in improved, measurable student literacy outcomes. Chou (2011) found that action learning supported both teacher and student learning in elementary schools in Taiwan. Bruce et al. (2010) reported on mathematics professional learning projects in Canada, and also found that collaborative, classroom-embedded professional learning in an action learning model led to substantial gains in student achievement and teacher quality.

**Effective professional learning**

Professional learning projects have a history of being short-lived and fragmented, with little measurable impact on classroom practice or student learning (Borman, Hewes, Overman, & Brown, 2002; Coe, 2000; Hall & Hord, 2011; Tyack & Cuban, 1995). In contrast, professional learning projects that have resulted in improved teacher and student learning share a number of common features, classified broadly in the literature as “effective professional learning” practices (Borko, 2004; Loucks-Horsley et al., 2010; Stoll et al., 2006; Wilson & Berne, 1999).

There is general consensus in the literature on what constitutes effective professional learning (DuFour, Eaker, et al., 2010; Fullan, 2010, 2007; Loucks-Horsley, et al., 2010;
Timperley et al., 2007). First, effective professional learning is content-specific. It addresses what students need to know and problems that may be experienced in teaching it (Hawley & Valli, 2000; Loucks-Horsley et al., 2010; Timperley et al., 2007; Wei et al., 2009). Dixon (2013), who investigated the leadership practices of a large middle school in the Northern Territory which used the Teaching and Learning School Improvement Pedagogical Framework, highlighted the importance of teachers having in-depth knowledge of what they teach and how to teach it. Similarly, Ball, Thames and Phelps (2008), who completed extensive qualitative analyses of videos and classroom teaching practice to measure teachers’ mathematics knowledge, found that teachers need to know the content they teach in order for students to learn it. This view links to Shulman’s (1987) widely-cited work, “Knowledge and Teaching: Foundations of the New Reform”, in which he outlined evidence of a broad and elaborate “knowledge base for teaching” (p. 7).

Second, professional learning that is based on a range of evidence including student work samples, as well as formative and summative student assessment data, is more likely to build teachers’ capacity to analyse students’ strengths and weaknesses if a variety of sources is used, potentially leading to continuous school improvement (Borko, 2004; Stoll et al., 2006; Timperley et al., 2007). Professional learning that is informed by a range of data builds teacher and school capacity, informing future professional learning and addressing teacher and student needs in a cyclic mode (Borko, 2004; Darling-Hammond, Meyerson, LaPointe, & Orr, 2010; DuFour, Eaker, et al., 2010; Timperley et al., 2007). Wyatt-Smith, Bridges, Hedemann, and Neville (2008) reported on results of The Queensland Project which spanned one year in 2005 and included 100 schools, 300 teachers, and 5,000 students. This project shared similarities with QTAL in that it was a “purpose-built conceptual model” (p. 1) which focused on
teacher capacity building, collaboration, and external support in the form of project managers and academic partners. Findings of the projects outlined a range of factors that facilitate the long term sustainability of professional learning, including data-driven programs, a no-blame culture, and the development of professional learning communities across schools.

Third, when teachers have input into the planning and implementation of professional learning, ownership and engagement potentially increases. Collaborative professional learning typically relates to individual and small group learning, but it also builds collective school capacity when the learning is shared across the school (Darling-Hammond et al., 2010; Easton 2008; Elbousty & Bratt, 2010; Goos, Dole, & Makar, 2007; Wei et al., 2009). An empirical study by Louis et al. (1996) involving 24 schools that were engaged in serious reform efforts, found that teacher empowerment, engagement, and ownership of reforms was linked to high levels of professional community in schools, in which teachers shared collective responsibility for student learning. Louis et al. (1996) identified that teacher efficacy was higher in schools where supportive structures were firmly in place. These supportive structures provided teachers with opportunities to make key decisions about policy and practice that impacted on their individual daily work, and the collective work of the school. Lefstein and Perath (2014) also investigated teacher engagement and ownership of reforms across nine countries and determined that it was crucial for teachers to have a voice in educational policy and practice, as ownership is essential for the effective implementation of reforms (Borko, 2004; Darling-Hammond et al., 2010; DuFour, Eaker, et al., 2010; Fullan, 2008; Timperley et al., 2007).
The constitution of effective professional learning is important background to this research because QTAL is aligned with principles of effective professional learning as outlined in the literature (Hawley & Valli, 2000; Borko, 2004; Ingvarson, 2005; Timperley et al., 2007; Wei et al., 2009).

In summary, professional learning is regarded as effective when it is collaborative, school-based and embedded in teachers’ everyday work. It is coherent and continuous and part of a wider, supported, school change and systems agenda.
Pedagogical change

This research also investigated whether participation in collaborative professional learning facilitated sustained pedagogical change in terms of how professional learning was delivered and organised. Pedagogical change is unlikely to occur if professional learning does not engage with teacher beliefs and theoretical understandings (Gerston, Chard, & Baker, 2000; Le Fevre, 2014). Similarly, for change to be adopted and embedded in practice, teachers require time and other organisational systems in place in order to engage in sustained collaborative professional learning. Organisational systems could be enablers such as designated time for teachers to meet, leadership support, funding for teacher release, or other resources that remove structural obstacles and support the change process (Chong & Kong, 2012).

Chong and Kong (2012) used collaborative professional learning in the form of lesson study to identify the conditions that facilitated pedagogical change in Singapore secondary schools, focusing in particular on teacher beliefs and understandings. Chong and Kong (2012) found that teachers’ self-efficacy beliefs (Tschannen-Moran & Hoy, 2001) are linked to their collective efficacy in schools, and are facilitated by supportive structures such as those mentioned above (Darling-Hammond & Richardson, 2009; Erickson et al., 2005). If teachers believe that they can improve their teaching for the benefit of their students, they are more likely to change their practice to facilitate and sustain pedagogical change.

Pedagogical change takes time to be learned, adopted, and sustained, and a continued focus on new learning over time ensures that teachers feel supported in their learning, thus making the changes more likely to be adopted in practice. An empirical study by Goddard, Goddard, and Tschannen-Moran (2007) involving 47 elementary schools in
mid-western USA investigated the link between collaborative professional learning and student learning outcomes. They found that schools with high levels of collaboration, such as regular timeslots for teachers to collaboratively plan and reflect on their learning and their students’ learning, together with a sustained focus on learning over time, positively correlated with higher achievement in students’ reading and mathematics scores. These findings indicate that a sustained focus is needed for teachers to adopt changes associated with professional learning into their practice, and for the changes associated with collaborative professional learning to positively impact on student learning (Supovitz & Turner, 2000; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007; Corcoran et al., 2003).

In addition to the importance of a sustained, coherent focus on new learning over time, pedagogical change requires consistent leadership, however “most school leaders do not stay in the job long enough to achieve this” (Goldberg, 2000, p. 85). Ideally, sustained educational change requires continuity of leadership over the longer term and consistent leadership is a major determinant as to whether change is sustained. In schools where improvement is sustained, school leaders are not necessarily “champions of change” (Sheppard, Brown, & Dibben, 2009, p. 26), and where those changes are associated with collaborative professional learning, leadership is more holistic and distributed (Dinham et al., 2008). Charismatic leaders who lead most professional learning initiatives have been “negatively associated with leadership sustainability” (Fullan, 2005, p. 30), because the learning usually stalls when they leave, if leadership succession is not firmly established to replace them (Schechter & Gannon, 2012; Stoll et al., 2006).
Some schools do manage to sustain change during leadership succession, as outlined by Dinham et al. (2008), King (2011), and Stoll et al. (2006), although it is not the norm. A range of empirical and theoretical studies have found that some schools are successful in maintaining innovations over time when new leaders actively support the changes through collaborative, distributed leadership (Fullan, 2005; Lambert, 2007; Reeves, 2009).

Lambert (2007), who investigated the link between high leadership capacity schools and sustainability of reforms in the US and Canada across 15 schools of varying types, found that sustainability is a function of a particular type of leadership, characterised by shared vision, shared leadership, reflective practice that generates learning practice, and high student achievement. Similarly to Fullan (2010), who suggested that principals “influenced continuation in direct ways” (p. 101) as schools move through phases of change, Lambert identified three phases of lasting school improvement through which schools move in order to achieve sustainable change. These include instructive, transitional, and high capacity phases. In the instructive phase, teachers display high levels of dependency. In the transitional phase, in which there is a shared sense of leaders “letting go” (p. 315), teachers become increasingly more collaborative and focused on student learning. In the high capacity phase, leadership is increasingly interdependent, clear strategies are in place for succession, and staff display high levels of autonomy. This suggests that change is more likely to be sustained when schools have reached the high capacity phase of the change process as described by Lambert (2007).

In addition to teachers “owning” the change process, in order for pedagogical change to be embedded in practice it needs to be actively supported by the school leadership
through the provision of opportunities for teachers to engage in developing theoretical understandings of new knowledge and skills (Darling-Hammond et al., 2010; DuFour et al., 2009; Fullan, 2010; Hall & Hord, 2011). Opportunities for teachers to develop theoretical understandings necessitates that school leaders organise human and administrative resources which enable teachers to collaboratively build on their knowledge and devise ways of integrating new learning into their existing practice, ensuring coherence of professional learning. Maintaining a sustained focus on learning that coheres to existing school and system targets are well accepted as necessary precursors for new learning to be adopted in teachers’ practice (Bowe & Gore, 2012; Chong & Kong, 2012; Klentsch, 2005).

**Professional learning communities**

The professional learning approach investigated in this study involves teachers working in collaborative groups for professional learning. A range of terms describe this process, all nuanced slightly differently. One such term is “learning organisation”, used by Schön (1987), Argyris (1999), Senge (1990) and Senge et al. (2000) in relation to organisational learning. They suggest that schools themselves are continually learning along with the teachers in them, making reference to both the individual and collective learning capacities of schools. Lave and Wenger (1991) coined the term, “communities of practice” (p. 98), which they elaborate as learning that involves a deepening process of participation in a community of learners, with particular reference to group learning. By far the most widely accepted term used to describe groups of teachers working together in schools is “professional learning community”, identified as a promising professional learning strategy that can lead to sustained, substantive school improvement when the instructional focus is linked to student learning (DuFour, Eaker,
The terms outlined above collectively refer to groups of teachers working and learning together in the context of their specific schools and education systems. The school learning culture refers to “the relationship between learning and the social situation in which it occurs” (Hanks, 1991, p. 14), reflecting a school’s overall capacity for improvement. Fullan (2008), Senge et al. (2000), and Goldberg (2000) all report that the school culture is a major determinant as to whether changes associated with professional learning are adopted and sustained, which is the focus of this research.

**School culture**

Professional learning is more likely to be successfully adopted and sustained if there is a school culture in place based on cooperation, collaboration, and professional trust (Florian, 2000; Hall & Hord, 2011; Hipp et al., 2008; Jurasaitė-Harbison, 2009; Kennedy et al., 2011; Lavie, 2006; Wood, 2007; Yendol-Hoppey & Dana, 2010). Consistent with the work of Deal and Kennedy (1982), Fullan and Hargraves (1991), Stoll (1999), Reeves (2009), and Schuck et al. (2012), school culture is often described in the literature as “the way we do things around here”. From this generally accepted definition, all schools have a culture; however, successful schools have their focus clearly on moving student learning forward. DuFour, DuFour, Eaker, and Many (2010) argue that a learning culture comprises “the assumptions, beliefs, expectations and habits that constitute the norm of an organisation” (p. 94). They use the term “professional learning community” and outline three underlying principles of professional learning communities. First, there is an expectation that all students will
learn; second, there is a culture of collaboration; and third, there is a clear focus on results.

Although the model of teachers working in professional learning communities is claimed to be one of the more powerful forms of professional learning (DuFour, Eaker, et al., 2010; Hord, 2004; Schmoker, 2004), it does not necessarily in and of itself lead to teacher learning nor student improvement. Brownell, Adams, Sindelar, Waldron, and Vanhove (2006) demonstrated that teachers benefit from collaboration to varying degrees and suggested that teachers whose views differed markedly from the group were least likely to benefit from collaboration, thus emphasising the importance of initially creating a shared theoretical and knowledge base among the group, as knowledge, skills, and beliefs all work together to enable teachers to adopt change that leads to improved student learning.

Additionally, in a review of 11 studies on the impact of professional learning communities on teaching practice and student learning, Vescio et al. (2008) identified that there was limited evidence to support the effectiveness of professional learning communities. Furthermore, an empirical study by Bolam et al. (2005) which investigated the effectiveness of professional learning communities in 393 schools through surveys with interviews conducted in 16 case study schools, found that although teachers valued professional learning communities, there was limited evidence to suggest that impact was measurable beyond teacher perceptions. Measurable student improvement only occurred in professional learning communities which focused on changing teachers’ instructional practices.
Similarly, Talbert and McLaughlin (2006) found that not all professional learning communities positively impact on student learning. They investigated the perceptions of teachers in “weak” and “strong” professional learning communities, finding that in schools where professional learning communities were weak, there was “a tradition of autonomy” (p. 18) and little collaboration between teachers in relation to their practice, while instruction was traditionally text-book oriented and teacher centred. In contrast, schools that had strong professional learning communities also had high levels of collegial support. In particular, teachers in those schools where there were strong learning communities, regularly reflected on and changed their practice based on ongoing data collection and “shared an uncompromising commitment to high standards” (p. 20).

**Impact**

While a considerable amount of literature has been published on the benefits of professional learning communities in sustaining learning in schools, my research question specifically investigates the impact of collaborative professional learning on teacher dispositions and school culture, and whether any identified changes are sustained over the longer term. Factors identified in the literature that relate to the impact and sustainability of collaborative professional learning include the need for flexibility in professional learning approaches to address local needs (Karagiorgi & Kyriacos, 2006; Shenton & Pagett, 2007; Wright et al., 2008), political contexts in which collaborative professional learning is carried out (Heppell, 2011; Luke, 2010; Reid, 2009; Sherman, 2008), and teachers’ dispositions which influence their willingness to adopt changes in practice (Jurasaite-Harbison, 2009; Sunley & Locke, 2009; Thornton, 2006). Additional factors identified in the literature that impact on
sustainability include barriers to change in schools (Bobis, 2004; Goos et al., 2007; Ji-sun, 2008; Thomas, 2005), the use of data influencing teachers’ willingness to adopt change (Barber, 2005; Gore & Ladwig, 2006; Joyce & Calhoun, 2010), and the importance of fidelity and coherence of professional learning, so that systems at all levels, including national, state and local education authorities, are mutually supportive of changes associated with collaborative professional learning (Guba & Lincoln, 1994; Jurasaitė-Harbison, 2009; Little, Feng, VanTassel-Baska, Rogers, & Avery, 2007; Riveros, 2012). The influences outlined above are further elaborated in the remainder of this chapter.

**Flexibility**

One emerging theme relates to the wide range of inquiry-based collaborative professional learning approaches used in schools and their reported levels of impact on student learning (Karagiorgi & Kyriacos, 2006; Shenton & Pagett, 2007; Wright et al., 2008). Karagiorgi and Kyriacos (2006) found that flexible professional learning activities which enabled teachers to “pick and mix” (p. 395) activities that increased relevance in local contexts were regarded more highly by teachers, and the impact on classroom teaching was greater as a result.

Other studies have considered the importance of flexibility in collaborative professional learning in schools, and suggest that impact varies across different educational contexts in relation to level of teacher expertise and experience (Berg, Grisham, Jacobs, & Mathison, 2000; Shenton & Pagett, 2007). Practitioner-based models of professional learning are recommended, as these enable the linking of theory and practice, and the use of a “bottom-up” approach in which teachers can support each other in their
learning, while additional local support is provided by visiting “knowledgeable professionals” when a focus on content is needed (Osmundson & Herman, 2005; Shenton & Pagett, 2007). The professional learning models outlined by Berg et al. (2000) and Shenton and Pagett (2007) share similarities to the professional learning model of QTAL in that professional learning is collaborative and locally based, and external support is available in the form of academic partners and state coordinators who act in a facilitative role.

Some professional learning models fail due to a lack of flexibility in design and implementation and consideration of the local context. Bantwini (2009) outlined a professional learning model used in South Africa to implement a new science curriculum. Due to a lack of flexibility, the externally imposed professional learning model used impacted negatively on the implementation of the new curriculum because learning was not tailored to suit local contexts. Other studies confirm Bantwini’s (2009) findings and have suggested that professional learning that is flexible, addresses local contexts, and offers external support is more likely to positively impact on teacher learning and classroom practice than a top-down, generic, one-size-fits-all professional learning program (Ewing et al., 2010; Hargreaves, Fullan, Senge, & Robinson, 2007; Yendol-Hoppey & Dana, 2010). The latter rarely works as different school contexts have varying professional learning needs which should be acknowledged and addressed if the professional learning is to be successfully adopted and sustained by teachers at the local level (Cordingley, 2008; Klentschy, 2005; Wyatt-Smith et al., 2008).
Political contexts

Professional learning activities that focus on increasing teachers’ understanding of pedagogy increases the likelihood of improved teacher and student outcomes (Ewing et al., 2010; Gore & Ladwig, 2006; Thomas, 2005). However, it is increasingly challenging for teachers to find a workable balance between providing quality teaching with a varied and rich curriculum, when they feel pressured to prepare students for narrowly focused external examinations (Reid, 2009; Luke, 2010).

The contentious link between the use of data to inform teaching and the impact of professional learning has been reviewed previously by Bailey (2010), Davies (2010), Mitchell (2007), and Boardman and Woodruff (2004). Schools and districts which place considerable emphasis on external assessment data results may negatively impact on what is actually taught in classrooms when teachers who, due to political pressure, increasingly focus on “teaching to the test”, thus assessing only a narrow section of the curriculum (Bailey, 2010; Klentschy, 2005; Meirink et al., 2007). Using “high stakes” (Lee, 2006; Luke, 2010; Reid, 2009) assessments to evaluate classroom teaching does not always align with quality teaching and assessment practices when a “back to basics” political context (Luke, 2010) potentially reduces the quality of pedagogy to lower-order drill and practice activities (Heppell, 2011; Luke, 2010; Reid, 2009; Sherman, 2008).

Measuring impact

Sometimes, however, the political context can provide a catalyst for an improved focus in a particular area. Bailey (2010), for instance, found that a school-wide effort to improve mathematics in response to the United States Government’s *No Child Left
Behind mandate resulted in improvements in teacher knowledge, skills, and dispositions and significantly improved student learning outcomes. Notwithstanding, Davies (2010) and Boardman and Woodruff (2004) argue that measuring impact of professional learning programs using these data may or may not be valid, as other unrelated influences could have been responsible for increased student performance and improved teacher attitudes.

Schools that sustain their learning regularly interpret a wide range of school-based and external data during professional learning to aid planning and inform teaching (Acevedo, 2010; Mitchell, 2007), whilst avoiding excessive data demands on teachers and students (Fullan, 2005). Through a reflexive process, professional learning communities are formed which support teachers in changing their practice and accommodate the ongoing identified needs of students (Cormier & Olivier, 2009; DuFour, Eaker, et al., 2010; Hall & Hord, 2011; Hipp et al., 2008). Academic achievement may be greater in schools where teachers report high levels of collective responsibility. Whalan (2012) found that schools which engaged in a “collective struggle” to address identified teaching and learning issues enjoyed rewards, such as raised teacher trust, sustained improvement, enhanced capacity, and improved student learning outcomes.

**Linking impact to student outcomes**

Schools are complex systems and many factors have been found to impact on both teacher and student learning, as already outlined in this chapter. Whilst it is difficult to link improvements in student learning to specific professional learning programs, large-scale empirical studies have attempted to do so (Fullan, 2000; Gore & Ladwig, 2006;
Joyce & Calhoun, 2010). Gore and Ladwig (2006), who reported on the impact of professional learning on pedagogy as part of a four-year longitudinal study, *Systemic Implications of Pedagogy and Achievement in NSW Public Schools*, which involved 900 teachers and “investigated the relationships between professional learning, the quality of pedagogy and student achievement” (Ladwig, Smith, Gore, Amosa, & Griffiths, 2007, p. 5), found that the links between professional learning and pedagogy were not particularly strong. Their findings suggested that although investment in professional learning is significant, the concepts of professional learning and professional development are unclear and definitions are problematic. As a result, impact is difficult to measure, both in terms of teacher professional growth and student learning outcomes. Several possible explanations were provided for the finding that the link between professional learning and student outcomes was weak. It was suggested that the quality of the professional learning was compromised at the school level as a result of the way in which the reforms had been introduced to schools. Teachers did not regard the professional learning as significant and, subsequently, the learning generally was not sustained.

Another issue identified in this study related to systems support which was not strong enough to ensure that all schools deeply engaged with the reform (Gore & Ladwig, 2006). For serious engagement to occur, systems and school leaders need to continue to support teachers in improving the quality of their pedagogy over time. Guskey (2003) also reported a lack of verifying evidence that effective professional learning results in improved student outcomes. Similarly, Little et al. (2007) and Joyce and Calhoun (2010) identified that the fidelity of implementation of reforms was an important consideration. They found that learning was more effective when it was implemented locally but supported by external knowledgeable professionals in the local context,
highlighting the situatedness of practice (Guba & Lincoln, 1994; Jurasaite-Harbison, 2009; Riveros, 2012).

However, some empirical research has established a link between student learning and specific professional learning reforms. Fullan (2000) reviewed three types of large-scale educational reform to determine their impact through case study, with varying degrees of identified success. These types of reforms included school district reforms (Elmore & Burney, 1998; Fullan & Pomfret, 1977), reforms where many schools attempted to implement a particular change (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998; Wright et al., 2008), and state or national initiatives where most schools were involved in a specific change process (Acevedo, 2010; Cooper, Slavin, & Madden, 1998).

Fullan (2000) identified that the first type, school district reforms, historically fail at the classroom level. Elmore and Burney (1998), for instance, who reported on district reforms in two education districts in the USA, New York and San Diego, found that top-down programs which were implemented in schools that did not have the organisational or individual capacity to “put the reforms into practice” (p. 6) had little impact on student learning. This suggests that shared expertise drives educational change in schools, which is achieved through a complex balance of top-down (central) and local school authority (Elmore & Burney, 1998).

Bryk et al. (1998), who examined a whole-school reform involving 550 schools in Chicago, found that excessive bureaucratic management resulted in a policy change and power being handed over to local school councils. Following decentralisation, the schools tended to work in isolation to the detriment of student learning and, due to a lack of instructional improvement, the central office was restructured to provide focused
support to build school capacity. The role of the central office changed from one of control to one of supporting schools in achieving their instructional goals, which provided a degree of autonomy at the local level within the context and accountability of the wider school system.

Additionally, Hill and Crevola (1999) reported on a school-wide reform initiative for improving learning outcomes in the Early Literacy Research Project in 27 disadvantaged elementary schools in Victoria, Australia. The project involved schools putting in place structured two-hour literacy blocks daily which incorporated research-based literacy practices and included external support and ongoing collaborative professional learning for teachers. It was found that significant improvements in student learning were achieved, as well as reported improvement in teachers’ self-efficacy beliefs. In addition, the reform was extended to schools that were not directly involved in the project, as news spread in relation to the project’s reported positive impact on student learning.

This third type of reform as outlined by Fullan (2000) were large-scale, state or national reform initiatives. Acevedo (2010), who reported on the Reading to Learn accelerated literacy program in Stockholm, Sweden, found that most students who participated in the program significantly improved their reading levels, suggesting the importance of theory-informed teacher practice in improving student outcomes. The Reading to Learn program is designed on a scaffolding literacy approach to teaching reading and writing based on the theoretical underpinnings of Bruner (1996) and Vygotsky (1980), among others (Cowey, 2005; Gray, 2007; Rose, 2004). Twenty-two teachers from seven primary and secondary schools were involved in this study with about 400 students in total, representing a broad cross-section of school types across Sweden. The schools
were from various socioeconomic status (SES) areas: four low-SES, two medium-SES, and one high-SES. A limitation of this particular study was that complete data sets were only collected for 58 of the students involved. Although this was a smaller empirical study with a limited numbers of schools, students whose data was analysed showed substantial improvements in literacy outcomes. The quantitative data collection recorded a growth from 11% to 33% for high-achieving students and from 31% to 128% for low-achieving students (Acevedo, 2010, p. 29).

Similarly in Australia, where the implementation of Reading to Learn has been growing in Catholic middle schools in Victoria since 2002 (Culican, 2006; Rose & Acevedo, 2006; Rose & Martin, 2007), measureable improvements have been noted in those students who participated in the project. In addition, the professional learning has been rated highly by all teachers who were involved in the program, with the authors claiming that “teachers are provided with a set of skills that we consider unparalleled in the field, equivalent to a Master’s degree in both pedagogic theory and practice and educational linguistics” (Rose & Acevedo, 2006, p. 17).

Although an increasing number of empirical studies have supported the link between effective professional learning and improved student learning outcomes (Guskey, 2002; Hayes, Mills, Christie, & Lingard, 2006), such as those discussed above, some research findings suggest that one does not necessarily lead to the other (Gore & Ladwig, 2006; Guskey, 2003). It is increasingly accepted that improved student outcomes are powerful indicators of the success of professional learning programs (Meirink et al., 2007; Poekert, 2012), and a growing number of studies are attempting to cement the link between involvement in collaborative professional learning projects and improved student outcomes (Acevedo, 2010; Culican, 2007; Hill & Crevola, 1999).
Sustainability

The sustainability of change initiatives continues to be a perplexing problem in education (Lambert, 2007) and, as outlined previously, is the major focus of this research. Studies throughout the world have attempted to determine the conditions that sustain learning in the longer term (Aubusson et al., 2009; Fullan, 2005; Timperley et al., 2007). In a study of action learning projects in schools in NSW, Australia, Aubusson et al. (2009) identified a series of factors that were critical for sustaining professional learning. According to Aubusson et al., professional learning communities, distributed leadership, collaboration, and reflection were enabling factors of sustainable school change. Timperley et al. (2007), in a New Zealand best-evidence synthesis of 135 separate research studies on teacher professional learning, determined that sustainability depends on what occurs during professional learning as well as the organisational conditions put in place when external support is withdrawn.

Fullan (2005), who reported on the United Kingdom’s Literacy and Numeracy Strategy, found that after an initial improvement in student outcomes, results were not sustained. Fullan (2005) determined that although top-down programs were unsustainable, centrally driven reforms were sometimes a necessary initial step in the change process, a view that is also supported by Hall and Hord (2006, 2011). Fullan advocated a balance between local decision making in schools and centrally driven reforms to sustain change (2007, 2008, 2010). He reported that the main factors which challenge the sustainability of reforms in schools relate to competing priorities and a lack of sustained focus on reforms, changing demands and staff turnover. It seems that time for professional learning in schools is limited due to ongoing and increasingly competing demands. It is therefore important for schools and systems to be cognisant of factors that influence
sustainability, to maximise the benefits of time and money spent on professional learning.

A number of factors have been identified that need to be in place in schools if learning is to be sustained. Investigating the factors that impact on the sustainability of professional learning communities, Kilbane (2009) conducted a retrospective study with a number of schools that received government funding for a reform effort in Indiana, USA. Kilbane found that elements of reform interventions in a school must be complementary to provide the coherence necessary to sustain change. He identified that coherence is required between school-, district-, and state-level reform and is dependent on the elements of professional learning, professional culture, environment, leadership, and school goals all working together to support the change in the school (Fullan, 2008; Reichstetter, 2006; Taylor, Pearson, Peterson, & Rodriguez, 2005).

**Teacher dispositions impacting on sustainability**

As outlined earlier in this chapter, dispositions are structured by a person’s past and present experiences which impact on their current and future orientations and practices (Bourdieu, 1977; Grenfell, 2008). Deeply held beliefs, based on teachers’ personal and professional histories, do play a role in the acquisition and adoption of practices developed during collaborative professional learning (Jurasaitė-Harbison, 2009; Sunley & Locke, 2009; Thornton, 2006). Stoll et al. (2006) refer to teacher dispositions as “an individual’s orientation to change” (p. 226) and state that “attention needs to be paid to factors that inhibit or facilitate learning” (p. 244) for individual members of professional learning communities in order for the learning to be successfully sustained across the organisation.
Systemic change is rarely sustained. This sceptical but widespread view prevents some teachers from deeply engaging with innovations. Gore and Ladwig (2006) found that a resistance to the professional learning strategy of peer observation and feedback related to the Quality Teaching framework linked to teachers’ beliefs that it could be used to “judge their teaching” (Gore & Ladwig, 2006, p. 19), and teachers were reluctant to engage with the reform as a result. Greater focus on teacher dispositions during the implementation phase of the innovation may have ensured that teachers were more open to adopting and sustaining the changes associated with collaborative professional learning in their practice (Bobis, 2004; Borko, Liston, & Whitcomb, 2007; Okhee, Luykx, Buxton, & Shaver, 2007; Wright et al., 2008).

**Barriers to sustained change**

A number of teacher concerns are identified in the literature regarding the impact of collaborative professional learning and are considered as barriers to change (Bobis, 2004; Thomas, Tagg, & Ward, 2003). These teacher concerns are based around a lack of adequate time and resources allocated at the school level in order for professional learning programs to be effectively implemented and supported (Goos et al., 2007; Ji-sun, 2008).

Teachers have also reported personal feelings of information overload which acted as a barrier to change. Irrespective of feeling overwhelmed with the pace of change associated with professional learning, in a number of studies teachers have strongly indicated that they would continue to implement programs that they believed, based on their observations and a range of data, improved their students’ learning outcomes (Bobis, 2004; Thomas et al., 2003). As outlined earlier in this chapter, data is important
in informing professional learning and a powerful motivator which influences teachers to query their dispositions and change their classroom practice, potentially leading to data-driven, individual and collective school improvement (Wyatt-Smith et al., 2008). As previously noted by Bobis (2004), “it is taking time for some teachers to change habits and attitudes of 20 years, but they are willing to have-a-go as long as there is support and they can see it benefits their students” (p. 149).

Some researchers have argued that investigating negative cases can lead to a deeper understanding of phenomena being studied (Anderson & Arsenault, 1998; Flick, 2009; Flyvbjerg, 2006). Okhee et al. (2007) reported on a science professional learning program that was not sustained, and the identified reasons for this were threefold. First, the researchers found that teachers’ dispositions were not adequately addressed during the implementation phase, and the intervention was not sufficient to effect a major change in teachers’ dispositions. Second, it was found that many of the teachers in the project were not confident in their pedagogical content knowledge, such that they were not adequately equipped to address the necessary new content, or the changes to their beliefs and practices. Third, the intervention was a school-wide one. The researchers query whether the structures were in place at the school level to support and sustain the learning. There was insufficient designated time for teachers to reflect and plan, and limited support for the program from the school leadership. Unless teachers have time and opportunities to reflect on how they feel about what they are learning and to question their core beliefs with the support of their leaders, the changes associated with collaborative professional learning are unlikely to be sustained (Borko et al., 2007; Ritchhart, 2001).
Earlier in this chapter I outlined the documented success of teachers learning together in groups as a powerful form of professional learning, commonly referred to as professional learning communities (DuFour, DuFour, et al., 2010; Hipp et al., 2008; Stoll et al., 2006; Wyatt-Smith et al., 2008). The existence of professional learning communities in schools seems to be a major determinant as to whether improvements which result from professional learning are sustained. Saunders, Goldenberg, and Gallimore (2009) compared schools which used a professional learning community model of professional learning to those that followed more traditional professional learning in the form of visiting experts and external courses, across a school district over five years. They used student-outcomes data in the form of state and national test results, comparing the two groups of schools, finding that there was no significant difference between the two groups of schools for the first two years but noting a positive difference for the next three years, suggesting that it takes time for change to be adopted, implemented, and embedded in schools in ways that might be considered to be “sustained” (Corcoran et al., 2003; Fullan, 2010; Hall & Hord, 2011; Yoon et al., 2007).

Linking professional learning communities, school culture and sustainability

The link between professional learning communities, school culture, and sustainability is an ongoing theme in this research. Hipp et al. (2008) investigated two schools that built and sustained professional learning communities, as part of a larger federal project entitled Creating Communities of Continuous Inquiry and Improvement from 1998 to 2000 in south-western USA. It was found that transforming schools into professional learning communities involved schools moving through Fullan’s three levels of change from initiation, to implementation, and finally, institutionalization or sustainability.
(Fullan, 2008; Stoll et al., 2006), similar to Lambert’s three phases of instructional improvement (2007) as outlined earlier in this chapter.

Theories of sustainability and change developed by Fullan focus on whether changes are embedded in the infrastructure of the school, whether there are enough people committed to the change, and whether there is continued focus and support for the change over time (Fullan, 2005, 2007, 2010; Hargreaves et al., 2007). Although school contexts differ, successful strategies have been identified across schools that may assist others in developing and sustaining change through professional learning communities. In summary, the research suggests that change must be embedded into the day-to-day learning of the school and collaboration should be clearly focused on linking instructional practice to student outcomes in order for it to be sustained.

**Summary**

This review of the professional learning literature has identified a number of issues as current debates in the field. First, professional learning has been gradually moving towards more collaborative models where teachers have a greater input in process and content. This however appears to differ greatly between schools, regions, and education systems, highlighting the complex influence of context in the field which negatively impacts on sustainability.

Next, the need for a substantive pedagogical framework was outlined earlier in this chapter which links professional learning to student outcomes. This ensures that all stakeholders share a common understanding of what high-quality teaching looks like in classrooms, as well as a common language for collaborative reflection which influences aspirations and classroom practices.
A range of collaborative professional learning approaches exist that potentially provide teachers with greater ownership and agency of their learning, moving them towards the “teacher as researcher” role, as outlined by Stenhouse and others (Elliott & Norris, 2012; Stenhouse, 1975, 1981). The teacher as researcher potentially builds skills and professional confidence, as teachers research their practice in the context of their own classrooms with collegial support, moving them towards the formation of professional learning communities (DuFour, Eaker, et al., 2010; Schmoker, 2004; Stoll et al., 2006; Teague & Anfara, 2012). This approach to professional learning seems to be privileged in the literature, however there is some discrepancy in relation to how they are defined and enacted (Borko, 2004; Gore, Bowe, Clement, et al., 2012; Guskey, 2003).

Additionally, a lack of knowledge about teachers’ attitudes and beliefs which influence innovation adoption has been identified (Brownell et al., 2006; Sunley & Locke, 2009; Thornton, 2006). Teacher dispositions are a focus of this research, which aims to develop a better understanding of their impact on teacher learning. Related to this are also identified enablers: professional learning strategies that are employed in schools to enhance teachers’ capacity to learn and which have the potential to make schools learning organisations.

Next, the multifaceted issue of professional learning funding for schools was discussed. Schools and systems strive to employ government funding in ways that sustain professional learning initiatives and maximise the benefits of this sustainability for teachers and students over the longer term. Some research has suggested that when funding ceases so too does the innovation, unless schools have strong infrastructure in place to sustain the learning (Elmore & Burney, 1998). An interesting perspective put forward in the literature in relation to professional learning funding is that innovations
which have been sustained are generally not tied to specific external funding sources, affording school-based professional learning teams a degree of autonomy to address specific, local needs (Erickson et al., 2005; Groundwater-Smith & Mockler, 2009; Mockler, 2013), free from onerous systemic accountability requirements.

Finally, the bleak record of sustained, positive educational change is well documented (Bowe & Gore, 2012; Fullan, 2005; Joyce & Calhoun, 2010). This research may go toward revealing local and systems factors that impact on the successful implementation and sustainability of collaborative professional learning. Findings could potentially be utilised across the wider education field. This is important knowledge to be shared because “the growth of educators needs to lead directly to increased student learning” (Joyce & Calhoun, 2010, p. 9). In the next chapter I outline and develop the theoretical framework on which my analysis and interpretation of data is based in subsequent chapters.
Chapter 3: Theoretical Framework and Methodology

In Chapter Two, I mapped the field of professional learning within which my study is located. I concluded by establishing the need to examine what sustains professional learning over the longer term in schools. Current issues identified as debates in the field were also discussed, including the importance of coherence, the need for a substantive pedagogic framework, the impact of teacher dispositions on classroom practice, the multifaceted issue of professional learning funding for schools, as well as factors that impact on the successful implementation and sustainability of collaborative professional learning. Effective teacher professional learning is increasingly regarded as a major determinant in improving student learning (Guskey, 2002; Hayes et al., 2006), and more research which investigates the factors that positively impact on the sustainability of professional learning in schools is called for, in order to maximise benefits for teachers and students over the longer term (Aubusson et al., 2005; Hoban et al., 2005; Ingvarson et al., 2005). This chapter outlines the theoretical framework and the research methodology underpinning my study of this topic.

In this study, I investigated the ways in which schools’ participation in QTAL projects contributed to changes in teachers’ dispositions and school professional learning culture, and the extent to which any identified changes were sustained over the longer term. As noted in Chapter One, the major research question of this study was:

In what ways, if any, does participation in collaborative professional learning projects contribute to sustained changes in teacher dispositions and school professional learning culture?
Three subsidiary questions, as listed in Chapter One, also guided the investigation of this major research question.

**Theoretical framework**

The ways in which participation in collaborative professional learning changes teachers’ dispositions and school culture is viewed through a theoretical lens informed to varying extents by Newmann, Fullan, and Hord, who all argue the importance of building teachers’ collective dispositions, skills, knowledge, motivation, and school-based resources to bring about positive change in schools through the creation of a “community of learners”.

*Newmann’s work on building school capacity*

Previous studies (Newmann & Associates, 1996; Newmann et al., 2000; Newmann et al., 1995) have outlined the relationship between professional learning and improved pedagogic practice, a relationship similar to that on which the QTAL initiative was based. They observed that professional learning consistent with schools’ pedagogical reform attempts led to greater coherence, increasing the likelihood that learning would be sustained. Pedagogy is central in building school capacity through a collective focus on high-quality teaching. According to Newmann et al., factors that address key aspects of school capacity are: (1) teacher knowledge, (2) professional community, (3) program coherence, (4) technical resources, and (5) principal leadership, combined with supportive policies and programs in addition to high-quality instruction. This body of work on school reform locates pedagogy as central to building school capacity, and emphasises high-quality teaching and school-based collaboration as fundamental to change.
Newmann and Wehlage (2005) describe successful school restructuring as a process of building circles of support in schools, within which the above factors influencing school capacity are included. Student learning is central, surrounded by circles of support that are conceptualised as authentic pedagogy, school organisational capacity, and external support. The circles of support which build successful school restructuring, as outlined by Newmann and Wehlage (2005), are depicted in Figure 2 below.

Figure 2. Circles of support for successful school restructuring. Adapted from Successful School Restructuring: A Report to the Public and Educators by the Centre on Organisation and Restructuring of Schools (p. 2), by F. Newmann and G. Wehlage, 2005.

Fullan’s research on school improvement and sustainability

Similar to Newmann, Fullan’s research is also rooted in capacity building as a central component of collective school improvement. Fullan (2005) identifies different forms of
capacity building, including lateral capacity building which develops competency across peers, and vertical capacity building which builds local ownership and external accountability. Lateral capacity building relates to how teachers learn with and from each other, whereas vertical capacity building refers to whole-systems support and how the system aids in professional learning at the local level. Although lateral capacity building is perceived by Fullan to be important in improving practice at the local level, he argues that only vertical capacity building brings about sustained systemic change (Fullan, 2007, 2010).

Fullan (2005) identifies a number of factors that act together to build capacity and bring about positive school change, namely building dispositions, resources, and teachers’ motivation, knowledge, and skills, which are summarised in Figure 3 below.

Figure 3. Factors that build school capacity. Adapted from Leadership and Sustainability: System Thinkers in Action (p. 4), by M. Fullan, 2005, Thousand Oaks, CA: Corwin.

The factors identified by Fullan in Figure 3 are loosely coupled with those established by Newmann et al. in relation to influencing school capacity and student achievement. Both bodies of research explore mechanisms in schools which ensure ongoing school
improvement. External support, as identified by Newmann et al., includes technical resources which support ongoing teacher learning in schools. Technical resources are described as discrete influences, such as time for teachers to plan, autonomy from unreasonable bureaucratic demands, school learning climate, support from school communities, and school funding (Newmann et al., 2000). Similarly, Fullan identified that resources are a key component of school improvement, broadly classified as those specific structures and practices which build job-embedded learning into the everyday work of schools, such as groups committed to helping each other develop and daily interactions that promote learning in context. Both bodies of research refer to resources that “transfer…skills and ideas to classrooms and schools…enhanced by cycles of application and regular examination of student results” (Fullan, 2005 p. 69).

Authentic pedagogy, a term describing the instructional quality of classroom tasks (Newmann & Associates, 1996; Newmann et al., 2000; Newmann & Wehlage, 2005) as outlined in Chapter Two, is associated with standards of intellectual quality rather than teaching strategies or processes. Newmann identifies student learning as the core of successful school restructuring whereas Fullan’s work focuses more on building the collective skills of teachers as a central component of school improvement. Although they are by no means the same, these perspectives provide a compatible set of tools which contribute to the theoretical framework on which this research is based.

School reform and leadership are also considered as essential and interconnected practices (Fullan, 2007, 2010; Fullan et al., 2009; Fullan & Hargreaves, 1996; Newmann & Associates, 1996; Newmann et al., 2000; Newmann et al., 1995; Newmann & Wehlage, 2005), in which leadership plays a role in ensuring that school improvement is ongoing and sustained. They acknowledge the important role of the
principal in ensuring that teachers’ knowledge, skills, and dispositions, as well as necessary technical resources and program coherence are firmly in place to provide a collective and ongoing focus on high quality teaching. Additionally, Fullan (2007) identifies the principal as key to both the implementation and continuation of professional learning initiatives, particularly in ensuring that new staff are supported when implementing existing school programs. He also acknowledges that staff turnover seriously undermines the continuation of professional learning initiatives, and that school leaders have a crucial role in supporting new staff as they become familiar with existing school programs and priorities.

The existing research by Newmann (Newmann, 1996; Newmann et al., 2000; Newmann et al., 1995; Newmann & Wehlage, 2005) and Fullan (Fullan, 2007, 2008, 2010; Fullan et al., 2009; Fullan & Hargreaves, 1991, 1996) forms a highly regarded and often-cited body of literature on pedagogical reform which addresses school capacity, spanning nearly 30 years. It is claimed that a failure to address school capacity may be the cause of an acknowledged and well-documented history of failed educational reform attempts (Melbourne Graduate School of Education, 2012; Armour & Makopoulou, 2012; Borko, 2004; Newmann, 1996; Wayne et al., 2008). Their collective work provides a broad theoretical lens with which to explore the concepts investigated in this research.

**Hord’s framework of professional learning communities**

I also drew on the work of Hord (2004) and others (Hall & Hord, 2001, 2006; DuFour et al., 2009; DuFour, DuFour, et al., 2010) to investigate the degree to which professional learning communities were evident in case study schools. Professional learning communities were described in Chapter Two as environments of cooperation, mutual
support, and growth where teachers work together to achieve what they cannot accomplish alone. DuFour, DuFour, et al. (2010) outlined three underlying principles of professional learning communities, namely: (1) there is an expectation that all students will learn, (2) there exists a culture of collaboration, and (3) there is a clear focus on student results. As previously outlined in Chapter Two, a specific framework used extensively by researchers to explore professional learning communities in schools was devised by Hord (2004).

Hord’s framework was used as a protocol for school-based observations of professional learning meetings during collection of case study data in this study. The framework outlines five dimensions of professional learning communities, within which leadership performs an important role. According to Hord (2004), the principal in a professional learning community is an active participant in the professional learning where leadership is shared, a view that is well supported in the literature (Dinham et al., 2008; Kennedy et al., 2011; Timperley, 2011; Timperley et al., 2007). Power, decision making, and authority are distributed among staff. Added to this, staff share and articulate a common vision, with a focus firmly on student learning. An adaptation of Hord’s framework of professional learning communities can be seen in Figure 4 below.
Hord’s framework of professional learning communities aligns with the previously mentioned work of both Newmann and Fullan, and also forms part of the theoretical framework on which my research is based. Similar to other research discussed in Chapter Two (e.g., Dinham, 2007; King, 2011; Timperley et al., 2007), Hord outlines the benefits of teachers developing collaborative work practices and collective responsibility for student learning, which also echoes Fullan’s idea of having a shared vision and Newmann’s concept of professional community. In addition to this, Hord highlights the crucial role of school leaders in ensuring that supportive conditions for learning exist in schools, and further emphasises the need for distributed leadership—another key factor identified by both Newmann and Fullan as influencing school capacity for improvement.
Although the three bodies of work on which my theoretical framework is based are all concerned with building school capacity through teachers working together to improve their practice, the factors identified by each of the above authors have conceptually different foci. Newmann et al. identify the core of successful school restructuring as being student learning that is supported by high quality pedagogy. Fullan distinguishes between vertical and lateral capacity building, with the former related to teachers learning from each other in the local context and the latter concerned with whole-systems change. Although Hord’s framework forms a narrower, school-based focus, she also identifies building organisational capacity (supportive conditions) and distributed leadership (supportive and shared leadership) as essential factors in school professional learning communities, similar to the aforementioned bodies of research.

The factors identified in the three bodies of work outlined above can be broadly classified under three main headings. First, “Contextual/external factors” include factors such as program coherence, technical resources, supportive policies and programs and resourcing. The second main heading, “School level factors”, includes factors such as professional community, principal leadership, capacity building, shared values and vision, collective learning and application, shared leadership and supportive conditions. The third main heading relating to the factors identified in the three bodies of work that collectively constitute my theoretical framework is “Teacher level factors” and include such elements as teacher knowledge, teacher skills, dispositions, motivation and shared personal practice. In summary, the research base which underpins my theoretical framework is depicted in Figure 5 below.
Historically, social research has been concerned with understanding “the other” (Denzin & Lincoln, 2005, 2011), in which researchers approach their subject with a predetermined theory and ontology, epistemology, and methodology. Together, these underlying principles form the interpretive frameworks which guide researchers’ actions. In this manner, researchers are situated in ways that impact on how they shape
studies and interpret evidence. Their position is framed by their world view, comprised of their ontological and epistemological perspectives.

**Locating the researcher in the field**

In establishing the trustworthiness of my research, I disclose that I am a practising teacher as well as a researcher. I have had first-hand experience with the particular project being studied in two schools as a teacher participant and as a team leader. One of the schools in which I was previously employed participated in the initial survey in this study. From my involvement with the project across two schools, I acknowledge having had some initial understanding of the phenomenon being studied. It was this background knowledge that motivated me to undertake the research, as outlined in Chapter One. As a result of my experiences, I feel a connection with the teacher participants in the study which warrants disclosure, although it is generally acknowledged in qualitative research that “as the researcher is the primary instrument of data collection, subjectivity and interaction are assumed” (Merriam, 1998, p. 59).

Similar to Harrison, MacGibbon, and Morton (2001), my research experiences “shape and are shaped by” (p. 324) my understanding of the topic in the field of collaborative teacher professional learning. I have sought the perspectives of teachers, at the same time attempting to distance myself from the data, by “making the familiar strange, and the strange familiar” (Wolcott, 1999, p. 86).

**Philosophical paradigm**

Philosophical paradigms underpin the research process. Positivists attempt to give objective accounts of the real world, whereas post-positivists believe behaviour cannot be quantified and regard attempts to do so as unreliable. The post-positivist view is that
qualitative data can and should be read scientifically whereas the post-modern notion of
data is that it can be interpreted in many ways, depending on the position of the
researcher. Methods are becoming increasingly blurred to better cater for the needs of a
rapidly changing and increasingly complex technological world (Denzin & Lincoln,
2011).

Qualitative research has gained increased prominence and credibility over the past 50
years, as researchers increasingly attempt to understand the social and cultural
intricacies of people’s lives. Qualitative research involves studying phenomena in
natural settings using a range of interpretive tools which add richness, depth, and
complexity to a study. Strauss (1966) and Nelson, Treichler, and Grossberg (1992)
describe qualitative research as a “bricolage” or patch-work quilt, in which the various
data sources are stitched together to uncover multiple, contrasting meanings that lead
the reader to a broad and substantial understanding of a subject. Richardson and St.
Pierre (2005) put forward a contrasting metaphor of qualitative research. They liken
qualitative research to a crystal through which the researcher views a phenomenon from
many faces that intersect as light passes through them. Both examples outline how
qualitative research aims to tell the same story from a range of perspectives, in order to
depth understand the phenomenon being studied.

In this study, collaborative professional learning is investigated from the perspectives of
educational leaders, teachers both directly and indirectly involved in collaborative
professional learning projects, and academic partners who worked in schools supporting
QTAL project teams. By investigating collaborative professional learning from a range
of viewpoints, I seek to identify common themes that contribute to the knowledge base
and to practice, inductively building in-depth description and analysis.
Statement of approach

_We stand firmly behind our belief that critical qualitative inquiry inspired by the sociological imagination can make the world a better place._

— Denzin and Lincoln (2011, Preface, p. x)

This chapter identifies my research as mainly qualitative in design because I sought to deeply understand the factors related to teachers’ professional learning experiences which influenced their individual and collective dispositions and practices. My research is underpinned by a critical theory perspective (Guba & Lincoln, 2005; Kincholea & McLaren, 2005, Denzin & Lincoln, 2011), which aims to empower teachers to have greater input into their professional learning experiences and, in so doing, address specific local teacher and student learning needs.

The research design consisted of an initial survey designed to inform the collection of cases, followed by the case studies themselves. In this design, I first collected and analysed the data from an initial survey. As outlined in Chapter One, the survey population comprised schools which received QTAL funding from 2006 to 2010. The list of schools and the names of individual school projects were provided on request through the NSW Department of Education and Communities. Following the identification of four case study schools through “maximal variability sampling” (Cresswell, 2008, p. 214), semi-structured interviews, observations, and document study were undertaken at these sites. The purpose of the survey was to identify case study schools.
The study tracked a reflexive process in relation to teachers’ experiences with a professional learning project up to seven years hence, to determine whether its impact was sustained in relation to current practices and school learning culture (Wiersma & Jurs, 2005). I investigated the beliefs, attitudes and practices of groups of teachers in the case study schools, their dispositions and interpretation of existing culture, and in particular the dominant discourses on which they drew in relation to professional learning. The theory developed was substantive, grounded in local practice. Teacher dispositions and school culture were investigated in order to understand what sustains collaborative professional learning practices over the longer term.

**Research model**

Similar to the methodology employed by Coe (2000), Florian (2000), Coburn (2003), and Kilbane (2009), the chosen research model, a qualitative multiple case study, enabled examination of the ongoing sustainability of a prior intervention, across a number of sites. Stake (1995) defined case study as:

> A study of a bounded system emphasising the unity and wholeness of that system, but confining the attention to those aspects that are relevant to the research problem at the time…Common to all case study researchers is the search for patterns. (p. 259)

In my study, a case was defined as a school. Four cases were investigated in order to address the research questions from multiple perspectives, and to ensure there was some variability. Selection criteria for cases are outlined later in this chapter.

Multiple case study was selected as the methodology because collecting and analysing data from several cases provides opportunities to identify patterns across sites,
potentially strengthening the robustness of theory produced and maximising what is learnt (Stake, 1995; Tellis, 1997; Zonabend, 1992). “Collective case studies”, “cross-case”, “multi-case”, and “comparative case study” (Merriam, 1998, p. 40) are synonymous terms used to describe multiple case study approaches. Findings are initially presented as individual case studies or portraits (Lightfoot, 1983), then cross-case analysis is carried out in order to make comparisons between cases which, in this study, included the schools and any identified confluences between them. Single cases are grounded by explaining and comparing the phenomena across the broader education field, strengthening the trustworthiness of findings.

The careful selection of cases is essential in all case study research. Although similar themes are identified by comparing professional learning practices across schools, caution is exhibited when generalising from individual cases as each case is unique (Stake, 1988). Sometimes unique cases also help us to understand more typical cases (Flyvbjerg, 2006; McDonald & Walker, 1975). Flyvbjerg (2006), for example, used single cases to investigate power and corruption in local government. In doing so, he argued that typical cases did not provide the richest details, and the unique cases that stood out in some way revealed more information. With Flyvbjerg’s findings in mind, I particularly targeted cases that stood out in the initial survey due to their difference in order to gain multiple perspectives on my topic.

**Overview of data collection**

Initial data collection took place in May, 2012. Questionnaires were administered by a website for ease of access as “the population of potential respondents had 100% access to computers” (Fontana & Frey, 2005, p. 721) in schools. Simple descriptive statistics
were used to analyse survey data using SPSS statistical computer software. Four case study schools were selected based on survey data responses.

Once schools had been selected and agreed to participate, I visited each case study school in turn and introduced the research at a general staff meeting. I answered any questions teachers had in relation to the research, and invited all interested teachers to nominate themselves for interview.

In a subsequent visit, I conducted semi-structured interviews with interested staff, using the interview protocol that had been piloted previously with a QTAL team of teachers at a large primary school. Data collected for case studies consisted of interviews, school-based observations of targeted professional learning meetings, and document study. These data methods are discussed further below.

Following the completion of interviews, and during subsequent visits to case study schools, I collected further evidence of school learning culture. I was guided in my observation of professional learning meetings by Hord’s framework of professional learning communities, as previously outlined in Chapter Two (Hall & Hord, 2006, 2011; Hord, 2004). I analysed of a range of documentary evidence provided by the schools, for relevance to the study, and to address the research questions. The qualitative data collected for case studies were read, coded, and analysed to identify themes using NVivo 10 software.

**Initial surveys**

The survey instrument was piloted in May, 2012 in a large primary school that had participated in QTAL from 2008 to 2010. Five members of the original QTAL team
trialed the survey instrument and provided feedback in relation to clarity of questions, survey layout, and relevance of questions to the project in which they participated. The survey instrument was modified as a result of the teacher feedback received during the pilot study. Some questions were deleted to ensure that the survey instrument was free from ambiguity and clearly provided the information sought to address the research questions.

Surveys were forwarded to all 160 participating schools that received QTAL funding from 2006 to 2010 in May, 2012, and were addressed to school principals, with a request to pass on surveys to the previous QTAL team leaders in each school. If the team leader was no longer in the school, the survey was forwarded to a previous QTAL team member. Surveys were designed to address the research questions by identifying whether the content and process of QTAL contributed to identifiable and significant longer-term changes in teachers’ dispositions and school culture.

The design of the initial survey was informed by the literature that underpins this study, including the body of research on collaborative professional learning, pedagogical change, professional learning communities, factors associated with effective professional learning, and the impact and sustainability of collaborative professional learning. The survey questions were linked to the research questions and are included in Appendices 5 and 6. Participant responses were coded and key themes were identified so that research questions could be investigated.

**Selection of case study schools**

Completed school surveys were initially sorted into three categories: (1) schools reporting that participation in QTAL impacted on teacher dispositions and/or school
learning culture, but that learning was not sustained; (2) schools reporting that participation in QTAL impacted on teacher dispositions and school learning culture, and that learning was sustained; and (3) schools reporting that participation in QTAL did not impact on teacher dispositions and school learning culture, and that learning was not sustained. Following the initial sorting of surveys, schools which reported that teacher learning associated with QTAL had been sustained (as per category two above) were critically examined to identify: (1) schools where factors associated with the sustainability of teacher professional learning, as identified in the literature, were evident; and (2) schools which also stood out in some way, in order to maximise the variability of cases selected.

Additionally, I sought some variability in case study schools by selecting a mix of rural and urban schools, primary and secondary schools, and different-sized schools with varying student enrolment numbers, also taking into consideration the differing time periods in which the schools undertook QTAL.

The process that I used to select my four case study schools is outlined diagrammatically in Figure 6 below.
On the basis of this data, four schools were selected for the multiple case study. Cesta Public School was a medium-sized, country primary school situated 50 km west of a major urban centre. Only two teachers who were involved in QTAL remained on the staff at the time of this study, however all of the QTAL team members were accessible, even though they had moved on to other schools. Collum High School, an urban secondary school on the south-western outskirts of a major city, had participated in QTAL in an earlier round of funding (2006 to 2007). Collum High School stood out...
because its QTAL project comprised a joint project with partner primary schools.

Turley High School was a much larger secondary school than Collum High School and was situated 100 km equidistant between two major cities. Turley High School was a middle school consisting of a junior secondary campus, and its project originated in a specific subject faculty in the school. Widdon Public School was a small primary school on the outskirts of a major regional centre, and nearly all of the teachers who participated in QTAL had remained on staff. The case study schools, along with the specific reasons for the strategic selection of cases as outlined above, are summarised in Table 1 below.

Table 1. Strategic selection of case study schools.

<table>
<thead>
<tr>
<th>School name</th>
<th>No. of students</th>
<th>Years of project</th>
<th>QTAL teachers remaining</th>
<th>Rural or urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesta Public School</td>
<td>360</td>
<td>2008–2010</td>
<td>2</td>
<td>Rural</td>
</tr>
<tr>
<td>Collum High School</td>
<td>800</td>
<td>2006–2007</td>
<td>3</td>
<td>Urban</td>
</tr>
<tr>
<td>Turley High School</td>
<td>1100</td>
<td>2008–2010</td>
<td>6</td>
<td>Rural</td>
</tr>
<tr>
<td>Widdon Public School</td>
<td>160</td>
<td>2008–2010</td>
<td>5</td>
<td>Urban</td>
</tr>
</tbody>
</table>

**Initial survey data**

Of the 160 schools that received QTAL from 2006 to 2010, 52 surveys were returned, representing a return rate of 33%. The survey instrument gathered useful background information in relation to collaborative professional learning projects in these schools, although as previously stated, the main purpose of the survey was to guide the selection of case study schools.
Survey respondents

Most of the survey respondents were directly involved in the QTAL projects in their schools, indicating that the majority of survey respondents were well placed to do so, as they had been directly involved in the project in their local schools and were therefore able to provide first-hand information which would contribute to addressing the research questions.

Survey respondents came from a broad cross section of school types in government schools in NSW. The majority of schools that responded to the survey were primary schools, followed by secondary schools), and the smallest response was from central schools, as seen in Figure 7 below.

Figure 7. Survey respondents and school type.
This research covered a cross-section of the various school types (from small primary schools to large high schools) in NSW government schools.

**Sustainability of action learning and the Quality Teaching framework**

Respondents were asked to identify whether action learning and the Quality Teaching framework, the two components of QTAL, were still used in the school for professional learning. First, respondents were asked to identify if the particular model of collaborative professional learning used in QTAL, action learning, had been sustained. Respondents from 88% of schools reported that action learning had been sustained as a mode of professional learning, at least to some extent. Additionally, it was reported by 93% of respondents that the Quality Teaching framework continues to be a focus in the school. This suggests that participation in collaborative professional learning projects may have impacted on both the approaches to and processes of professional learning.

**Staff awareness of QTAL**

Respondents were also asked about how effectively the QTAL team communicated project content and outcomes to the rest of the staff, as a means of sharing or “scaling up” (Coburn, 2003; Thoonen, Sleegers, Oort, Peetsma, & Geijsel, 2011) the reform across the school. The data indicated that there may have been greater awareness of QTAL projects among primary staff than secondary staff. The majority of primary respondents (77%) indicated that the whole staff were either well informed or moderately well informed about their QTAL project during its implementation; in contrast, fewer (53%) secondary respondents indicated this.
**Impact of QTAL on school learning culture**

Respondents were also asked whether the collaborative professional learning project investigated in this study, QTAL, impacted on school culture. Sixty-three percent of respondents reported that QTAL had little or moderate impact on school learning culture, while 25% of respondents indicated that QTAL had a strong impact on school learning culture.

Impact across different-sized schools was also investigated. In the smaller schools (less than 300 students), it was reported by the vast majority (82%) of respondents that QTAL had some impact on school learning culture (either a little, moderate or strong impact) and the same impact was identified in 66% of respondents in medium sized schools with between 300 to 600 students. In the larger schools with more than 600 students, 53% of respondents also identified some level of impact on school learning culture. These data suggest that school size may have been a determinant as to whether participation in QTAL positively impacted on school learning culture, but results above are inconclusive. That said, the majority of survey respondents, across small, medium, and large schools, reported that QTAL had to some extent facilitated the development of a positive school learning culture.

**Factors that increased sustainability**

Schools were asked to report on possible factors that may have increased the sustainability of QTAL in the school. A range of factors were reported, including more internal and external support, increased support from state coordinators, and collegial support from outside the school. Some respondents indicated that they were satisfied
with the level of support they had received, and reported that “nothing” was lacking in their QTAL experience.

Approximately 40% of respondents felt that more in-school support may have led to the project being sustained across the school to a greater degree. Additionally, 20% of respondents felt a higher level of external support may have resulted in projects being further sustained. There were two QTAL state coordinators during the timeframe of the study, who were responsible for all projects across NSW. Ten percent of respondents reported that more support from QTAL coordinators may have increased sustainability, and collegial support from outside the school may have also led to increased sustainability.

**Case study data collection**

**Semi-structured interviews**

Qualitative interview data were gathered from interviews with principals, QTAL team leaders, QTAL teachers, and other interested teachers in each case study school. In total, 58 interviews were conducted across the four schools. A semi-structured interview approach was chosen to allow for flexibility to cater for individual respondents and varying contexts (Fontana & Frey, 2005). The interview questions were linked to the broader research questions (see Appendix 6) and focused on the process and content of school professional learning projects, as well as the ways in which the professional learning processes that began with QTAL remained in the school in some form, up to seven years hence. The semi-structured interview protocol used in the research is included in Appendix 7.
The pedagogical framework underpinning QTAL, the Quality Teaching framework (NSW DET, 2003c), continues to be a broad systems initiative that schools use to shape teaching and learning in classrooms, and as a basis for sharing practice. During interviews, I attempted to determine the degree to which the pedagogical model remains a focus in case study schools, while at the same time recognising that adoption and retention of the Quality Teaching framework within a school may be related to a broad range of factors other than participation in QTAL.

**Observations of professional learning meetings**

Dimensions of professional learning community as identified by Hord (2004), and outlined in Chapter Two were used to guide my observation and analysis during the monitoring of school professional learning meetings. Observation was selected as a research technique for this study to provide a window into school professional learning practices, and to contribute to my understanding of the phenomenon of collaborative professional learning in each case study school. Observation was also used to corroborate reported interview data in relation to how teachers were working together in schools at the time, reinforcing the trustworthiness of research findings. Field notes were used to record specific observations during professional learning meetings and focused on interactions among participants, the content of professional learning meetings, and the professional learning processes used in the case study schools.

During observations, I assumed the stance of “observer” (Merriam, 1998, p. 101). Teachers were well aware of my role in the research and of the fact that I was taking field notes in relation to their professional learning practices and interactions during the professional learning meetings. Although I was physically situated in the professional
learning meetings, I did not participate in the meetings in any way, and attempted instead to observe and analyse meeting proceedings, using criteria based on Hord’s (2004) framework as a guide, noting (1) whether staff showed evidence of shared values with a firm focus on student learning, (2) whether there was evidence of collaboration and reflective dialogue during the meetings, (3) whether the school principal was an active participant in the learning and shared leadership with the staff, (4) evidence of school infrastructure which supported ongoing teacher learning, and finally, (5) evidence of professional trust and respect among the staff. Summaries of the observations of professional learning meetings that I attended in each of the case study schools are presented in the case portraits in Chapter Five, based on Hord’s framework above.

**Document analysis**

Documents were analysed for evidence of the sustained impact of collaborative professional learning. Schools were asked to provide me with any documents that they felt would increase my understanding of the sustainability of learning associated with QTAL in the school, and no restrictions were given to schools in relation to what they could make available for analysis. A range of pertinent artefacts was provided by individual schools for examination, including professional learning plans, annual reports, staff meeting plans, units of work, class programs, school web pages, and other relevant online documents, as well as photographs of student work samples and video clips. Documents were individually analysed for evidence of relevance to the research, and to address the research questions. Documents studied are listed in Appendices 10, 11, 12, and 13, and they were coded using NVivo 10 software.
Summary of qualitative data sources

Although all interested teachers were invited to be interviewed for the research, the uptake in the case study schools varied. At Cesta Public School, 13 teachers were interviewed, five of whom had been involved in QTAL. However, three of the five QTAL teachers were no longer in the school, although they were available for interview and agreed to participate.

At Collum High School, 11 teachers were interviewed for this research, four of whom had been involved in QTAL. The QTAL team leader had moved to a nearby school but contributed to the research via email. Additionally, two retired Principals were interviewed, as well as three current members of the Collum Learning Community, a professional learning community consisting mainly of principals from partner primary schools, further outlined in Chapter Five. In total, 16 interviews were conducted that related to Collum High School.

At Turley High School, 16 interviews were conducted for this research. Most of the original QTAL team remained, and volunteered to be interviewed (six teachers). Turley High School differed from Collum High School and Cesta Public School in that most of the original QTAL team were still teaching in the school.

At Widdon Public School, the only small school in the study, all permanent teachers on staff chose to be interviewed for the research, as well as one casual teacher, nine teachers in total. Five of the teachers who were interviewed had been directly involved in QTAL, although one of these teachers, the Principal at the time of QTAL, had moved to a nearby school but was willing to participate in the research.
As to be expected, a higher percentage of the total staff was interviewed in the primary schools than in the much larger secondary schools. Turley High School and Widdon Public School had a higher number of QTAL teachers remaining than the other two case study schools, Collum High School and Cesta Public School. Additionally, the four academic partners were also interviewed for the research.

A greater number of documents were provided for analysis by Turley High School (n=39) and Widdon Public School (n=35) compared to Cesta Public School (n=19) and Collum High School (n=19). At Turley High School, a number of units of work were provided from across different faculties in the school that confirmed that the Quality Teaching framework was used for programming, as well as a range of teaching strategies booklets that were put together by original QTAL members to share their learning with the wider staff. A significant number of documents provided for analysis from Widdon Public School were curriculum-based teacher resources, as well as session notes from conference presentations that the staff had participated in following QTAL.

In total, I spent five to six days in each case study school during Terms 3 and 4, 2012. A summary of qualitative data sources collected in the research in each case study school can be seen in Table 2 below.
Table 2. Summary of qualitative data sources in the research.

<table>
<thead>
<tr>
<th>School</th>
<th>Interviews</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>QTAL teachers</td>
<td>Non-QTAL teachers</td>
<td>Academic partners</td>
<td>Documents for analysis</td>
<td>Observations/school visits</td>
</tr>
<tr>
<td>Cesta Public School</td>
<td>5*</td>
<td>8</td>
<td>1</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Collum High School</td>
<td>4</td>
<td>12**</td>
<td>1</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Turley High School</td>
<td>6</td>
<td>10</td>
<td>1</td>
<td>39</td>
<td>5</td>
</tr>
<tr>
<td>Widdon Public School</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>34</strong></td>
<td><strong>4</strong></td>
<td><strong>112</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

*5 QTAL teachers were interviewed from Cesta Public School, but three of these teachers had moved to other schools. Only two QTAL teachers remained.

**5 of the 12 interviews from Collum High School’s non-QTAL teachers were from the Collum Learning Community (see Chapter Seven).

Analysis of qualitative data

As previously discussed, field notes, interview transcripts, and other texts were analysed using NVivo 10 software. Prior to analysis, interviews were fully transcribed to provide a reliable record. Participants were asked to confirm that transcripts were a true and accurate record of events. Transcripts were entered into NVivo and the text was coded and analysed to identify emerging themes and make links between data sources.

Connecting themes provide “additional rigour and insight to research” (Cresswell, 2008, p. 258), however as this study is mainly qualitative, “generalisability may be an inappropriate goal for interpretive research” (Merriam, 1998, p. 210). The main overall themes identified in the qualitative research are listed and described with text examples from an NVivo Codebook, which is included in Appendix 4. Main themes were
identified in the data. The five key themes include: (1) the value of external knowledgeable professionals in bringing a range of expertise into schools; (2) the potential of a substantive pedagogical model to break down teacher isolation and build shared understandings; (3) the crucial role that leaders play in influencing school capacity for improvement; (4) change in schools; and (5) the increasing role of ICT and technology-focused professional learning in schools.

I will now move to outline the measures put in place in the study in order to confirm trustworthiness of this research.

Trustworthiness of research

Trustworthiness, credibility, and dependability are all terms used to assess the degree to which qualitative research can be trusted and believed (Guba & Lincoln, 2005). In this research, I have paid careful attention to the way in which data were collected, analysed, and interpreted and to how the findings are presented. Additionally, a range of data sources (interviews, observations, document study) have been included to maximise the likelihood that credible research results and “a holistic interpretation of findings” (Merriam, 1998, p. 105) are achieved. Measures of trustworthiness drawn upon in the research are outlined below.

First, my own location in relation to the field was disclosed earlier in this chapter. Next, my survey instrument was based on the body of literature drawn upon in Chapter Two, and piloted in a large primary school. Amendments were made to the survey instrument based on the pilot study feedback received from teachers. Semi-structured interviews were transcribed and returned to interviewees for member checking. Any queries made by interviewees were addressed, and transcripts modified accordingly, as a measure of
dialogic trustworthiness. Ongoing email contact and dialogue with interviewees clarified any anomalies in the transcripts that emerged during data analysis. This ensured that the basis for my analysis was accurate and that I clearly understood the main themes identified by the interviewees in these data.

Dialogue makes understanding the life world and lived realities of others possible. By failing to engage in deliberative dialogue and inquiry, researchers put themselves at greater risk of not seeing, not understanding, and misinterpreting people whose lives and experiences differ from their own. (Larson, 1997, p. 459)

As well as maintaining ongoing dialogue with interviewees to ensure clarity, accuracy, and understanding, I also sought feedback from supervisors and colleague researchers regarding the procedural accuracy and clarity of my data collection methods and analysis (Wolcott, 1999). This took the form of peer debriefing, which provided opportunities to validate my data analysis and interpretation with researchers in the field who were not directly involved in my study. A number of challenging issues were identified in the interview transcripts; these were clarified with interviewees and discussed anonymously with supervisors and peers to consolidate my understanding of the emerging issues from multiple perspectives, which aided in my analysis and understanding.

Raw data were entered into NVivo and reduced through the process of fine coding and synthesis, which included summarising, diagrams, and memos in NVivo. Finally, data were reconstructed into key themes. Through an ongoing focus on trustworthiness in the research as outlined above, findings are grounded in the data, and inferences made are logical, sequential, and largely supported in the wider professional learning literature, as outlined in Chapter Two (Miles & Huberman, 1994).
Ethical considerations

Key ethical considerations in the research were those relating to confidentiality of participants and schools, authenticity of data and its security, as well as storage and destruction. My main ethical consideration in conducting this study was to protect the privacy of teachers involved, to show respect for their dignity and rights at all times, and to ensure that data were analysed accurately, in a way that was “doing justice to participants” (Flick, 2009, p. 41). Participants were assigned a pseudonym to protect their identity. Additionally, case study schools were allocated a pseudonym to further protect the anonymity and privacy of research participants who work in them, which is accepted ethical practice (Barnes, 1979; British Sociological Association, 1992).

Informed, written consent was obtained from all participants prior to their inclusion in the research. Ethics approval was sought from the Human Research Ethics Committee (HREC) at the University of Newcastle prior to the commencement of the study and is included in Appendix 8. Ethics clearance was then sought from the schools’ governing body, the New South Wales Department of Education and Communities, prior to piloting the initial survey and before commencing any form of data collection. This is included in Appendix 9. The study conformed to the guidelines of the NSW DEC Strategic Research Directorate and the University of Newcastle, Australia.
Limitations of the study

This research is a retrospective study. A large proportion of data collected was in the form of teacher self-report, and the QTAL projects in the study were completed up to seven years hence. It is difficult to ascertain how far a school’s participation in QTAL resulted in changed teacher dispositions, teaching practice, and/or school culture, given the length of time and the complexity of the school experience. Consequently, the extent to which any claims can be made is limited because other factors may have impacted on schools’ decisions to sustain the learning associated with their collaborative professional learning projects. Cases selected were chosen from a clearly defined population, namely, schools that participated in QTAL projects between 2006 and 2010. As noted above, I am not seeking to generalise beyond these case study schools; however, the study does aim to contribute to research in education that informs schools and education systems in relation to what sustains professional learning in the longer term. It is hoped that findings from the study will provide new insights into professional learning which strengthen the quality of teaching in classrooms and, ultimately, student learning outcomes.

Summary

In this chapter I have outlined the theoretical framework and methodology for this study, and the reasons why they were chosen. This study sits in the area of critical social research, both in the aims of the project, which contribute to a critical understanding of the sustainability of collaborative professional learning, and in the value of the knowledge and understandings that teachers bring to the research as they hold the emic perspectives of what works best in their schools and classrooms. This chapter has
articulated my theoretical framework and methodology used to investigate the
“problem” of this study, which is related to the impact and sustainability of
collaborative professional learning in schools. Additionally, I have reported the survey
data from the initial phase of the research. The survey was used to inform the selection
of the four case study schools based on selection criteria outlined earlier in this chapter.

In the following four chapters, I provide more comprehensive, qualitative “portraits”
(Lightfoot, 1983) of the case study schools selected, and further elaborate on my
findings in these particular schools.
Chapter 4: Widdon Public School

Widdon Public School is classified as a metropolitan government primary school, with an enrolment of 166 students (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2012a). There are seven full-time teaching staff, a non-teaching Principal and one class per grade. Widdon Public School is a small country school, situated on the outskirts of a large regional centre. The school profile reports that it is a “small community school with a strong focus on safety, unity, respect and fairness” (ACARA, 2012a), and “there is a strong technology focus in the school, with particular emphasis given to the basic skills”. The school attracts an Index of Community Socio-Educational Advantage\(^2\) (ICSEA) score of 951, which is below the average ICSEA value of 1,000 in Australian schools. Of the 166 students who attended the school, 4% identified as of Aboriginal descent and 6% originated from Language Backgrounds Other than English.

Participants at Widdon Public School

As reported in Chapter Three, nine semi-structured interviews were held at Widdon Public School. Five of the teachers interviewed were original QTAL team members. One QTAL team member had left the school and was not interviewed. The Principal at the time of QTAL, and also a QTAL team member, Sian, had moved to a nearby school following QTAL and was replaced in the role by an Assistant Principal, Alison, who arrived at the school soon after QTAL funding ceased. Both Sian and Alison were interviewed for the research. The school also had two QTAL team leaders: Natalie, who

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\(^2\) The Index of Community Socio-Educational Advantage (ICSEA) is a measure that enables meaningful comparisons between schools. It has been developed for the My School website and measures key factors which correlate with educational outcomes (ACARA, 2012b).
went on maternity leave mid-project and her colleague, Mandy, who took over the organisation of the QTAL team in Natalie’s absence and also agreed to be interviewed.

The Academic Partner was interviewed at length in relation to her highly esteemed role in the school during QTAL, as reported by Sian, Natalie, and Mandy (QTAL team members). The Literacy Coach, Winona, who joined the school following completion of the QTAL project and assumed a role similar to that of the previous Academic Partner did not wish to be formally interviewed. Winona held the view that my study related to the time before she started working in the school. Nonetheless, a range of evidence provided by the staff and the Academic Partner suggested that Winona’s work was a continuation of the learning that had commenced during the QTAL project prior to her arrival.

The last year of my work there, they were starting to work in each other’s classrooms as buddies. And being much more comfortable with me working alongside them in their classrooms, and me demonstrating things they wanted me to demonstrate...And when Winona came into the school it was like a lovely transition. (Academic Partner, Widdon Public School)

Our current academic partner’s name is Winona. She’s been sensational, too. She’s been a fantastic coach. She knows how to get everyone on the same page. She never makes you feel like you’re silly. She knows how to guide you without you even knowing you’re being guided. (Natalie, QTAL team leader, Widdon Public School)

I attended one general staff meeting in order to gain a sense of the dynamics among teachers, and to introduce the research, one targeted professional learning meeting, and a regional literacy network meeting in which a team of teachers from Widdon Public
School presented a session on “The Power of Writing Feedback” to other regional primary teachers.

During my observation of the professional learning meeting, teachers shared research on their school literacy target as led by their Literacy Coach. Staff at Widdon Public School collaboratively discussed the research, reflecting on current school policy and practice. They updated a draft school literacy policy, and were observed linking theory with classroom practice. Widdon Public is a small school, and the staff worked as one group to complete tasks; however, there was discussion in smaller groups at times throughout the meeting when pairs of teachers fed their findings back to the larger group. The Principal was also an active and equal participant during the meeting, and the focus throughout the meeting was on student learning in classrooms. During interviews, teachers (including Angela, Linda, Natalie, and Mandy) consistently articulated and described the school vision of Widdon Public School as “We’re all in!”, where teachers shared a whole-school perspective and ownership of school initiatives.

Although the meeting was led by the Literacy Coach, all teachers contributed actively during the meeting and everyone’s views were valued. The literacy strategies that they discussed were illustrated with anecdotes of classroom applications across the school. Additionally, a video of student work samples was viewed, reflected on, and discussed by staff during the meeting, evidence of data-driven professional learning. The Principal was an equal team member, and there was a high level of engagement and collegiality throughout the meeting. Teachers discussed how they implemented particular reading strategies in their respective classrooms. Positive and negative issues were identified and discussed, demonstrating a high level of professional trust among the staff.
A total of 35 documents were provided by the school for document study. These documents are listed and classified in Appendix 10. In total, five days were spent in the school during Terms 3 and 4, 2012. These data collectively formed the basis of this case study.

**Widdon Public School’s collaborative learning project**

Six teachers from Widdon Public School were involved in QTAL from 2008 to 2010. The project was called “Assessment for Learning: Using Effective Practices for Learning and of Learning”. The focus of this project was on writing as this was the school’s identified area of need, based on Basic Skills Test\(^3\) data and teacher feedback at that time. The Principal, Sian, attended an induction not long after she arrived at the school. Sian’s task was to improve student outcomes; however, she admitted that, initially, she had “no idea how to do this”. A colleague principal at the induction advised her to encourage her staff to become involved in action learning, so that they could see what they were doing with “fresh eyes” and identify how they could individually and collectively improve their practice. At that time, QTAL funding applications had arrived at the school. Sian rallied a group of interested teachers and they successfully applied for the funding. Sian reported that a visiting consultant who had previously worked in the school attempted to dissuade her from applying at the time, as he felt that the staff were not ready to be involved in action learning. Despite this, Sian proceeded to do so as she viewed the project as a school improvement opportunity. Her aims were to build staff cohesion, positive school culture, and teacher efficacy, and to improve pedagogical skills across the school.

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\(^3\) The *Basic Skills Tests* were a series of state-wide NSW tests for students in Years 3, 5, 7, and 9 covering numeracy, reading, writing, and language. The Basic Skills Tests were replaced by the National Assessment Program for Literacy and Numeracy (NAPLAN) in 2008 (NSW DEC, 2012).
Widdon Public School was a unique case in a number of ways. Following completion of the QTAL project, the school received targeted government funding for a “National Partnership in Literacy and Numeracy”\(^4\) in 2010 which continued until 2013. Most schools which received this type of additional professional learning funding chose to participate in specific literacy intervention programs recommended by the Department of Education and Communities. Sian, the Principal, did not wish to begin a new literacy program as the school had experienced considerable success in the QTAL project prior to this, and wished instead to continue building upon the project that they had begun in order to consolidate and sustain the learning. Sian thus decided to use the National Partnerships funding to employ a literacy coach, as the academic partner role had been highly valued by the staff during QTAL.

There was a mentor along the way and that was [the Academic Partner] who transformed into Winona with National Partnerships [funding]. We were one of the very few schools that didn’t buy programs. We bought a person—Winona! (Sian, Principal)

Sian’s decision to use National Partnerships funding to buy a knowledgeable professional to work alongside teachers, rather than to implement new programs, was based on three factors. First, discussions with the Academic Partner, a highly credible literacy leader, confirmed that the school already had a project that was progressing well. They agreed that the school did not need another project or commercial program. However, as the Academic Partner was unavailable to continue with the role due to her university responsibilities, she introduced Winona to the Principal, who became the literacy coach in the school for the next three years. Second, during the QTAL project,

\(^4\) The Smarter Schools National Partnerships was a National Government and State and Territory agreement aimed at addressing disadvantage in Australian schools, which received additional funding to improve teacher quality and/or literacy and numeracy. Over one quarter of Australian schools had access to National Partnerships funding (DEEWR, 2010).
Widdon Public School teachers visited a high-performing, low-socioeconomic school in Victoria. From Sian’s perspective, this visit, in addition to her views based on her own professional experiences, confirmed that a continued professional learning focus on a few selected targets over time better facilitated the achievement of those targets and also sustained learning. And third, Sian’s decision not to undertake the Department of Education and Communities programs offered to the school under the National Partnerships agreement stemmed from her personal beliefs in relation to what constitutes effective professional learning, as well as her knowledge of local needs, effective pedagogy, and sustained school improvement. Sian decided to continue building on their existing QTAL project to ensure that the learning would be firmly embedded in classroom practice.

After our visit to [the Victorian school] and follow-up research we did into school improvement, we then made the decision to only go with one direction each year, K-6, to develop a whole-school approach to teaching, learning and assessment and embed the learning…The decision not to go with the suggested programs was mine, based on my research, knowledge and beliefs around effective pedagogy and school improvement. [The Academic Partner] confirmed the approach for me…it was extremely risky! (Sian, Principal)

When she [Sian] looked at the literacy projects offered by the National Partnerships, she didn’t want to do any of those. She felt her school was further down the track. She didn’t want to involve them in another project. They were already involved in a project. I think she was looking at me…I said, “I can’t be your academic partner. I haven’t got the time”. I said, “What you need is a literacy coach!” She agreed. She said she wanted to get a literacy coach. That’s how Winona came into the picture. So, I introduced her to Winona and she became their Literacy Coach. (Academic Partner)
As a case study, another distinctive feature of Widdon Public School was its tumultuous history prior to the school’s involvement in QTAL. Sian arrived at the school in 2007, just before they began participating in QTAL, and at that time, the staff reported low esteem due to consistently poor Basic Skills Test results and the negative impact of a confronting visit from a team of officers from the Department of Education and Training on staff morale.

I’ll never forget…when I arrived at Widdon, they were considered to be a failing school and had been told as much. There was every consultant, help, you name it, crawling over that place, trying to do whatever they could. The big-wigs had been in and said, “This is rubbish. You’ve got to do something about it!” And as a result, the staff were quite flat. (Sian, Principal)

Morale in the school was very low, and for lots of reasons. I quote from the final QTAL report, “General confidence and esteem very low. Teachers were devastated by visits from the DET improvement team, the school education director, the regional director, and Quality Teaching consultant”. Teachers just didn’t think they were teaching well…When I actually said something to the school education director, he said, “That was not the intention”. I said “No, but that’s what the message was”. He said, “The message was to go in and tell teachers [they needed to improve]”. I said, “No, the message they heard was, “We’re bloody lousy teachers!” (Academic Partner)

The Department of Education and Training had sent a “school improvement team” to the school to inform the staff that they needed to improve their external test results. The perception of the Principal and Academic Partner was that this departmental strategy

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5 The “school improvement team” is defined in this research as a team of regional leaders in the Department of Education and Training consisting of the regional director, the school education director, and the Quality Teaching consultant who visited the school to inform the staff that they needed to improve their external student outcomes data.
Collaborative professional learning and changing school culture

Positive change at Widdon Public School began with the arrival of a new Principal, Sian. Sian instigated QTAL, along with a team of interested, volunteer teachers. Mandy, a QTAL team member who had been at Widdon Public School for more than ten years, outlined the positive impact that a change of leadership had on school culture. She described the professional isolation she had felt as a teacher in the school prior to Sian’s arrival.

Our boss [at the time of QTAL], Sian, made the big impact. Her passion, experience, the way she was with the kids and her teaching. But then what she put into place for us made a big difference. The school feels like a whole different place to what it was before. Whoever said “It comes from the top” is correct, because Sian made a big difference. Particularly because there’s one grade. One teacher. I was on my own little island, doing what I thought was right. (Mandy, QTAL team leader)

The current Principal, Alison, arrived at Widdon Public School as Assistant Principal following the cessation of QTAL funding. She saw evidence of Sian’s positive impact in facilitating change and establishing a whole-school approach to professional learning. These aspects of school culture remained a focus at Widdon Public School, even after Sian had left the school. Leadership continued to be distributed across the school and decision making shared among the staff.

I came as an Assistant Principal to the school, and from the moment I walked in the door I could see it…Sian had taken the school from one that was struggling, we weren’t getting very good results, to the year I came in,
with things really starting to take off. The biggest thing is that it’s a whole-school approach. I know Sian had done work about putting the ideas out there, collectively coming up with what was good for our school, what was going to work, but then everyone had to be on board. There was no exception. It’s K-6 and that’s definitely still the approach across the school. (Alison, Principal)

Absolutely, we are one team. It’s not infants or primary. We are Widdon Public School and whatever changes we put in place at any one time, there’s always an open discussion about it. Very rarely is anything dictated with “This is the way it’s going to be”. It’s definitely a democracy. We workshop ideas, we trial things, and get rid of things that don’t work. We analyse to see what’s wrong, then find something to replace them. (Linda, teacher)

Alison and others, including Mandy, Natalie and Angela, described the collective voice at Widdon as “We’re all in!” indicating that everyone had to agree before new innovations were adopted, “because for things to change, it has to start in Kindergarten, and go all the way to Year 6. You have to build on things” (Angela, QTAL team member).

A lack of professional trust existed among the staff prior to Sian’s arrival and their participation in QTAL, as a result of their shared history. When Sian and the Academic Partner began planning for the QTAL project, the regional Quality Teaching consultant expressed a desire to continue to work in the school on the project as a critical friend. However, the Principal and the Academic Partner decided that including the Quality Teaching consultant on the QTAL team would not be conducive to change due to the consultant’s previous role as a member of the school improvement team, whose actions were regarded within the school as having undermined teachers’ professional efficacy.
The school had a sense that they were being watched, because of what happened earlier. The Quality Teaching consultant put herself in as a critical friend, and the worry was she was part of the region and she would be evaluating them. We discussed that even though it was her role as a consultant, her involvement may not allow the project to take off, to get the whole facilitation process going and getting [the staff] trusting each other. (Academic Partner)

The lack of school progress prior to Sian’s arrival and QTAL was linked to an absence of professional trust and a lack of explicit, targeted professional learning opportunities for teachers that addressed local teacher and student needs.

We were seen as an at-risk school, a school where we had people come in checking us because we weren’t achieving anything. Now I know why. At the time we didn’t know why we weren’t achieving but we weren’t getting that professional development [that we needed]. (Natalie, QTAL team leader)

Successful change in schools requires supportive leadership, and a sustained focus on learning over time (Hall & Hord, 2006; Hord, 2004; Fullan, 2007). Widdon Public School had a history of low results in external testing. A change of leadership, and an injection of funding from QTAL enabled the school to focus on teacher learning in a targeted, scaffolded way. These findings suggest that support from knowledgeable professionals from outside the school, in the form of an academic partner followed by a literacy coach, and a shared focus on improving pedagogy through collaboration, resulted in a school culture of collective commitment, successful teacher practice, and school improvement that has been sustained, despite the change of leadership in the school.
Leadership within the school was focused on bringing about improvement through the team’s collective emphasis on QTAL. The Principal was willing to take informed risks, based on her knowledge of the learning needs of her staff and students. Sian’s ongoing, active participation in QTAL was identified as a contributing factor towards the project’s sustained success by numerous team members, including Natalie, Mandy, Angela, and Val.

She’s the one who drove us to do QTAL because she believed in it so much. She said, “This is the model. This works. Look what’s happened in our school! Look at our student outcomes. Our NAPLAN growth! Everything has improved!” (Natalie, QTAL team leader, Widdon Public School)

Sian reported that she felt that the project was successful for a number of reasons. First, the project was based on student learning data. The school formally began “data tracking”, a process of methodically collecting, recording, and reflecting on data that mapped changes in student learning in relation to writing. External test data also supported the continuation of the project, as Basic Skills Test data (from 2006 to 2007), then NAPLAN data (from 2008) showed that the school writing data average was for the first time consistently above the Australian average for writing. Qualitative data from teachers and formative school-based assessment data thus suggested that the project had improved teachers’ classroom practice and student learning outcomes.

**Sustainability of the Quality Teaching framework**

Although teachers reported that the Quality Teaching framework was a focus of the project, teachers did not mention the pedagogical model until I questioned them about it.
We didn’t know what the Quality Teaching framework was when we started QTAL so our first six months was spent familiarising ourselves with the framework and the elements, understanding the elements and what they looked like. All our meetings were based on looking at and discussing the Quality Teaching framework. (Natalie, QTAL team leader)

Nearly all teachers who were interviewed at Widdon Public School, including the QTAL team members, Val, Mandy, Natalie, and Angela, reported that Quality Teaching was the basis of everything they did, although they no longer talked about it because they believed that their deep knowledge of the framework was embedded in their practice.

You can see children are engaged. You can see quality learning environments in classrooms. We’re collecting all the resources for our own background knowledge, but also passing the background knowledge on to the students. The explicit teaching that happens in the classroom. I couldn’t have said this before QTAL. Now I can say with confidence, “Walk into any classroom in this school and you will see explicit teaching of strategies to help students learn things they need to know. The Quality Teaching framework…it happens. We don’t use the words because it’s just embedded in our knowledge now. There’s no going back. (Natalie, QTAL team leader)

When we first started QTAL, we studied the framework. We don’t do that anymore. However, it still underpins everything we do. (Mandy, QTAL team leader)

Although teachers reported that the Quality Teaching framework was embedded in practice across the school, a newer staff member, Rose, was unaware of the existence of the model, highlighting the need to ensure that teacher learning is consistently revisited so that new staff members are instructed on the theory that informs practice in the school. The Principal, Alison, was aware of the need to provide new staff at Widdon
Public School with professional learning opportunities in order to learn about existing school initiatives which underpin whole-school practice; yet Rose’s demonstrated lack of knowledge about the Quality Teaching framework was evidence that she had not had the opportunity to learn about the framework during professional learning activities whilst at the school.

I agree it’s not talked about much now. When it first came in, it was talked about every meeting. It will be interesting next year because we have a couple of new teachers coming in. (Alison, Principal)

Mandy identified the related issue of staff mobility and the need to continually update new staff in current school practices. Some of the more experienced mentor teachers, such as Natalie and Linda, were casual or temporary status teachers and seeking permanent employment. If they were to obtain permanent employment elsewhere, there would be gaps in the corporate knowledge base of the school, potentially impacting on the sustainability of professional learning initiatives in the school.

A potential problem is that many of our mentor teachers are casuals. If or when they go, that could be a problem. Some of the experienced casuals don’t want to go. They present at our conferences, so they know their stuff. It does worry me because of course they want permanent work. (Mandy, QTAL team leader)

For learning to be sustained, the focus on involving new staff in sharing the agreed competencies and priorities of the school needs to be maintained (Rowling & Samdal, 2011). Alison and Mandy identified the need to ensure that corporate knowledge was regularly shared with new staff, so that all teachers were fully informed and prepared in the event that key personnel left the school.
Notwithstanding the challenges of sustaining change in schools when key people move on, it was reported that the change of principalship from Sian to Alison was seamless. As an Assistant Principal at the school prior to her promotion as Principal, Alison was already part of the existing school culture and had a deep knowledge and understanding of school priorities and their collaborative professional learning practices. She had developed strong working relationships with the staff, based on mutual trust and respect. Alison ensured that school targets continued on unaffected, sharing ownership of ongoing professional learning initiatives with the staff.

I’m not planning to change anything as a new Principal, especially since it’s working. We will continue with the mentor next year. I’m trying to work the timetable to have an Assistant Principal off class so they can go into classrooms and continue to support. Not only the new teachers but everyone…to keep the momentum going. I feel it will remain because it is built into the culture. It really is. The professional development will be maintained for the year and again, it will be focused. People aren’t going off to do a range of other things. Professional development will be based around the school plan and it will be around one aspect. (Alison, Principal)

Alison valued the innovative teaching practices at her school and the staff’s eagerness to try out new ideas. However, she was also cognisant of the real risk of professional learning overload with such a “hard-working staff” (Alison, Principal), and ensured that the school leadership monitored teacher workloads to prevent them from taking on too much change at any one time. Professional learning was therefore based around the school plan and focused on one target at a time, with follow-up and leadership support.

We’re brave enough to try new things, and also brave enough to throw things out if they’re not working or don’t suit us. Also to our detriment sometimes the teachers will take on too much. They see something and we do have that thing, “If you’re going to take that on, what are you going to
Teachers at Widdon Public School regularly visited each other’s classrooms and provided constructive feedback about each other’s practice. This started with QTAL and has been sustained over the four years since QTAL funding ceased. However, the Academic Partner expressed some concerns about coding teachers’ lessons using the protocols provided by the Department of Education and Training as part of the Quality Teaching support materials (NSW DET, 2003b). She felt the accompanying numeric coding scales could potentially negatively impact on teacher efficacy. The AcademicPartner waited until teachers were firmly entrenched in their QTAL project before introducing lesson observations and peer feedback to the staff at Widdon Public School.

What I did not like was the rating and the evaluation scales. All that goes against anything I believe about what works with teacher learning. With Widdon, there was no way I was going to use that framework too early because I didn’t want them rating themselves being good or bad against anything but themselves. The Principal felt very strongly the same.

(Academic Partner)

When the Academic Partner did introduce the Quality Teaching framework to the staff at Widdon Public School, they found it a useful framework for cross-checking and to ensure that they were addressing the Quality Teaching elements in their teaching practice.

I think it’s a great framework for cross-checking…what you’re doing well, what you need to be doing, but until you feel comfortable about what you’re doing and how you’re doing it, teachers are the first people to jump in and say, “I’m not so good at this!” (Academic Partner)
When teachers observed each other teach, they used simple recording proformas which listed what they had observed. The person who was teaching then had to record why they did what they did throughout the lesson. The QTAL group then shared each other’s buddy-teaching feedback sheets and discussed and reflected on them at team sharing meetings.

Teachers at Widdon Public School highly valued the opportunity to observe each other teach, and it was a regular, formalised part of the school professional learning calendar. The literacy coach, Winona, also observed teachers’ lessons to assist them in achieving their jointly planned personal learning goals. Additionally, teachers organised and implemented their own peer teaching sessions with whomever they felt most comfortable among their group of colleagues.

The formal part of our professional learning is when Winona comes into the room and wants to see a reading lesson. Everybody does the best lesson they possibly can. That’s probably a little more formal and then we get some feedback on it. There’s other interclass visits where two teachers together decide on the lesson. One will teach it, they then get back together and say what worked, what didn’t and why. Then the next teacher will teach and the first will provide them with constructive feedback. Teachers choose their buddies, whom they’re most comfortable with. (Alison, Principal)

These findings suggest that almost all of the teachers who were interviewed at Widdon Public School, with the exception of one teacher who had been at the school for only a year, reported that they had a deep knowledge and understanding of the Quality Teaching framework, which they believed was transferred into their classroom teaching.
Sustainability of action learning

The process of action learning was evident in the way professional learning was delivered at Widdon Public School. Teachers worked in collaborative groups, to achieve shared goals. It was reported by the staff that this mode of professional learning began with QTAL and has remained in the school. I saw evidence of action learning in the professional learning meeting that I attended and during staff presentations, both on video and at a regional literacy network meeting. Teachers reported that action learning was the means by which professional learning was delivered in the school, achievable in part as Widdon Public School was a small school and whole-school communication was embedded in the school culture.

Everything is team-based and we have a lot of whole-school activities because we’re a small school so we’re able to do that. We have an Aboriginal Education committee, and an ICT committee, and they’re learning together, looking at research, looking at what works and what needs to be improved at this school. (Natalie, QTAL team leader)

Sian considered action learning to be a natural part of teaching. Teachers discussed issues, put strategies in place, trialled them in classrooms, then came together to reflect on and refine them. This was the process of QTAL, and she likened it to her earlier Reading Recovery training which she regarded as “the best professional learning I have ever been involved in” (Sian, Principal), a view mirrored by Angela and Val who, like Sian, identified similarities in their QTAL experience and their Reading Recovery training (Clay, 1994).

It’s very much like that because in Reading Recovery you go in, talk about an issue, how to implement it, potential problems. Then you go away and implement it, then meet to reflect on what happened, what worked for you,
what didn’t, how we can improve it, student outcomes. That’s exactly what we did in QTAL. We decided, “This is what we’re going to try”. We went away and tried it. We came back and said, “This didn’t work. I found this worked better”. We discussed it, ironed out the kinks, and had another try at it. We kept retrying it and improving it. (Angela, QTAL team member)

They shared what worked and what didn’t work and that starts when you’re beginning to build a professional learning community, as evidenced by that built-up trust. It was fine to say when something hadn’t gone well. It was alright to say you didn’t know. In fact, on my first day I stuffed up badly in someone’s room. But that’s okay because that’s what happens in teaching. Eventually they learnt it was a safe place to fall. There wasn’t that criticism in relation to having a go. (Sian, Principal)

A number of other school practices were reportedly sustained, which may have begun with the school’s participation in action learning through QTAL. Following QTAL, the school focus expanded to include spelling, then reading comprehension, a continuum of literacy learning. The data focus on writing continued and included all the staff, under the guidance of the Literacy Coach. School organisation evolved to each staff member spending 80 minutes each fortnight with the Literacy Coach. During these meetings they jointly planned class literacy sessions and discussed any issues the teacher was experiencing, putting in place strategies for improvement in an action learning mode. Teachers who were directly involved in QTAL from 2008 to 2010 reported that action learning started with the project that the school was involved in and, due to its measurable success in improving teacher and student learning, it was adopted as the preferred mode of professional learning delivery at Widdon Public School.
Changes in teacher dispositions and school learning culture

Sian believed that action learning potentially assisted teachers in changing their dispositions by showing them other ways to approach issues. Previously mentioned formative and summative data also confirmed that the approach was working in their school. Both the Academic Partner and Literacy Coach at Widdon brought a range of expertise into the school that was widely regarded as having broadened teachers’ perspectives.

In November, 2008, the QTAL team reported on their progress as part of an annual evaluation requirement of the QTAL funding. Teachers identified increased professional confidence, group cohesion, and a climate of collaboration that was focused on student learning, indicators of success of the project at that stage. This evaluation provided a snapshot of how the project had changed teachers’ dispositions and classroom practice.

QTAL made me think about what I teach and specifically how I teach it, being explicit and using background knowledge to make lessons more engaging, and planning QT strategies and learning experiences. (Val, QTAL team member)

[It was] extremely beneficial in guiding my teaching. [I am] more explicit. Being able to discuss concerns with others in an open manner ... [I have] learned to do “less but better”. (Angela, QTAL team member)

I have found the QTAL program to be extremely worthwhile. The collegial communication that has been created has given us an excellent platform to share and grow in our teaching practices. (Val, QTAL team member)

It improved my professional confidence in my teaching. Being able to share ideas and concerns with colleagues has been fabulous. (Mandy, QTAL team leader)
This has been a great experience which has given me more confidence in my teaching. This is leading to improved student outcomes in my class.
(Natalie, QTAL team leader)

The second reason provided by Sian for the ongoing success of QTAL was that the staff observed her making mistakes in her own teaching and changing her practice as a result. She actively modelled the message, “It is okay to make mistakes”. Sian believed that she had credibility with the staff because teachers saw her take risks, willing to reflect on what did and what didn’t work in classrooms, and modifying her practice accordingly.

When I first arrived, the staff were scared to say they didn’t know. I also went into their rooms and taught. I thought it was good for them to see when things didn’t work for me. They could see there were days when I didn’t do very well, and I could say to them, “Gee, that was shocking!””, or I struggled with the difficult students that they struggled with...We had common experiences to discuss. I think they felt, “If the leader’s prepared to put herself out there and on show, then we can do that too”. (Sian, Principal)

It was reported by Mandy, Angela, and Natalie that changes in school culture began with the arrival of Sian, and evolved during and beyond QTAL, as evidenced by teachers’ eagerness to share problems and successes experienced in the classroom. Prior to Sian’s arrival, teachers reported that they were scared to speak out when they did not understand something, for fear of being ridiculed, and were afraid of making mistakes in their practice.

My biggest fear was I was too scared to speak up because I didn’t want to be the “dumbo” that said the ridiculous thing, so when you’re all discovering new things together, you’re not too scared to speak up. This, for me is the main thing. And as we’re all in it together, you’re not too scared to try things out and make mistakes. (Mandy, QTAL team leader)
I think we were all struggling in some aspects, too scared to speak up, thinking “People will think what kind of a teacher are you? You can’t even teach this!”, but when somebody was brave enough to admit they were struggling... it was like a snowballing effect. “Oh, yes, I’m finding that too”, and the next person, and the next person. We all felt brave enough to say what we were feeling then we could finally do something about it. (Angela, QTAL, team member)

Along with a change in leadership, Widdon Public School’s participation in the QTAL collaborative professional learning project from 2008 to 2010 acted as a catalyst for change in terms of teachers’ dispositions and school learning culture, as evidenced by the data outlined in this case study. The strategies and processes they learned during QTAL have been embedded in practice, and have since been expanded upon and evolved into “the way we do things around here” (Deal & Kennedy, 1982; Fullan & Hargraves, 1991; Reeves, 2009).

**Key findings at Widdon Public School**

Widdon Public School staff clearly felt that both the change of leadership and the QTAL collaborative professional learning project that occurred around the same time, were significant determinants in relation to the positive changes which occurred in the school and resulted in improved learning for both teachers and students. Key aspects of the findings are summarised in Table 3 below.
Table 3. Key findings at Widdon Public School.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Key findings</th>
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<tr>
<td><strong>Quality Teaching framework</strong></td>
<td>Planning using Quality Teaching elements increased student engagement</td>
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<td></td>
<td>Focus on Quality Teaching resulted in teachers becoming more reflective in</td>
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<td></td>
<td>relation to their practice</td>
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<td></td>
<td>Use of Quality Teaching framework resulted in more explicit teaching</td>
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<td></td>
<td>Peer observation and feedback formalised, and explicit feedback from Quality</td>
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<td></td>
<td>Teaching resources was not used</td>
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<td></td>
<td>The need to regularly revisit the Quality Teaching framework to ensure new</td>
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<td></td>
<td>staff are familiarised</td>
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<tr>
<td><strong>Action learning</strong></td>
<td>Action learning is regarded as a natural part of teaching</td>
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<td></td>
<td>Evidence of action learning in observations and document study at Widdon</td>
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<td></td>
<td>Public School</td>
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<tr>
<td></td>
<td>An action learning mode of inquiry evident in teachers’ conversations</td>
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<td></td>
<td>Action learning supported by school-wide distributed leadership</td>
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<td></td>
<td>Increased teacher confidence as a result of QTAL and the professional learning</td>
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<td></td>
<td>that followed</td>
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<tr>
<td><strong>Teacher dispositions</strong></td>
<td>Increased professional confidence linked to QTAL</td>
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<td></td>
<td>All QTAL teachers valued sharing issues, learning from each other, and the</td>
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<tr>
<td></td>
<td>supportive school culture</td>
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<tr>
<td></td>
<td>No differences in dispositions of younger and older teachers as all teachers</td>
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<tr>
<td></td>
<td>equally valued</td>
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<td></td>
<td>Focus on one target at a time enabled teachers to feel in control of the pace</td>
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<tr>
<td></td>
<td>of change at Widdon Public School</td>
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<tr>
<td></td>
<td>High level of collective responsibility in the school</td>
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<tr>
<td><strong>School learning culture</strong></td>
<td>Professional learning targeted improving student data</td>
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<td></td>
<td>Increased collegiality and willingness to share concerns with colleagues</td>
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<td></td>
<td>Risk taking encouraged based on ethos, “It’s okay to make mistakes”</td>
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<td></td>
<td>New leader facilitated the positive change in school climate associated with</td>
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<td></td>
<td>QTAL</td>
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<td></td>
<td>Smooth leadership transition, as new leader was well prepared re existing</td>
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<td></td>
<td>culture and school goals</td>
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<tr>
<td></td>
<td>Sharing across the wider education network began with QTAL</td>
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As highlighted in Table 3, Quality Teaching has been sustained, but an identified need exists for strategies to be put in place to ensure that new teachers are trained in current school practices, on an ongoing basis. Action learning has been adopted across the school, and teachers reported it was the norm for teachers to identify issues together, put systems in place to improve them, and to revisit and refine actions. School-based data tracking and national test results since QTAL support the view that the action learning process adopted by the school at the time of QTAL has been beneficial in improving student learning outcomes and, as a consequence, it has remained as a preferred professional learning process.

At the time of writing, four years have passed since QTAL project funding was ceased and the school is regarded a leader in its field within the wider educational community. This is evidenced by Widdon Public School teachers’ acclaimed presentations at national literacy conferences, as reported by the Academic Partner and well-supported regional literacy network meetings, at which teachers presented their school writing program. Additionally, other schools now visit Widdon Public School to view first-hand teaching practice that resulted in them not only “turning around” their writing results but to also sustain their improved results over time. The strategies that Widdon Public School staff learned during their participation in QTAL were firmly embedded in the school, have been expanded and built upon, and are now widely regarded by the staff as common practice in the school.

There is definitely a link at this school between our involvement in QTAL and our improved student learning outcome data. Not just QTAL but also because of what we’re doing now. Because it’s the same. QTAL has just kind of continued on. It’s just not called that any more. That’s how we do professional learning and it’s a huge, exciting bonus. I want everyone to
know about this, and how good it is. I want everyone to know it’s not as hard as you think. There are hard times, and there’s times when there’s lots of work that needs to be done but part of what we do now is data collection. At the moment we collect data for writing and it’s really specific data for each student. Every student in my class gets feedback at least once a week on a piece of writing and that’s all part of what we’re doing. It’s hard. You see the improvement in student outcomes and it’s so worth every bit. (Natalie, QTAL team leader)

At Widdon Public School, there was a clear, coherent developmental path to teacher learning. It had both an individual and collective focus. There was ongoing teacher support from colleagues, the Literacy Coach, and school leadership. Strategies, such as regular teacher meetings with the Literacy Coach and data tracking meetings with the Principal, ensured that teachers were supported and learning was targeted to address both teacher and student needs. Professional learning at Widdon Public School was like a continuum, a complex interplay of affect, cognition, and metacognition, where teachers acted and collaboratively reflected on learning processes and ways to improve them in an ongoing cycle of improvement and reflexivity.
Chapter 5: Cesta Public School

Cesta Public School participated in QTAL in a later round of funding, from 2008 to 2010. Cesta Public School is a primary school in a large country town, 50 km west of a major urban centre in NSW, Australia. Around 307 students attend the school, with 15% of students identified as of Aboriginal descent and 5% of students having a Language Background Other than English. There are 15 classes, and three of these are special education classes. The school reported a focus on technology in its 2013 annual school report, with “the use of technology in the classroom being an integral part of student learning and engagement”. The school attracts an Index of Community Socio-Educational Advantage (ICSEA) of 884. Cesta Public School draws a range of additional funding, traditionally Priority Schools Program (PSP) funding, which is currently called “equity funding” and National Partnerships low-SES funding. These are targeted government initiatives which support schools in low-socioeconomic communities.

Participants at Cesta Public School

As reported in Chapter Three, 13 semi-structured interviews were held with interested staff, including two QTAL team teachers who were still members of staff at Cesta Public School at the time of the research, three of the original QTAL team who had subsequently left the school, and the Academic Partner for the QTAL project.

I attended one general staff meeting in order to develop a sense of the school’s systems and procedures and to introduce the research, as well as one regular professional learning meeting. During this professional learning meeting at Cesta Public School, I
observed staff familiarising with a new computer operating system. Teachers were supported in their learning by a school executive member then worked individually, acquainting themselves with the new computer system with collegial support from peers and the school executive member who was leading the professional learning session. The Principal was a participant in the learning, and supportive conditions were evident; learning was action oriented, and teachers supported each other throughout the meeting.

Drawing on Hord’s framework of professional learning communities, there was no evidence of a shared school vision during the professional learning meeting at Cesta Public School and, in this particular meeting, nor was there evidence of shared personal practice or learning which related to teachers’ practice in the classroom. There was however evidence of teachers learning together and sharing their knowledge; school leaders were active participants in the learning, and supportive conditions were a focus of the professional learning meeting.

Nineteen documents were provided by the school for document study, as evidence of sustainability of past collaborative professional learning initiatives. These included programming proformas, QTAL newsletters, professional learning plans, and evaluations. Documents used in the research are listed and classified in Appendix 11. In total, I spent six days in the school over two school terms, 2012. These data collectively form the basis of this case study.

Collaborative professional learning project at Cesta Public School

The Cesta Public School QTAL project was titled, “Embracing Quality Teaching through ICT”, and an invited group of five teachers formed the project team. The application for QTAL was submitted by the Assistant Principal, Shane, who had strong
personal and professional bonds with the staff. He invited a select group of interested teachers to participate in the project, based on his knowledge of the staff and their willingness to embrace technological change. The QTAL team collaboratively planned what they wished to achieve in the project. As the project was focused on increasing ICT use in the classroom, and interactive whiteboards (IWBs) were being introduced into schools at the same time, the project was considered to be in alignment with the implementation of broader DET systems initiatives related to ICT.

We sat down at the beginning as a team and scheduled some professional development days…The first 12 months we scheduled things that we would do whether it was classroom observations or developing an ICT scope and sequence or whether it be scouting out websites, and putting resources together for staff. We did some online training, we did some SMARTBoard6 training, so we just scheduled all those events to start with. (Shane, QTAL team leader)

An important aspect of the QTAL model was the flexibility that school teams had in deciding on their preferred mode of implementation, to best suit the local site. At Cesta Public School, the team met regularly, mostly in school time. Additionally, the QTAL team held a number of dinner meetings and visited nearby secondary schools and primary schools that were regarded as advanced users of ICT. Shane recalled the team feeling enthused by the flexibility that QTAL offered in terms of decision making and building professional confidence. They decided how, when, where, and what was included in their QTAL project, as Shane articulated.

6 “SMARTBoard” refers to a particular brand of interactive whiteboard used in schools.
We felt pretty important because we were constantly saying to each other, “This is about us and our learning”. “We want to get the most out of it for us!” Staff were jealous in a good way, of all the things we were doing. They [the state coordinators] kept reinforcing to us, “You are the drivers of this and whether people are jealous of you or not, keep driving forward with what you want to learn, so that you are able to bring it back and support staff with it”. (Shane, QTAL team leader)

Sustainability of the Quality Teaching framework

Four years after the school participated in QTAL, the Quality Teaching framework was still being discussed at Cesta Public School. However, it was not consistently used across the school. There was evidence of its use in some of the younger teachers’ classrooms and by teachers who had participated in QTAL. The school executive therefore devised strategies to provide teachers with time to view each other’s lessons, and there was ongoing discussion in relation to whole-school programming strategies using the Quality Teaching framework.

Quality Teaching lesson coding is one of our priority areas. We’ve looked at putting another system in place next year. (Stan, QTAL team member)

In programming, that’s where all the conversations are happening through Quality Teaching, and trying to get a consistent structure that can be used across the school. (Genevieve, teacher)

The teachers who had been directly involved in QTAL reported that they used the Quality Teaching framework in their practice, more so than teachers who had not participated in QTAL. There were however a few exceptions. Some of the younger teachers who had not participated in QTAL were already very familiar with the Quality
Teaching framework through their training at university, and reported that it was an important part of their practice. This was the case with Delia, Genevieve, and Jaidyn.

It [the Quality Teaching framework] showed me where I could make gains in teaching the elements [of the framework] in a better way. And I was also able to see where I was really strong. (Genevieve, teacher)

Some of the more experienced teachers on staff, such as Marleen, Garth, and Greg, confirmed that the framework was used more so by younger staff members.

It would be embedded in the younger teachers’ programs, certainly the ones who are recently out of university. For us older ones, no, it’s nowhere near embedded. (Marleen, teacher)

Findings suggest that Quality Teaching was sustained in the school to a certain degree. This was reported by staff, as outlined above, and evidenced by current school targets in relation to programming, lesson observation, and coding.

Of the 14 staff interviewed, five teachers had been part of the school QTAL team and nine teachers had not been directly involved in QTAL. Three of the five QTAL teachers were no longer on the staff, as stated previously. All of the QTAL teachers reported that they placed a high level of importance on the Quality Teaching framework in their practice. Of the nine non-QTAL teachers interviewed, three new teachers, each with less than five years’ teaching experience, and one teacher who had been teaching between five and 10 years, indicated that the Quality Teaching framework was important in improving their practice. In contrast, all three of the more experienced teachers, who each had greater than 10 years of teaching experience, stated that the Quality Teaching framework had more of an impact on the younger teachers on staff.
These teachers placed varying levels of importance on Quality Teaching. The remaining two teachers interviewed were non-teaching executive members, and they reported that they valued Quality Teaching in their school leadership roles, as a means of improving teacher practice and overall school improvement.

Teachers who had been involved in QTAL at Cesta Public School placed a higher priority on the Quality Teaching framework and its links to improving practice than those teachers who had not been directly involved in QTAL, apart from the four teachers already mentioned who had learned about Quality Teaching through their fairly recent university experience. This finding suggests that the Quality Teaching framework was regarded as important in improving student learning by the majority of but not all staff who were interviewed at Cesta Public School.

**Sustainability of action learning**

The QTAL teachers (Kimberley, Stan, Maddie, Shane, and Josh) were reportedly “convinced” of the power of action learning as a professional learning model. Stan, a QTAL team member, stated, “[action learning] encourages teachers to think about and reflect on their own learning based on student outcomes in classrooms”. The Principal believed that the school’s involvement in QTAL led to sustained change in “how” professional learning was enacted in the school.

Action learning is the only way to go, identifying a problem and working together to solve it through reflection. I try and promote this in my leadership. Our involvement in QTAL resulted in sustained change around collaborative professional learning. It changed the way we go about things.

(Jan, Principal)
Other teachers on staff who were interviewed but not involved in QTAL, Jaidyn, Genevieve, and Lulu, confirmed that an action learning approach to professional learning was evident at Cesta Public School. The staff were divided into priority action teams for professional learning. In small groups they identified local issues and used action learning to devise strategies that improved practice, which they then shared with other staff.

During the priority teams meetings I’ve seen teachers together and doing [action learning]. But I’ve also seen and experienced it in Focus on Reading, Language, Learning and Literacy, and Best Start at the school. (Jaidyn, teacher)

Kimberley also drew similarities between current professional learning and practices that had been part of their QTAL project.

There are a lot of similarities in the current models of professional learning to QTAL [FOR, Best Start, L3]. There is a mentor, it is small group learning, with collegial support. There are a lot of similarities…We run our release program like that throughout the school. Instead of having it every week, we save it up and have a whole day every three weeks. This was like what happened in QTAL and that was good. (Kimberley, QTAL team member)

Professional learning initiatives that the school participated in following QTAL, which included Focus on Reading (FOR), Language, Learning and Literacy (L3), and Best Start, had an action learning approach built into the programs. Teachers met regularly to plan and reflect on program implementation in a cyclic mode, with a clear focus on

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7 FOR is a middle-years professional learning program which focuses on the teaching of reading. L3 is a Kindergarten reading and writing classroom intervention, and Best Start is a Kindergarten assessment process (NSW DEC, 2010).
student learning. Additionally, an external support person facilitated the group and provided in-class support in implementing the programs.

Notwithstanding the reported increased use of collaborative professional learning in the school following QTAL, the abovementioned programs were departmental initiatives and could simply be indicative of a fairly recent and widespread systems movement towards more collaborative forms of professional learning (Gore, Bowe, Clement, et al., 2012). The programs may or may not have been related to the school’s involvement in QTAL. Similarly, ICT was the content focus of the QTAL project and technology in teaching and learning has continued to be a major systems focus following QTAL. Whether the project focus was sustained because QTAL was successful, or because ICT remained a systems focus as schools prepared students to be “21st-century learners,” is difficult to determine with a degree of certainty. The QTAL team leader, Shane, reported that both of these factors were in play at Cesta Public School. He felt that the focus on ICT remained because it was an ongoing systems focus, and that the QTAL team were empowered through their involvement in the project to actively share their learning with the wider staff, thus perpetuating school improvement.

It’s both really. In one way because schools want to keep up with and include ICT in professional learning. For me the project was more about the planning and delivery of action research. It could have been about anything. (Shane, QTAL team leader)

According to Shane, the strength of the QTAL project was related to the collaborative professional learning approach, which could potentially be used across all professional learning pedagogical content areas to improve teachers’ practice.

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8The term, “21st-century learners”, refers to the widely cited view that students are expected to learn more complex and analytical skills in preparation for further education and work in the 21st century (AVID, 2012; Heppell, 2011; Professional Teachers’ Council NSW, 2004; Wei et al., 2009).
Changes in teacher dispositions and school learning culture

Dispositional differences were evident between teachers who had been members of the QTAL team and other teachers on staff who were also interviewed. QTAL team members reported that the flexibility of professional learning delivery provided by the QTAL model built professional confidence, and that they valued the QTAL focus on research as a means to inform practice. Some QTAL teachers, including Kimberley, Stan, and Maddie, reported that they actively sought professional learning opportunities following QTAL due a strong belief that it resulted in improved teacher practice and student learning.

I think professional learning is wonderful. I take every opportunity that I can to get it, because we teach in an area that’s so dynamic and changing so much, that I think if you don’t do professional learning you lose touch. I always put my hand up for whatever’s on offer because I think it’s great and improves my practice. (Maddie, QTAL team member)

In contrast, a number of the more experienced teachers on staff who had not participated in QTAL, Greg and Marleen, seemed less open to the new learning associated with the QTAL project. Following QTAL, the team attempted to disseminate the new learning to the rest of the staff. Some teachers expressed the view that they found technological change threatening, and were unwilling or unable to incorporate the changes introduced by the QTAL team into their classroom practice.

There’s a big gap. The younger people coming through certainly have good technology skills. But there’s also a gap between older teachers and younger teachers. It’s an age thing more than anything else. We’ve missed the boat in terms of technology. I personally found it challenging. It’s hard to catch up.
There were things about it that I just wasn’t as competent. (Greg, retired Assistant Principal)

Dispositional differences between QTAL teachers and other staff were also evident in the failed attempt to introduce peer observation and feedback associated with Quality Teaching across the school at Cesta Public School following QTAL. Both Marleen and Garth, who were experienced teachers, expressed the view that there existed a fear of failure among the staff which underpinned a lack of professional trust, and this was the reason for staff reluctance to participate in peer observation and feedback.

We were scared. We didn’t want people coming to watch us and code our lessons….I don’t like people watching me teach…I think we lack confidence in having our peers assess us. (Marleen, teacher)

I think the real reason [for the staff’s reluctance to participate in peer observation and feedback associated with Quality Teaching] is that there weren’t enough people who saw the value in it. Teachers are notorious for not being comfortable being observed while they’re teaching. (Garth, teacher)

Although Marleen and Garth did not wish to participate in peer observation and feedback sessions associated with Quality Teaching, not all the staff were unwilling to do so. Genevieve and Lulu had not been QTAL team members, but they reported that the peer feedback which they received provided them with valuable opportunities to improve their pedagogy.

Teachers who participated in QTAL at Cesta Public School shared a strong belief that professional learning was linked with both improved teacher and student learning. QTAL teachers reported a preference for in-school professional learning which directly
impacted on student learning, and valued the role of research in strengthening their practice. These were features of the QTAL model. Some teachers who did not previously participate in QTAL, namely Marleen, Greg, and Garth, reported that there existed in the school a level of discomfort in relation to technological change, and resistance to change generally. This finding is significant as teacher dispositions impact on teachers’ willingness to embrace change and can be a constraint to professional learning in schools (Bowe & Gore, 2012).

Those QTAL team members who remained in the school, Stan and Kimberley, reported a different view to Marleen, Greg and Garth. They believed that there existed a strong professional learning culture at Cesta Public School.

I think there’s a really good culture around professional learning. And I believe that there’s a strong learning culture at Cesta Public School. (Stan, QTAL team member)

Stan highlighted the advantages of having one person in the school take responsibility for leading professional learning initiatives.

That’s why the in-school stuff like QTAL is invaluable, when we had Shane…because you’re going to need people like that. There’ll come a time where it may be all you’ve got…It’s important to have those people who specialise in certain areas, who can lead the staff in professional development across the school. (Stan, QTAL team member, Cesta Public School)

Shane led QTAL and many of the other professional learning initiatives that followed. Then he accepted a new role as Principal elsewhere and left Cesta Public School. Delia
articulated the difficulty encountered by the school as a result of Shane’s sudden departure.

That person’s gone. He was the one really strong at implementing it. So someone really needs to delegate and have that strong role. Otherwise people will start to forget it, [the learning that resulted from collaborative professional learning] won’t remain consistent. (Delia, teacher)

The Academic Partner expressed the view that schools had to plan for the sustainability for professional learning, through distributed leadership throughout the project. In that way, many people would be competent to step up when key players move on.

I think that’s one of the major issues facing educational change in schools. The big issue, the champion takes on the role and becomes maybe too involved in the project, and takes on too many of the responsibilities of the project without building other people to work with them. Now, Shane was doing that. He was getting support from the members of the team, but it was very clearly his project and I think that’s one of the dangers of these projects. The person then moves on. If they haven’t created a second in command, or third in command, in terms of involvement, it’s very difficult quite often then for the project to continue. (Academic Partner)

Shane had an alternate view of school culture at Cesta Public School. He believed the culture did undergo change after QTAL, as the school became more involved with a range of professional learning activities, and this change in professional learning culture was perceived as a positive by most of the staff.

There was a shift in collaborative planning, a shift in teacher talk that was happening in the staffroom and that has led onto other professional learning that has come in since then. L3 was the same. These programs contributed to changing the way that people were learning. (Shane, QTAL team leader)
Shane also reported a resistance to change at Cesta Public School, which he attributed to some of the influential, experienced teachers on staff. Shane used the analogy that he was the skipper on a sailing ship who encouraged staff to hop on board, but some of the more experienced staff were resistant to sail the ship. Due to their reluctance to participate in collaborative professional learning initiatives, sustained school change was difficult to achieve.

My feeling is without those three or four coming on board, there was still a reluctance to sail that boat. I held on to that analogy of the more people on the boat, the easier it would be to sail it. Those few were holding the boat back. (Shane, QTAL team leader)

Shane suggested that the ongoing resistance from a minority of experienced staff was professionally frustrating, and he hinted that the continued resistance to change being exhibited by the more experienced staff members may have contributed to his decision to seek promotion elsewhere.

When we reflected on why the school was not moving forward, we realised that even though those people were a minority they were still strong and had a voice, and had the ability to influence what goes on in the school…They’re not going to change. (Shane, QTAL team leader)

School culture at Cesta Public School may have been positively influenced by the school’s participation in QTAL; however, there was insufficient corroborating evidence to draw strong conclusions in this area.
Key findings at Cesta Public School

In the research, I investigated whether there was evidence that the learning from QTAL was sustained, and whether Cesta Public School’s participation in QTAL also contributed to changes in teacher dispositions and school learning culture. Findings have been discussed throughout Chapter Five and are summarised in Table 4 below.

Table 4. Key findings at Cesta Public School.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Key findings</th>
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<tbody>
<tr>
<td>Quality Teaching framework</td>
<td>Quality Teaching is still on the agenda and leaders are investigating ways to further embed it in the school</td>
</tr>
<tr>
<td></td>
<td>Some staff resistance to Quality Teaching; not total staff commitment to Quality Teaching framework</td>
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<tr>
<td></td>
<td>Peer observation not sustained post QTAL</td>
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<tr>
<td></td>
<td>QTAL team members confident in using the Quality Teaching framework</td>
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<tr>
<td></td>
<td>Quality Teaching not valued to the same extent by non QTAL team members with the exception of some younger teachers who studied it at university</td>
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<tr>
<td>Action learning</td>
<td>Current professional learning programs use action learning, collaborative professional learning, e.g., FOR, L3, PBL</td>
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<tr>
<td></td>
<td>Process of action learning for professional learning remained from QTAL</td>
</tr>
<tr>
<td>Teacher dispositions</td>
<td>Feelings of disempowerment identified; ICT is too challenging for some teachers</td>
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<td></td>
<td>Belief that research is useful in improving teaching</td>
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<td></td>
<td>Some teachers unwilling to change (may be generational)</td>
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<td></td>
<td>Most staff are unwilling to partake in lesson coding; there exists a preference for privacy</td>
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<td></td>
<td>A lack of professional trust in the school was articulated by some staff</td>
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<tr>
<td>School learning culture</td>
<td>Preferred in-school collaborative professional learning to external courses</td>
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<tr>
<td></td>
<td>Blockers may have prompted leader to move to another school</td>
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<tr>
<td></td>
<td>The pace of change is divisive in relation to school professional learning community</td>
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<td></td>
<td>Strong emphasis on teaming in professional learning</td>
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</table>
At the time of data collection, teachers at Cesta Public School were still having discussions about the Quality Teaching framework, but it was not embedded in practice for the majority of teachers interviewed. The school executive members were also exploring ways in which they could support teachers to facilitate the process of peer observation and feedback in the school, as their previous attempts had not been successful. Action learning was evident in the implementation of the school’s professional learning at the time of this study, suggesting that action learning was sustained following QTAL. Four years after the school participated in QTAL, a specific collaborative professional learning project, some teachers reported that this experience had had a positive impact on teacher dispositions at Cesta Public School, but more so with the teachers who were directly involved in the project. Teachers who had participated in QTAL reported dispositional change.

There was some evidence to suggest that the staff were beginning to work towards becoming a more highly functioning professional learning community. This was demonstrated by the Principal’s willingness to share her authority and decision making, and teachers feeling well supported and that their opinions were valued and acted upon by school leaders. However, the lack of teacher willingness to deprivatise their practice may have impacted on the collective learning of the staff and, at the time of this study, appeared to be a challenge identified by teachers at Cesta Public School. Existing literature suggests that in order for teachers to embrace the sharing of their practice with peers, school leaders may need to consider creating increased opportunities for collaboration and reflection on student learning, between and among teachers from across the school (Cormier & Olivier, 2009). These are some of the identified conditions which increase professional trust and deep learning for teachers, as previously outlined in Chapter Two.
Chapter 6: Turley High School

Turley High School is a junior secondary campus of a larger, multi-campus school in a semi-rural, coastal region in NSW. The school opened in 1997, and has grown considerably since that time. The school is one of two middle-years campuses, with a population of 1,021 students from Year 7 to Year 10 and around 75 staff at the time of this research. The third campus is a senior high school (Years 11 and 12), which the two middle-years campuses feed into. The school attracts an Index of Community Socio-Educational Advantage (ICSEA) of 950. Of the 1,021 students who attended the school, 9% identified as of Aboriginal descent and 10% originated from Language Backgrounds Other than English.

Turley High School aims to develop “confident, socially responsible adolescents through quality, responsive and engaging learning experiences” (ACARA, 2012a). A tenet of Turley High School is the expectation that all students will succeed, as articulated among staff through the guiding question, “How is this child smart?” A strong team ethos was visible in the school, evidenced by the frequent references that staff made to “Team Turley”, and “relationships, relationships, relationships” during school visits. These mantras were used extensively to disseminate the school vision. The Principal, Shelly, articulated that it was an expectation that the staff maintained collegial professional relationships at all times, and this expectation was generally respected by staff.

There is light-hearted camaraderie. Staff use humour to get their point across. I’m not saying they all love each other, but it is an expectation that they maintain collegial relationships, and they do, which is great. (Shelly, Principal)
**Participants at Turley High School**

In total, 16 semi-structured interviews were held at Turley High School. Six of the teachers interviewed were original QTAL team members, who had all remained in the school. The other 10 interviews consisted of interested teachers and school executive members. The Academic Partner also participated in an interview.

I observed one staff meeting and one professional learning meeting. The staff meeting was an administration meeting, which I observed in order to develop a sense of the school and its culture, as well as to introduce the research. During the professional learning meeting, staff divided into smaller groups to work in an action learning mode on projects directly related to the achievement of school targets. The school targets included improving teachers’ ICT skills, familiarising staff with the Focus on Reading professional learning program (FOR), and collaboratively planning lessons for teachers in the Advancement via Individual Determination⁹ (AVID) program, a tertiary readiness program. All of these programs are further outlined in this chapter. Distributed leadership was a focus of the professional learning groups. The AVID group was led by a teacher, as was the FOR group. However, the ICT group was led by an executive team member with expertise in the ICT field. In this group, teachers worked through a series of online professional learning activities individually, in pairs, and in small groups, with much collegial support.

Drawing on Hord’s framework of professional learning communities, there was evidence of a shared school vision throughout the professional learning meeting, ⁹ *Advancement by Individual Determination* (AVID) is a college-readiness program which originated in the US and aims to prepare students for tertiary study through “research-based methods of effective instruction” (AVID, 2012).
expressed in the mantras at Turley High School. The school vision at the school was “Relationships, relationships, relationships” and “How is this child smart?” The respectful manner in which staff shared leadership during the meeting was evidence of the supportive school culture, as was the opportunities provided to junior staff members who chaired the meeting and led professional learning teams during group-work activities.

Two of the groups (FOR and AVID) focused on linking the learning to student outcomes and classroom practice. Teachers actively shared classroom experiences in their respective groups; some teachers in the FOR group brought student work samples to share, demonstrating the use of student data for professional learning. There was also some discussion about specific FOR comprehension activities being suited to particular student learning styles, further evidence of a shared school vision as teachers articulated how they cater for individual student needs and interests in the classroom, reflecting the previously stated mantra of “How is this child smart?” Teachers in the third group, the ICT group, were working individually and in small groups to learn new skills that they would more than likely use in the classroom, but the focus of their activity in this particular meeting was on teacher learning, and specifically on completing online ICT modules. I did not see or hear evidence of teachers linking the learning to classroom practice.

Collaborative learning and action learning were features of the FOR and AVID groups during the professional learning meeting at Turley High School. The Principal circulated around all of the groups. I did not observe her actively engage in any one particular group activity during the meeting. One Deputy Principal led the ICT group, however the school’s other Deputy Principal did not attend this professional learning
meeting. When I queried the Principal on her role during that particular meeting, she replied:

I was there, had set up and done the background work…I try really hard not to influence any particular group and it has worked for us…I move around the groups, listening to conversations, etc. I do believe and try to practice genuine consultation and collaboration on the big-ticket items. (Shelly, Principal)

This suggests that she was modelling distributed leadership during this particular meeting and was in effect demonstrating supportive and shared leadership as per Hord’s framework, despite the fact that she did not actively participate in any group-work activities.

I also observed two lessons at Turley High School at the invitation of the QTAL team leader, Bella. Lessons included an AVID lesson, and a student-led welfare meeting which was combined with roll-call. In the AVID lesson, the teacher led a discussion about a significant, contemporary issue. Students then worked through collaborative learning strategies to consolidate their understanding of the issue, before discussing it in-depth in a class debate. The student-led welfare meeting, held during roll-call, was an example of student leadership. These meetings had been embedded into the day-to-day running of the school for some time. Shelly outlined the opposition she experienced in implementing student-led welfare meetings during the morning roll-call period, her absolute determination to do so, and the increase in student self-confidence as a result.

It was hard to get that off the ground. Some said “Kids can’t do that role”. And I said, “Yes, they can. I’d done it before and am totally committed to sharing the leadership role with students and staff. (Shelly, Principal)
The lesson observations were further evidence of the high level of distributed leadership at Turley, not just among the staff, but shared among the students as well. Distributed leadership was actively encouraged by the school leaders at all levels in the school.

Thirty-nine documents were provided by the school for document study, as evidence of sustainability of past collaborative professional learning initiatives. These included programming proformas, units of work, professional learning plans, teaching strategies booklets, reflective journals and evaluations. Documents used in the research are listed and classified in Appendix 12. In total, I spent five days in the school over two school terms in 2012. These data collectively form the basis of this case study research.

**Collaborative professional learning project at Turley High School**

The QTAL project ran from 2008 to 2010 at Turley High School, and was located in the Social Science faculty. The project was implemented as the faculty was underperforming, based on previous School Certificate data. Two teachers, Bella and Tina, who were also Head Teachers at the school, jointly applied for QTAL funding.

We went into the project because we wanted to have an opportunity to look at what was happening in literacy in one particular faculty area that was underperforming but had so much potential. (Shelly, Principal)

The kids weren’t getting the results in the writing sections of the exam, and the kids were a bit disengaged... It [the QTAL project] was another way of getting a faculty refocused that was underperforming. (Tina, QTAL team leader)

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10 The School Certificate examination was a formal examination in NSW secondary schools, held at the end of Year 10. The School Certificate was replaced by the Record of School Achievement (ROSA) in 2012, a cumulative credential that lists students’ accumulated academic results throughout secondary school (NSW Government, 2012).
A number of teachers from the Social Science faculty had participated in School Certificate marking the year preceding QTAL, and had observed that their students’ written responses did not rank in the higher bands compared to other schools. They noticed a number of areas where these written responses were lacking, based on the marking criteria used in the School Certificate.

We had four teachers who were doing School Certificate marking at the time. While marking, we noticed the level of writing in our school was not what it should have been. A couple of things we wanted to focus on through the Quality Teaching framework. We needed to go back and revise what we were actually teaching, because we were teaching too much. We didn’t realise that ‘til we marked the School Certificate. We thought, “We didn’t teach it that way, and that’s where the marks have been allocated”. (Bella, QTAL team leader)

Those teachers who were involved in the School Certificate marking volunteered to be on the QTAL team. The team focused on the explicit teaching of writing, and a number of elements of the Quality Teaching framework in their QTAL project, which included explicit quality criteria, engagement and substantive communication. The Turley High School QTAL project had two aims: first, to “push” more able students into the higher achievement bands in their written responses; and second, to scaffold those students who were not writing well by explicitly teaching them strategies that would assist them in moving beyond the bottom bands of the School Certificate examination in Social Science.

We had to get our explicit teaching right first before we could teach the kids. The second thing was around engagement and coupled around both of those was substantive communication. It was all about building those Band Five and Six answers. We were working at two ends, getting kids who were writing nothing to write something by scaffolding their writing; and in doing
so, moving them out of Bands One and Two. At the other end, we had kids in Band Four we wanted to pop up to Band Five and possibly Band Six.

(Bella, QTAL team leader)

The QTAL team pre-tested the students in April 2008, with a student quality teaching survey, to determine baseline data for the QTAL project. The student quality teaching survey consisted of 40 yes/no statements relating to aspects of Quality Teaching which impacted students’ performance and attitudes.

We surveyed the kids in the various areas [Quality Teaching elements] to find out what their ideas were about engagement. The feedback came back there was a lack of relevance in the curriculum. As we became aware they were bored and switching off, we realised this was why we were not achieving. We turned it around by making the learning more relevant and it also helped with the introduction of more technology. This was an area that the kids were really into. (Tina, QTAL team leader)

Results of the pre-test indicated that students were not engaged in their learning because the curriculum lacked relevance to them. Students also requested to use more ICT in their learning, and the QTAL team agreed with the student feedback that increasing ICT was an important consideration in increasing student engagement.

A range of explicit writing strategies were used by the team to achieve their aims. One strategy that has been sustained across the school was a literacy strategy called TXXXC. The strategy—an abbreviation for “topic, explain, extend, example and conclusion”—is a paragraph or short-response scaffold for structuring written responses. The strategy proved very successful, and for the following two years after implementing a range of writing strategies, their School Certificate Social Science results improved markedly.
We had TXXXC that was a writing model that had been brought into the school a year earlier... We started using it to write our short answers...Then we started working with how we could build the TXXXC into the extended responses...The results the year after improved greatly, and the year after that. We achieved this through explicit teaching, and metalanguage was another area we focused on. We realised where the marks were being allocated, and placed our emphasis accordingly. (Bella, QTAL team leader)

The QTAL team at Turley High School targeted improving writing in only one faculty, Social Science, but the strategies were adopted quickly and intentionally, and were shared with the rest of the staff. This resulted in considerable growth in student-outcomes data across all faculties, as evidenced by School Certificate results post-QTAL. The original QTAL team reported that they felt professional satisfaction as a result of their involvement in QTAL; they had led a whole-school focus on improving writing, which resulted in school-wide, improved student learning outcomes.

…and our kids’ writing results went through the roof. We introduced it to the staff. Each faculty then took it on board. It was good to see everyone taking it on board, and our team led this. (Kellie, QTAL team member)

**Sustainability of the Quality Teaching framework**

At Turley High School, teachers were expected to draw on the Quality Teaching framework when programming, writing units of work, and teaching in classrooms. Although a mandate existed, it was not implemented in isolation as staff were well supported in their learning by the school leaders.

We’ve got the process of tight expectations, tight monitoring, tight outcomes and supportive processes. Obviously the supportive processes are around the professional learning. (Shelly, Principal)
Mandates are successful in supporting change processes only when there is ongoing support, learning and communication from school leadership (Hall & Hord, 2006, 2011; Saunders et al., 2009). Support for Quality Teaching was clearly evident at Turley High School, as evidenced by interview data from Dell, Ollie, George, Kellie and Ros, as well as documents provided by the school for analysis (i.e., documents 1, 10, 19, 20, and 23 in Appendix 12).

I felt absolutely supported by the leadership. We had a lot of input from the Deputy, Rob. He was involved in bringing a lot of the strategies that we used…It was a shared involvement. Even though we had leadership from the Deputy and Head Teacher, the focus was on us to generate ideas and implement these ideas in the classroom. So, it was definitely a collaborative effort. (George, QTAL team member)

Some teachers stated that the Quality Teaching framework needed to be regularly revisited in order to update new staff so that all teachers were aware of the model. Although there were attempts to accommodate staff changes in relation to their knowledge of the Quality Teaching framework in the school, one of the teachers, for example, stated that the emphasis on Quality Teaching had somewhat diminished “due to preparations for the introduction of the national curriculum in 2014”. This reflected existing literature which suggests that there is a need for coherence and continued focus over time of both pedagogical and curricular initiatives if the changes associated with professional learning are to be sustained (Meth & Azano, 2012; Rowling & Samdal, 2011; Schechter & Gannon, 2012).

I think [QTAL] was a success in that we gained a deep knowledge of Quality Teaching, and related strategies. We’ve also had a number of opportunities to go over them again. I think they’re limited a bit now because we have a lot of other things we are dealing with. There’s a lot of
change happening with the curriculum. That makes it hard to find time to go back and revise Quality Teaching. The new syllabus has to take priority at the moment. We seem to be in a constant state of change. (George, QTAL team member)

Lesson observation and peer feedback associated with Quality Teaching provided opportunities for teachers to collaboratively reflect on their practice with a view to improvement. These practices have been found to positively impact on teacher learning (Elmore, 2004; Gore, Bowe, & Miller, 2012; Ingvarson et al., 2005). A number of QTAL team members at Turley High School, including Ros, Albert and George, expressed the view that peer observation and feedback during QTAL was a useful teaching strategy which encouraged them to reflect on their own teaching, gain insights from other teachers, and learn new practices from peers. George reported that he felt the school would benefit from formalising and embedding the practice of peer observation and feedback associated with Quality Teaching into teachers’ everyday practice, an important part of QTAL, which had not been consistently sustained in the school. This view was confirmed by Ros, another QTAL member, who also reported that observing her colleague’s practice positively impacted on her own practice.

I went into George’s lessons. It was great to sit down and watch other teachers. It makes you reflect on your own teaching. You see what works with the kids in his room, so you can try new things in your teaching. I found that aspect really useful. (Ros, QTAL team member)

The reflection journal involved us writing down a number of points from each lesson. What I did well, what the students did well, concerns, strengths. Then a peer would teach the same lesson, and we would compare. It was an in-faculty thing. We went into each other’s classrooms on a regular basis [during QTAL]. We found it quite effective, to go in and see what someone
else was doing. Visiting each other’s classes does not happen on a regular basis anymore, to my knowledge. (George, QTAL team member)

Not all teachers interviewed at Turley High School shared the view that there was a need to formalise peer observation and feedback associated with Quality Teaching. The QTAL team leader, Tina, reported that lesson observation still occurred when there was a need to do so for the purposes of supervision or the accreditation of New Scheme teachers—but, generally not as a reflection tool for teachers, as there needed to be a level of professional trust between teachers in order for it to be successful. Tina believed that this could not be imposed on teachers, but that it must be built up over time. She was concerned that although some teachers would be happy to participate in peer observation and feedback, others would not.

If you don’t have a relationship with someone it doesn’t always work. You have to be comfortable with someone observing your practice, and [there needs to be] a level of professional trust to value their feedback. Some people can be protective of their classrooms, whereas some people may be critical of others and criticise them publicly if the relationship and trust isn’t there. As a supervisor, of course, lesson observations will happen when the need is there. (Tina, QTAL team leader)

Lack of flexibility in timetabling for peer teaching was an identified issue at Turley High School. During QTAL, teachers were prevented from observing lessons that were jointly planned with their peers if they were timetabled to teach the same grade at the same time. Albert acknowledged that timetabling peer teaching sessions was difficult, although he reported that he learned of many new ideas from watching his colleagues teach regardless of the lesson, and this had the effect of reinvigorating his own practice.
One of the difficulties was timetabling. If I’m going to watch a Year 9 lesson with another Year 9 teacher, we both teach Year 9 at the same time. It becomes almost impossible unless you have a mentor who is willing to take one of the classes. We couldn’t actually do the action learning that we would’ve liked. We had to see different year lessons, but that didn’t matter so much….Some of us had been doing the same tired lessons for a long time and got lots of new ideas from watching each other teach. (Albert, QTAL team member)

Albert’s views identify the need for flexibility and supportive structures to ensure that teachers are able to implement professional learning initiatives tailored to their particular goals and requirements. QTAL funding was deliberately flexible and schools had access to funding and resources in order to meet such needs; however, in this case, it is unclear why the Turley High School QTAL team chose not to use any funding for teacher release which would have enabled teachers to observe their buddies from the same year group, particularly if this was an identified issue in the project. There is a lack of evidence from the data to suggest any possible reason for this.

Teachers observing and providing feedback to peers was embedded in the New Scheme teachers’ accreditation process, as reported by Tina and Dell. New Scheme teachers viewed each other’s lessons and provided feedback using the Quality Teaching framework with which they were very familiar.

In an Early Career teacher meeting recently, we all quoted straight from the QT document….With the training we get at university now, we can easily label all the activities based on QT. Some teachers from other universities have not had this exposure. (Ollie, teacher)

The New Scheme teachers who were interviewed in this study all had a sound knowledge of the Quality Teaching framework because it was a focus of their fairly
recent university training. Quality Teaching was embedded in their practice and evident in their programming. Ollie, a classroom teacher, commented that teachers from previous generations had to learn about the Quality Teaching framework, but that teachers of his own generation developed a deep understanding of the framework throughout their university study and were therefore extremely confident in using it in their practice. Vince was a New Scheme teacher who also shared these views.

It is just the way it is. I know the generation of teachers before us had to learn [the Quality Teaching framework] but to us, we were trained in it over a long time and it is just common sense to us. It is used all the time, and we no longer even think about it. We just do it. (Ollie, teacher)

I trained in Queensland and there it was called, “Productive Pedagogies”. I know it well and try to use it all the time. We have it written at the bottom of all our programs. We have to complete this as part of our programming and we are ticked off on that so we all have to do it. (Vince, teacher)

Research data at Turley High School suggests that the sustainability of the Quality Teaching framework may not have been directly linked to the school’s participation in QTAL. The New Scheme teachers used the framework in their classroom practice, partially as a result of the knowledge and skills acquired during their recent university training. All staff were required to use the framework when planning and programming units of work, and all interviewees were familiar with the Quality Teaching framework and its potential to improve practice. Yet only the New Scheme teachers reported that they used the framework to provide feedback to peers, and to reflect on their own practice. In other words, the framework was used to plan and program units of work, and in the delivery of lessons, but it was generally not used as a reflection tool to provide collegial feedback to peers at the time of this research. The sustainability of the
Quality Teaching framework at Turley High School was not clearly associated with the school’s prior involvement in QTAL, although those teachers who were directly involved in QTAL demonstrated a deep understanding of the framework, as did others on staff.

To further corroborate this finding, the Deputy Principal reported that the school’s consistent practice in using Quality Teaching strategies of peer observation and feedback so that teachers could reflect on their teaching, was due to the fact that half of the staff were New Scheme teachers and the practice of peer observation and feedback was part of the process of their accreditation. A large percentage of the school were therefore actively involved in peer observation and feedback.

We are ahead of the game there. We have half the staff who are New Scheme teachers. (Rob, Deputy Principal, Turley High School)

Rob’s comments suggest that peer observation is an accreditation requirement for New Scheme teachers; however, earlier comments from George, Albert, and Ros clearly indicate that they highly valued the opportunity to participate in these sessions during their QTAL experience for the benefits they gained from observing each other teach, not because it was a requirement.

**Sustainability of action learning**

The QTAL funding was generally regarded as “a means of promoting action learning…and to encourage schools to use the Quality Teaching framework” (Ewing et al., 2010, p. 24). Action learning had been used at Turley High School prior to QTAL, but not to the level of usage and accountability associated with their collaborative
professional learning project. Ollie also confirmed that action learning was part of the school culture at Turley High School.

Yes, action learning was used in the school prior to QTAL. Not to the level that it was used in the project, but it was happening. Not to the depths of accountability that QTAL brought with it. In that process I think a lot more people got exposed to the process of action learning, and that opened up some different eyes as well. It’s not about going out to a workshop. It’s about looking at your students, looking at your practice, seeing what you can do and moving on from there. (Shelly, Principal)

Even though the school had been involved in some action learning previously, Shelly’s perception was that the School’s involvement in QTAL exposed more teachers to action learning, which was particularly invigorating for teachers who had been in the system a long time. She looked at a range of data to assess the success of action learning, including anecdotal evidence from staff, evaluations of professional learning meetings, and a range of student data including attendance, student engagement, the quality of student questions, and the quality of existing relationships (for example, between students and teachers, and among teachers). She did not solely rely on national test results, which she believed had a very narrow focus.

As far as QTAL goes, prior to that there was very little that has been offered within the DEC that is based on action learning. And I think people who had been teaching for quite a while here had never been exposed to that concept of action learning. For them, that was something new. Really, what we need to do is ensure the cycle of learning is just as strong for the teachers as what it is for the students. I favour action learning, and I also favour the accountability with it. It mightn’t be just the results that come through in NAPLAN because there’s more to life than NAPLAN but it’s the accountability of being able to show improvement in a child’s work and that’s measured in so many different ways. (Shelly, Principal)
Action learning was the preferred mode of professional learning at Turley High School. A similar model was adopted for national curriculum implementation three years following QTAL, with support from an external, knowledgeable professional to guide teachers in their learning, as was the model in QTAL.

The best professional learning is collaboration shared within. Sure, you need outside sources coming in otherwise you become stale within the setting. The professional knowledge you have within your school, there’s a breadth of knowledge there you just have to tap into. That’s why we have to provide those meeting times and those other structures for that to happen. And that’s where that action learning cycle and the classroom experiences need to be tapped into more and more. (Rob, Deputy Principal)

The Academic Partner for the QTAL project at Turley High School was also a firm advocate of action learning, actively promoting the process in her role.

I’m a real advocate for action learning…. If someone tries to do research in a school that isn’t action learning, where the teachers or the kids are not involved in some action, with some reflection on that action, and then with some results, from that reflection that is then translated into another action, [the teachers are] just not interested…. And I wouldn’t be either. I want to do something, I want to talk to someone. I want to do some reading and get more research based information, and I want someone to help me interpret that into actions. I want to try that action then talk to that person or group of people about what I did. Then I want to change some things and go back and do it again. (Academic Partner)

The Academic Partner guided the QTAL team through the action learning process, and Kellie, Ros, Shelly, and Rob reported that her input was positive. Rob, a Deputy Principal who was enthusiastically involved in QTAL, commented that the project
provided the QTAL team with time to focus on the process of action learning which resulted in measurable improved outcomes for students and professional pride for staff.

You could actually see the collegial, professional learning that was happening through that action learning cycle and having time. That’s what [QTAL] was for me. It was “time”. It was purely and simply to “buy time” and have some external expertise come and help some teachers with that. [The QTAL team] had a lot to be proud of with their data, and it showed. (Rob, Deputy Principal)

Both Shelly and Rob reported that the school lost its specialist funding for low-socioeconomic status schools following QTAL, however neither of them were overly concerned as they had experienced the potential power of action learning to change practice and positively impact on student learning at the local level. Rob felt that using such funds may have required removing staff from their classrooms and sending them outside the school for professional learning which could have been disruptive. Both he and Shelly believed that in-school professional learning using action learning facilitated greater sharing of professional knowledge and trust, and was a better investment for the school than having teachers participate in external courses.

We missed out [on Priority Schools funding] and I wasn’t too disappointed about that, because of people going out and not being on-class. I saw the disruptions that could present. When professional learning is based on an action learning cycle…I think that is a much better use of that resource. (Rob, Deputy Principal)

A number of staff reported that the school’s involvement in QTAL resulted in a deeper understanding of the process of action learning, which led to it being more widely adopted across the school. It was reported by Bella and Shelly that QTAL resulted in a level of clarity in relation to action learning that may not have existed prior to the
project. Bella (QTAL team leader) spoke of phases of change in the school which she attributed to her QTAL experience. She believed that QTAL opened the staff to possibilities of increasing collaborative practices, based on the action learning cycle.

We begin individually then we build on this as a group and we share. And we stick to our plan. This is our third phase of change. As the new curriculum comes in, we’re doing more collaborative stuff and we’re going through that action research cycle again. (Bella, QTAL team leader)

In summary, I did observe evidence of action learning in staff meetings that I attended, in a number of the documents that were coded (documents 3, 14, and 19 in Appendix 11), as well as during the abovementioned interviews with Rob, Shelly, Ollie, and Dee at Turley High School.

**Changes in teacher dispositions and school learning culture**

Not all teachers value collaborative professional learning, or enjoy learning in small groups. One team member, Richard, did not want to be involved in QTAL. He was interested initially because, at the time, the focus on improving writing was relevant to his practice. As the project evolved to include the increased use of technology in writing, Richard, who was a Social Science teacher as well as computer coordinator, increasingly felt that his time spent in QTAL meetings would be better utilised attending to his other school responsibilities. His role was to promote ICT, and the small-group learning of QTAL caused him a degree of frustration. His perception was that he gave more than he received in the small group, and he felt somewhat exploited as a result.
As much as I love the people I was working with…we had a slightly different dynamic. I perceived, “Richard will do it”, and “We’ll pick it up once he’s refined and perfected it, because he’s a perfectionist and that’s what he does”. (Richard, QTAL team member and Head Teacher)

Richard admitted that part of his increasing reluctance to participate in QTAL was related to his considerable workload at the time of the project. He was responsible for equitable access to ICT, and from his perspective his computer coordinator responsibilities were a priority for him at that time:

I was fixing computer systems and policies and all those things and getting more equitable access [for staff and students]. Getting more machines, better rollover of machines to all groups…I will 100% agree that [my increased workload] was part of my reluctance [to participate fully in QTAL].

(Richard, QTAL team member and Head Teacher)

I asked Richard why he did not cease participation in the QTAL project when it was no longer relevant to him, and why he lost interest in the project.

The project changed focus on the way through. I can’t remember what it changed from, or to [pause]. The original premise had some sort of value to me because at that time I had a combination of both higher achieving and lower achieving classes, and of course the lower achieving classes was what I felt my value contributed towards. So, my initial reaction was, this is great, but when it changed, it was sort of like, “Really? Why?” (Richard, QTAL team member and Head Teacher)

He cited a number of reasons why he was unable to leave QTAL, all of which related to the school culture and the expectation at Turley High School that all staff would support school initiatives as part of “Team Turley”: 
Even though we were told you could opt out, you really couldn’t. Team Turley is the culture. It is very much a place where “one in, all in”. It is just seen as not being part of the team. The school works because of the team. I’ve been in schools that don’t work because there is no team. This is the best option. Without Team Turley, we wouldn’t be anywhere near where we are now. (Richard, QTAL team member and Head Teacher)

Richard identified many strengths of the school culture at Turley. He suggested that the staff commitment to student learning was a contributing factor towards the positive school climate identified by nearly all teachers interviewed. Richard shared that opinions were always sought by the leadership, and staff had a tangible voice in school decision making. Richard believed that teachers felt valued at Turley, as evidenced by a high level of professional trust among staff:

Everyone’s opinions are valued. Everyone’s strengths are valued. You can have your opinion. And even if you are against the whole, your opinion is still seen as valuable. (Richard, QTAL team member and Head Teacher)

School culture is regarded by some as “the way we do things around here” (Reeves, 2009, p. 36). Richard demonstrated his understanding of this in the way that he described expectations of leaders and staff at the school. However, although respect for the individual was widely reported as part of the school culture at Turley High School, and although Richard held a degree of social capital as a result of his well-developed personal qualities, leadership position, and ICT skills, Richard’s disposition differed from that of the collective group which caused him a certain level of discomfort. This possibly resulted in some tension being felt between himself and other QTAL members.
It was reported that both unity and diversity were valued at Turley High School. Although the collective needs of the students and staff were of utmost importance, the needs of individuals and the contributions they made were also appreciated. Respect for individual differences was evident in the school leaders’ shared belief that cooperation facilitated a collaborative school climate and positive school change:

"People come with different skills and agendas but they all have something to add." (Rob, Deputy Principal)

"If we work together, we can do things a whole lot better." (Shelly, Principal)

The Academic Partner also reported that the culture at Turley was positive, consisting of a cohesive group of teachers, focused on delivering the best education that they could for their students.

"I found the school culture to be incredibly positive. [It is a] tough drawing area, low-socioeconomic status school. [There are] lots of problems. The staff were a very caring bunch of people. They really cared about what they did. They were highly motivated and that didn’t vary with teacher ages. They were all motivated." (Academic Partner)

In addition to Richard’s identified dispositional differences, there were other, noticeable dispositional differences at Turley High School, mainly in relation to varying generational perceptions among some staff. Ella, a teacher with five years teaching experience who had been at the school for over a year, claimed that some of the more experienced teachers on staff did not embrace technological change to the same extent that the younger teachers did. As a focus of the QTAL project was to increase the use of technology to engage students in writing, this issue was investigated during interviews. The superiority of many new teachers’ technology skills was acknowledged by some of
the more experienced teachers on staff, including Dell, Albert, Shelly, and Rob. However, this difference was not regarded by them as a weakness, as was suggested by Ella, but more of a strength; they collectively believed that different generations of teachers contribute different skill sets, which in turn helps to strengthen the overall school culture. Dell reported that new teachers felt a degree of professional pride when they assisted her in learning new technology skills, and Albert shared that he might otherwise be “jaded” in his role if it were not for the energy and enthusiasm of the young teachers who looked to him for guidance, which motivated him to be the best example and mentor that he could be for them.

I sit next to a young fellow whose ICT is just amazing. I was really pleased with myself when I did something by myself, for myself. I said, “Look what you’ve done to me!” We’re pleased when we can do something the young ones can do. And they’re proud that they’ve taught the “dinosaurs” how to do it. (Dell, Head Teacher)

There’s an incredibly young staff here, and there’s a really nice feel to the place. It’s an incredible “niche” of teachers who really have the right spirit about teaching. You won’t find too many people with their head down…who can’t wait to get out of teaching. I might have a bit of that in me, but the young people with whom I work take it out of me very quickly. They lift me out of it. To stay on your game in this school, you’ve got to be with it and alert. It is a great thing! (Albert, QTAL team member)

In relation to different generations of teachers working together, the school climate at Turley High School could perhaps be summed up by Tina who, instead of retiring two years prior to this study which had been her plan, had chosen instead to stay, along with others on the staff like her. Similar to Albert, Tina regarded her position as one of support, preparing the next generation of teachers to competently lead the school into
the future. The cornerstone of the school was the successful relationships that existed there at all levels:

I’m still working and I could have retired two years ago, so that says something. There are a few of us like this. We love being here because of the relationships we have within the school. (Tina, QTAL team leader and Head Teacher)

Tina also reported that those teachers who did not fit into the school culture of Turley usually found teaching positions elsewhere. She believed that new teachers sometimes adapted to change more easily than their more experienced peers because everything at the school was new and exciting to them:

There may be a difference in relation to how teachers take on change. Probably because [the new teachers are] not aware that it is change. Because everything’s fresh and new to them, it’s all new. Some [experienced teachers] are not as open but if they become a “dinosaur”, they’re not happy in the place and they end up leaving, solving itself. Whereas some younger teachers have the technology skills that are valued, some may not appreciate the value of experience in terms of classroom management. People are learning from each other all the time, irrespective of age. Sometimes younger teachers may not have thought it through, and older teachers may use their experience and prior knowledge that impact on their practice. (Tina, QTAL Team Leader and Head Teacher)

The ICT skills that new teachers brought to the school were well regarded by all staff, but equally valued was the experience and classroom management skills that more experienced teachers often brought to their roles.

Another specific issue identified by some of the younger teachers in relation to professional learning at Turley High School was “initiative fatigue”, or “innovation
overload” (Aminudin, 2012; Hargreaves & Fink, 2006; Reeves, 2009), terms used to describe situations in which too many professional learning initiatives are occurring at the same time:

…we are bombarded when there is too much going on. (Ella, teacher)

Sometimes we take on too much. We do a whole heap more than other schools. We need to focus and follow through with programs so they’re manageable and we don’t become run down. Sometimes we need to go slow, so we can keep on top of things and continue to love learning. (Ollie, teacher)

The school leaders were cognisant of the very real possibility that staff could become overloaded with too much professional learning at the one time, and thus made attempts to consolidate existing professional learning initiatives in the school prior to moving forward if any teachers appeared to be overwhelmed. As reflected by Ollie:

The school leaders really love education. You can see they care about the future of the kids….Sometimes it can be too hectic….sometimes it can be a bit too much. It unravels a bit and you feel overwhelmed. Then you see the leadership refocus, gather up what they’ve got, and consolidate, because they see there’s too much going on and the negative impact it has on teachers. I think that’s our pattern of learning here. (Ollie, teacher)

The Principal and Deputy Principal both stated that they were conscious of not overloading teachers, particularly the early career teachers, with too many professional learning initiatives at any one time. School leaders were constantly looking for evidence of teacher overload, making ongoing adjustments to workload related to professional learning initiatives to better accommodate the needs of staff.
We need to be mindful of not overloading teachers’ working conditions.
(Rob, Deputy Principal)

I feel a huge responsibility in that I’ve got so many early career teachers.
(Shelly, Principal)

**Key findings at Turley High School**

Through the case studies, I investigated whether action learning and the Quality Teaching framework, through participation in QTAL, had been sustained at Turley High School in the four years following cessation of government funding. I also examined whether Turley High School’s involvement in QTAL contributed to sustained changes in teacher dispositions and school learning culture. Key aspects of the findings have been discussed in this chapter and are summarised in Table 5 below.
Table 5. *Key findings at Turley High School.*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Key findings</th>
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<tbody>
<tr>
<td>Quality Teaching framework</td>
<td>Data indicates that the Quality Teaching framework is embedded in the school</td>
</tr>
<tr>
<td></td>
<td>New teachers are very familiar with Quality Teaching due to their recent university training</td>
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<tr>
<td></td>
<td>Quality Teaching is evident in teachers’ conversations and reflective practice</td>
</tr>
<tr>
<td></td>
<td>Peer observation and feedback was not generally sustained; used by New Scheme teachers only</td>
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<tr>
<td></td>
<td>Teachers interviewed believed that use of the Quality Teaching framework improved their practice</td>
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<tr>
<td></td>
<td>Teaching strategies that began with QTAL have been embedded and sustained across the school</td>
</tr>
<tr>
<td>Action learning</td>
<td>Action learning was sustained with external support and was attributed to QTAL</td>
</tr>
<tr>
<td></td>
<td>Evidence of the use of action learning in meeting observations and document study</td>
</tr>
<tr>
<td></td>
<td>Action learning was evident in teachers’ professional conversations and reflections</td>
</tr>
<tr>
<td></td>
<td>Action learning used to implement new curricula, with help from knowledgeable outsider</td>
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<tr>
<td></td>
<td>Action learning is the preferred mode of professional learning in the school</td>
</tr>
<tr>
<td>Teacher dispositions</td>
<td>Teachers interviewed valued professional learning and believed it improved student outcomes</td>
</tr>
<tr>
<td></td>
<td>Skills and dispositions that individual teachers bring to the group are valued</td>
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<td></td>
<td>Some dispositional differences identified between younger and more experienced teachers in relation to ICT</td>
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<td></td>
<td>Some inexperienced teachers felt overwhelmed by the pace of change</td>
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<td></td>
<td>QTAL teachers felt professional pride through sharing strategies from QTAL with the wider staff</td>
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<tr>
<td>School learning culture</td>
<td>Professional learning is organised to promote collegial work and collaboration</td>
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<tr>
<td></td>
<td>School culture is based on principles of inclusivity and respect</td>
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<tr>
<td></td>
<td>Focus on the school as a collective learning organisation</td>
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<tr>
<td></td>
<td>High level of professional trust and supportive school culture</td>
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<tr>
<td></td>
<td>School vision articulated widely by staff and school leaders</td>
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<tr>
<td></td>
<td>Collaboration, distributed leadership are tangible features of school culture</td>
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</table>
As can be seen in Table 5 above, the Quality Teaching framework as a substantive pedagogical model was well utilised by the staff at Turley High School. The New Scheme teachers in particular had a deep knowledge and understanding of the framework, as a result of their fairly recent pre-service teacher education in which Quality Teaching was a core component. Following QTAL, action learning continued to be the preferred mode for implementing professional learning within the school; school leaders attributed this, in part, to their collective involvement in the QTAL project.

A range of dispositions were articulated by teachers. QTAL team members, who were mostly from the Social Science faculty, reported a sense of increased professionalism in being able to share a range of teaching strategies with the rest of the school, having learned these during QTAL. These strategies remained in the school following QTAL and were regularly revisited. Likewise, the younger teachers described a sense of professional accomplishment and appreciation due to the support they received from more experienced teachers, and as they were valued by staff and offered a range of leadership opportunities.

They all want to pass a bit of the legacy on, to better education in the future.

“Passing it on”. We’re all here because we love teaching. (Ollie, teacher)

The dimensions of a professional learning community (Hord, 2004; Hall & Hord, 2011) were also visible at Turley High School. Staff collectively shared the same values and the same vision; this was evidenced by professional learning which addressed local school and student needs. Leadership was also distributed and organisational structures existed in a way that provided staff with opportunities to collaborate and learn together. Supportive conditions too were in place; at Turley High School these included professional trust and mutual respect, suggesting that peer observation and feedback
associated with Quality Teaching could potentially be a workable teacher improvement practice at Turley High School. This practice however was valued by most but not all of the QTAL team members. During data collection, the peer observation and feedback associated with Quality Teaching was used only by New Scheme teachers as part of their accreditation, although it had been a key aspect of the QTAL project and highly regarded by team members. Overall findings suggest that peer observation and feedback associated with Quality Teaching had not been shared and adopted by the rest of the staff, although it was being considered by the school leadership at the time of data collection as a means of focusing on improving teaching quality in the school in the future.
Chapter 7: Collum High School

Collum High School is a co-educational comprehensive high school on the western edge of a major city, with an enrolment of 735 students and around 60 staff at the time of this study. The school profile (ACARA, 2012a) indicates that 33% of students are from Language Backgrounds Other than English, with the majority of these being of Pacific Islander, Fijian, Indian, Afghanistan, Lebanese, Croatian or Bosnian descent. There is also a significant Indigenous student population in the school (9%). The school attracts an Index of Socioeducational Advantage of 913.

Collum High School was a unique case, as it has been a member of a successful professional learning community consisting of six primary schools and two high schools since 2002. Additionally, Collum High School and its partner primary schools had participated in QTAL in an earlier round of funding from 2006 to 2007, differing from other selected case study schools which had been funded in the later round of the AGQTP QTAL project between 2008 and 2010.

Participants at Collum High School

As reported in Chapter Three, 11 teachers from Collum High School were interviewed for this research. Four of these teachers were QTAL team members from 2006 to 2007, three of whom were still in the school at the time of this study. The remaining seven teachers nominated themselves to be interviewed as they expressed an interest in contributing to the research. QTAL team members who remained in the school included a science teacher, a creative arts teacher, and an English teacher. The QTAL team leader also contributed to this phase of data collection however he did so via email as he had accepted an offer of employment as Principal in a nearby school following QTAL.
Other participants interviewed included four Collum Learning Community (CLC) Principals from partner primary schools, all of whom had previously been involved in the QTAL project (two were retired, two were still in their leadership roles at the time of this study), and one Highly Accomplished Teacher (HAT), a specialist teacher attached to one of the partner primary schools whose position was linked to National Partnerships funding.

The QTAL Academic Partner, who was an active member of the Collum Learning Community from 2002 to 2011 and had worked on a number of collaborative learning projects with Collum High School and partner primary schools during that time, also participated in an interview.

I attended one staff meeting, which enabled me to gain a sense of how the school operated and to introduce my research, one professional learning meeting, and one meeting with the Collum Learning Community, which was held at a partner primary school, during Terms 3 and 4 in 2012. The professional learning meeting that I was invited to attend was a segment of a School Development Day, in which the Principal led an information session on the national test results (NAPLAN) of their incoming Year 7 students. A guest speaker, a senior officer from the Department of Education and Communities, presented a statistical analysis of partner primary school NAPLAN results and related information to the staff. There was minimal input and collaboration from the staff during the professional learning session that I attended. However, following this session, staff were divided into groups to discuss the input they received during the professional learning meeting that I observed. I was not invited to stay for the group discussion during the School Development Day.
Drawing on Hord’s framework of professional learning communities, there was no evidence of a shared school vision during the professional learning meeting that I attended at Collum High School. The school vision was articulated by the Principal during interviews and was also displayed prominently around the school, but no reference was made to it by other staff members during my time at the school. The particular professional learning meeting that I attended showed no evidence of collective learning or application, or supportive and shared leadership; nor did I observe any factors characteristic of supportive conditions or shared personal practice—even though aspects of Hord’s framework of professional learning communities were visible in other data collected previously at Collum High School.

In total, 16 semi-structured interviews were linked to Collum High School, in addition to the interview with the Academic Partner. I visited the school for six days during Terms 3 and 4 in 2012, and a total of 13 related documents were submitted by the school and the Collum Learning Community for document study. The documents, which included a range of school planning documents, reflections, emails, research, as well as minutes of meetings from Collum High School and that of the Collum Learning Community, are listed and classified in Appendix 13.

For this phase of the data collection, the interview transcripts, document study, and observation visits collectively form the basis of this case study.

**Collum Learning Community**

Collum High School enjoyed an active learning partnership with its partner primary schools, known as the Collum Learning Community. The Collum Learning Community was initiated by a newly appointed Principal of Collum High School in 2002 with the
aim of developing closer professional ties between the schools in the Collum High School feeder area and other interested local schools.

The Collum Learning Community was a forum for principals to discuss current school events and issues as they arose. One of the early foci of the group was for members to learn from each other by sharing data. Learning from action informed by data was one of the original aims of the Collum Learning Community. This approach helped to build professional trust among its members, and was still a focus within the group at the time of this study.

We looked at each other’s data, but had to be comfortable enough to know that we weren’t going to pull each other apart, behind closed doors when we were back in our own schools. We had to take the competition element right out of it. To the credit of all the Principals involved, they were for the first time able to look at data from different schools, and see how their students were going. (Ross, retired Principal, Collum High School)

The ongoing high level of collaboration, mutual support, and lack of competition between individual schools resulted in the Collum Learning Community attracting significant funding which enabled the group to partake in a range of cluster learning activities for teachers and students.

“We’re all in this together” ethos enabled us to apply for joint funding, and to empower teachers to run projects such as QTAL. On the sustainability side, if someone left, you needed this sense of commitment to the whole, for it to go on. While new principals had the freedom to develop their schools the way they wanted, there was still an overarching agreement that the bulk of staff in your school, and in the other schools, was on board with the project. (Neil, retired Principal, partner primary school)
Principals in the Collum Learning Community met regularly (every two to three weeks), with a focus on collegiality and support. The group reported that the main reason for their success was that they were self-initiated, and they had a clear focus on improving student learning outcomes based on data. This emphasis on data was a distinctive feature of the Collum Learning Community which, more broadly, is also reported in other successful professional learning communities as identified in the wider literature (DuFour, Eaker, et al., 2010; Hall & Hord, 2011).

Data collected during this phase of the study suggested that curriculum was a focus of the Collum Learning Community. Following involvement in QTAL, one of the partner primary schools whose students achieved above expected performance levels in national tests, was rewarded with a significant amount of funding from the National Partnerships agreement as well as the appointment of a Highly Accomplished Teacher. Sharon, the HAT who was allocated to the partner primary school, was selected to provide in-class support to teachers specifically in teaching the Australian English curriculum in addition to building their pedagogical skills and curriculum knowledge.

I go into classrooms, demonstrate best practice and work with the teacher in their planning and assessing in English. We “piggy back” each other through the cycle of change. I’ll teach a little, next time I go in, they’ll have a go. We do a lot of lesson study, planning a lesson together, then delivering it and assessing, then reflecting on it. (Sharon, HAT, partner primary school)

Greg, the Principal of this partner primary school, readily shared Sharon’s expertise with schools across the Collum Learning Community. He saw the collegiality of the group as a strength, and believed that the sustained success of the group was strongly related to its ethical underpinnings of mutual respect, support, and cooperation.
We are very happy for the success of others…. Each principal in their own way brings something to the table. We agree, we disagree, and that’s okay. Collegiality does not mean compliance… we have strong relationships that enable us to fearlessly discuss without judgement… there have been, and continues to be, strong points of difference, challenge and even opposition at times. (Greg, Principal, partner primary school)

The Collum Learning Community is an example of a professional learning community that has been sustained for more than ten years. It consists of a community of schools, represented mainly by the Principals, collectively addressing both individual and whole-school improvement needs with a clear focus on student learning (Cormier & Olivier, 2009). The commonly accepted dimensions of a professional learning community were also evident, including shared beliefs and supportive leadership focused on the collective learning of the group (Hall & Hord, 2006, 2011). There was clear evidence that the schools’ involvement in collaborative professional learning, through the Collum Learning Community, resulted in shared practices, shared values, and a shared culture, all of which have been sustained over the longer term.

**Collum High School collaborative professional learning project**

The QTAL project was a joint venture between the schools of the Collum Learning Community with a middle-years focus. Collum High School participated in QTAL from 2006 to 2007, the earliest case study school to take part in this research. The project, “Quality Teaching in the Middle School”, was aimed at building an ongoing relationship between teachers from the secondary school and those at partner primary

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11 Middle years collectively refers to grades 5 to 9. In Australia, the middle years span primary and secondary schools. A middle-years project is one where the local secondary schools combines with its partner primary schools to complete a joint professional learning project or to teach a unit of work.
Throughout the project, teachers used the Quality Teaching framework to provide collegial feedback on each other’s teaching.

Our main objective was to establish a sustainable learning relationship between the teachers at the high school and the partner primary schools. We used the NSW Quality Teaching framework as our dialogue to focus on the professional learning and provide feedback…and what we wanted to do was share the learning experiences of the teachers in the primary and the high school. (Vera, QTAL team member)

Teachers worked in a flexible mode, with team teaching, peer observation, lesson coding, and joint reflection being key foci.

Teachers planned in small teams, were given a budget from the Federal grant and used the NSW Quality Teaching framework as a basis for identifying areas of emphasis in their practice. Teachers conducted classroom observations, coded lessons and discussed results, identifying best practice and areas for improvement. At the end of each phase they celebrated achievements. Each team shared their results in an evening presentation, with a meal with teachers not involved in the program as a means to “spread” the impact of their action research. (Jeff, QTAL team leader)

The QTAL team leader, Jeff, now a principal in a nearby school, reported that the QTAL experience was “fantastic, as teams of teachers shared aspects of best practice pedagogy for the students across the Collum Learning Community”. Further elaborating on this, the Academic Partner reported that “focused flexibility” in the way that QTAL was organised “enabled primary and secondary teachers to become more aware of each other’s practices, organisation and content…and employ strategies that assisted students to make the transition from primary to secondary school more effectively”.

Sustainability of the Quality Teaching framework

Whole-staff professional learning activities focusing on the Quality Teaching framework were implemented prior to the school’s involvement in QTAL in 2006. Initially, some teachers were hesitant to apply the framework in their teaching and learning because they did not see the relevance; however, as they became more familiar with the language of the framework and what the elements looked like in their classrooms, teachers also became more willing to engage with the model and use the materials. This was reported to have a positive impact on their practice, which promoted further use.

We had done a lot of whole-school activities with the Quality Teaching framework when it was introduced before we did this project. At the beginning, we were given a document and as the language was detailed and different, some teachers wondered why they had to do this. But after we unpacked it together a few times, and explained to everybody it wasn’t completely different, and they were already doing many of the elements, the teachers began to embrace the framework. Once teachers understood the framework a little better, and how explicit it is, they accepted it a little better also. I think after our initial meetings, it had an impact on the whole staff. (Vera, QTAL team member)

It was reported by nearly all Collum High School staff who were interviewed that the Quality Teaching framework was embedded in the school, both in classrooms and in teaching programs, throughout and following QTAL. Teachers reported that it was a useful framework to reflect on student learning and to use as a common language for reflecting on their teaching.
It’s a framework that works, and helps you see whether or not you’re catering to a wide range of learning abilities and needs. (Maya, QTAL team member)

I think it makes you more self-aware of what you’re doing and how you need to change your approaches to certain topics….I was just thinking the other day about my Year 12s who have just started. And I’m thinking, “Oh, there’s so much content and there’s so much higher order thinking. But how much are they engaging with the information or with the content?” So it’s made me try to think of different ways that I can get things across to them. (Lani, QTAL team member)

Both Maya and Lani reported that the Quality Teaching framework was useful for reflection, as an individual and collective teacher improvement tool. They utilised the language of the framework to identify particular elements that they felt they were doing well, and those elements on which they wished to focus to help improve classroom practice.

When asked if the Quality Teaching framework changed her practice, Marg (a teacher who did not participate in QTAL) responded that she used it in her teaching and lesson planning, and teachers at Collum High School were expected by school leaders to do so. The Quality Teaching framework also formed the basis of the annual teacher assessment review schedule (TARS) process, which was undertaken by supervisors. Marg, Lani, Maya, and Suzette, a Deputy Principal, all reported that use of the framework was firmly embedded in the school.

It is there, and very much focused on. We use it for TARS. It does exist and it is ensured that’s the way we are going in the school. It is formalised in our programs, and we are expected to use it. (Marg, teacher, Collum High School)
School leaders supported the Quality Teaching framework implementation to varying degrees, which suggests that it may not have been universally endorsed at the leadership level. The two Deputy Principals seemed to have varying views on the usefulness of the Quality Teaching framework, which impacted on their level of usage of it in their leadership and practice. Deputy Principal, Suzette, stated that it had been a high priority in the school a few years prior to the study, but there had been an ongoing need to revisit Quality Teaching to ensure that new staff had a clear understanding of the framework. Suzette saw evidence of the use of the Quality Teaching framework in class programs, and she used the framework as a basis for discussion in relation to teachers’ practice during teacher annual performance review meetings as part of her supervisory role.

Yes, a lot of emphasis was placed [on Quality Teaching] a few years ago where it was a high priority for all. There is evidence in class programs. Yes, it needs to be reviewed and refreshed on an ongoing basis because we have a high turnover of staff. We need to touch base on all of that every two years, and have a look at examples….I look for it in programs and try to keep it alive. (Suzette, Deputy Principal)

In contrast, the other Deputy Principal at Collum High School, Patrick, did not feel he needed to use the Quality Teaching framework in his practice. Patrick used Quality Teaching in his executive role when supervising new teachers, because it was a school expectation, however he believed that it offered him little in terms of improving his own practice.

I haven’t really gone down the line of the Quality Teaching framework in my own classroom because personally I didn’t see the point of it. I was already engaging the kids, I had the kids working….I’ve used aspects of the Quality Teaching framework with beginning and new teachers and certainly
done some coding and modelling and those types of things with them but I didn’t need to have that terminology in my own lessons because I was already doing it, you know, and all it would have been was just putting a label on it. (Patrick, Deputy Principal, Collum High School)

Patrick reported that he had considerable success moving students forward in their learning as evidenced by a number of his students achieving Band Sixes, the highest achievement level in the Higher School Certificate, which was a rarity in the school. Patrick believed that increased learning and less disruptions resulted when teachers engaged in flexible modes of professional learning, leaving them free to take their regular classes during the school day.

Collum doesn’t get a lot of Band Sixes. Since this program in 2006 to 2007 I think we’ve had something like about maybe five band Sixes in the HSC. I’ve had two. Why do I think that I’ve got those Band Sixes? Because I’m here to work with the kids. And I firmly believe that you’re not going to see any improvements realistically in a school while we still have the model whereby we take staff off classes constantly [for professional learning]. (Patrick, Deputy Principal)

Patrick’s comments demonstrated the need to link successful professional learning with data which shows evidence of improved student learning outcomes.

Cheree, Collum High School’s Principal at the time of this research, was not present at the school during the QTAL project or when the Quality Teaching framework was introduced. Her view was that Quality Teaching was embedded in the school. Comments from Cheree and Patrick suggest that the use of the framework was regarded by some as an administrative task, raising the question as to whether the Quality

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12 The Higher School Certificate examination is a formal state-wide examination held at the conclusion of a student’s secondary education, usually after they have completed 13 years of formal schooling.
Teaching framework was actually embedded in teachers’ practice across the school. However, the three QTAL team members who had remained in the school, Vera, Lani, and Maya, in addition to others such as Marg, Suzette, and Phil, provided evidence in their interviews that implementation of the framework at Collum High School had in fact changed their practice, and that the changes had been sustained because they believed their practice had improved as a result. This was the case regardless of whether they participated in QTAL or in whole-school professional learning activities. Phil (Head Teacher) described how he focused on dimensions of the Quality Teaching framework in his teaching of technology.

We’ve got kids going to race meetings….We’re taking digital cameras, microphones as we’re going to do interviews with people. We’re going to use the equipment. It’s about asking “How can you extend yourself, and use your skills on the way through?” [The students] have to get some of that worldly experience otherwise it’s the shops at Collum, and that’s all they’re going to see in their life. So, it’s our job to give them that [real-life] experience. (Phil, Head Teacher)

The practice of teachers using peer observation and lesson coding associated with Quality Teaching however was not formalised across the school, and a number of teachers who had been involved in QTAL felt it would be beneficial to embed this practice into the school as a way to foster ongoing teacher improvement.

Observing each other teach and providing feedback, like we did in QTAL, doesn’t happen enough [at Collum High School]. It could be formalised more. I think it’s a time factor. People need to be given…time to achieve those goals. Especially new teachers. It would be good if we had more time to jump in and then give them feedback at the end of their lessons. (Maya, QTAL team member)
Lani described how her increased understanding of the Quality Teaching framework deepened due to her involvement in QTAL. As a result, she changed her planning and classroom teaching and the changes she made were sustained in her practice.

Yes, as we’re writing units it’s there. You look at it in terms of the type of lesson you’re planning, and what assessment task you’re using. The biggest thing for me is being explicit in the criteria for those tasks. In the classroom, it’s things like engaging students, you need to think about. (Lani, QTAL team member)

The Quality Teaching framework was an important part of QTAL. Teachers who were interviewed, with the exception of the Deputy Principal, Patrick, reported that it was a key component of teaching at Collum High School. Teachers were required to identify elements of Quality Teaching in their programming documents, and use the framework as a language to talk about their practice, highlighting areas in which they would like to improve. Suzette reported that the school leaders used the Quality Teaching framework as a basis for discussion during the annual teacher review schedule (TARS), and to collaboratively identify areas for improvement.

The extent to which Quality Teaching was implemented at Collum High School however, was unclear. Some teachers (Patrick, Marg) suggested that the Quality Teaching framework was an administrative task or “box-ticking” exercise, rather than a pedagogical model that built a shared understanding of what constitutes high quality teaching. This finding suggests that the implementation of the Quality Teaching framework at Collum High School may not have been sufficiently broad to consistently build individual teacher and school capacity. QTAL team members were confident that Quality Teaching was embedded in their practice and had changed the way that they teach. A number of other staff who were not involved in QTAL also stated that the
Quality Teaching framework was important in improving practice. At the time of this study however, teachers in the school were no longer observing their peers or providing collegial feedback to each other using Quality Teaching, as was the case during QTAL. It can be concluded therefore that this aspect of QTAL has not been embedded or sustained as a pedagogical practice at Collum High School.

Sustainability of action learning

Action learning was the process used in QTAL to guide teachers in transforming their practice. Teachers worked in small, across-school groups, learning with and from each other. QTAL comprised two action-learning phases or cycles. In Phase 1, secondary school teachers taught in the primary setting, and in Phase 2, primary teachers mainly taught in the secondary setting. Teachers taught jointly planned lessons. While one teacher taught, the colleague teacher coded the lesson using the coding sheet from the “Quality Teaching Classroom Practice Guide” (NSW DET, 2003b). Following the lesson, teachers jointly reflected on what they saw and experienced, and determined their course of action to revise the learning plan based on what they had observed. Colleague teachers then shared their findings at meetings to facilitate learning across the wider QTAL group. Teacher sharing was an important part of the cycle.

The Academic Partner regarded action learning as an excellent model of professional learning when it was practised by people who were familiar with the epistemological basis of the model and, in particular, recognised the importance of valuing the “insider” knowledge that people brought to the group. Teachers in this case had the most knowledge of the local context.
That’s the whole rationale for action learning. It is recognising it’s the people in the context, at the centre of the issue who know the most. Not an outside expert….There are some people who are still seeing academic partners as the outside expert. (Academic Partner)

The Academic Partner stressed the importance of evidence in the action learning process. Making educational decisions based on a range of evidence had been an important tenet of the Collum Learning Community from its early days when it shared data across schools, in order for members to learn from one another and collectively decide on future areas for improvement. It was a regular practice during QTAL meetings to begin action learning with data, to focus the meeting, and to move learning forward.

The next major issue about action learning is evidence. I can’t emphasise that enough. If you go into an action learning session without evidence people are going to look at during that session, all you get is that low-level professional discussion. (Academic Partner)

Sharon, who was the HAT in a partner primary school, reported that the high level of collaboration evident in the Collum Learning Community group assisted in uniting members to achieve shared goals. During this phase of data collection, this high level of collaboration, collective problem solving, and professional sharing was observed during a regular group meeting. Sharon used action learning to form working parties across schools, which in turn led to the formation of action learning plans and the achievement of joint curriculum and professional learning goals.

I notice how collaborative the Collum Learning Community school leaders are. I’m working at the next layer down in my role, leading curriculum and professional learning across the schools. The attitude of the staff reflects this. It was easy for me to pull strategic people together from the schools to
form working parties to develop action learning plans collectively, that we were all going to follow. I think that attitude of being so ready to pull together as a group, across schools, is a reflection of the leaders being so ready to pull together. (Sharon, HAT, partner primary school)

Although action learning was a major part of QTAL, little evidence existed at the school level to indicate that it had been sustained. The two meetings that I attended at Collum High School, one regular staff meeting and one targeted professional learning meeting, were very formal. These were led by the school executive with limited input from staff.

In contrast, at the Collum Learning Community meeting, educational leaders discussed a range of problems and possible solutions using action learning. Sharon (HAT) also used action learning to collaboratively implement change across schools. This is confirmed by data collected during this phase of the study which suggests that any evidence of action learning at Collum High School related directly to either their QTAL project or CLC activities, as can be seen in documents 7, 9, and 12 (Appendix 13).

**Changes in teacher dispositions and school learning culture**

Although most teachers at Collum High School described the school culture as a supportive one, not all teachers agreed with this view. At one extreme was a relatively inexperienced but accredited teacher, Maxine, who felt undervalued because she perceived that the leadership were not responsive to her needs. She applied for all the professional learning offered and was rarely successful. As a result, she felt unsupported and undervalued in the school.

I don’t feel valued at all. I feel like a lot of the time my ideas are really worthless….At the moment there seems to be people at the top who are very negative towards a lot of other teaching staff. There’s also a very negative
vibe in terms of asking for things to be changed, things to be done a
different way….There’s no creative juice flowing through the place….I have
applied for a transfer. (Maxine, teacher)

Phil, Patrick, and Cheree all explained that professional learning funds in the school
were limited and teachers were informed that they could realistically expect to be away
from the school one day each per year. All applications were considered by a school-
based professional learning team to ensure equity. As suggested by the Principal,
Maxine had unrealistic expectations in relation to her multiple requests to attend
professional learning outside the school, based on the limited available school
resources.

We do have limited funds….Depending on funding, it works out each
person would get one day out of the school each year, and we would never
knock them back. If someone applied for something that was valuable and
not $1000 at the Menzies Hotel in the city, then they would get to go. That
would be explained by the professional learning team. There are five or six
people on that team. Teachers are not discouraged from going out of school.
Applications are considered on merit. (Cheree, Principal)

Maxine expressed a preference for external professional learning courses, whereas most
of the teachers who were interviewed preferred small-group, school-based professional
learning that linked to classroom practice.

We don’t have access to a lot of different professional learning outside of
the faculty….I would like to do a lot of other professional learning courses. I
prefer to go on a professional learning course just to see different techniques
and management styles of different teachers and how I can use that in my
own classroom and my own teaching experience. (Maxine, teacher)
Maxine’s seemingly over-stated negativity in relation to her role at Collum High School is juxtaposed by Maya’s apparent eagerness to learn all she can about her subject. Evidence suggests that Maya’s enthusiasm and high expectations contributed to students achieving high academic results, and producing art works of exceptionally high quality.

The majority of professional learning I’ve been involved in has been fantastic. On the whole it’s been really worthwhile, and developed my skills, especially in Art with technology changing all the time, so I can go into digital arts or stop-motion animation and pick those skills up. I’m in an interesting field, that keeps changing every year or so, which keeps me motivated. (Maya, QTAL team member)

Lani, Marg, Phil, and Maya all preferred small group professional learning to learning in a large group in which a presenter addresses a large group and there is usually limited interaction. They reported that, in the small group, they were simultaneously engaged in the process of learning new skills as well as collaborative discussion about how to integrate the pedagogical content knowledge into their existing practice (Wei et al., 2009). Building professional trust and a collaborative work culture were also cited as reasons why people preferred small-group learning.

I prefer learning in a group rather than just reading a book or sitting and listening where you fall asleep with the drone and the buzz. I like to bounce ideas off other people and just see if everybody has got the same sort of feeling as I do. (Lani, QTAL team member)

I like small group teacher learning where you can work with a group of people who can help each other, and get their feedback. You need the expert but you also need others who are learning together to support and push each other. (Phil, Head Teacher)
Small groups are always better because you get to know other people. In big groups you don’t get to know the staff. We might not achieve everything, but it often results in people having a greater understanding of the people they are working with. It builds professional trust and a collaborative work culture. Having an understanding of people’s personal lives builds group cohesion and understanding. (Marg, teacher)

Small groups for me! I find when it’s a large group, it sometimes feels like I’m disengaged. And I am one of those people that need a hands-on approach, so if you’re teaching me something with a camera, give me a camera. If you’re teaching me something with a laptop I need to be doing it. And I think 90% of the population is like that. (Maya, QTAL team member)

At Collum High School, QTAL was delivered initially in small-group teams, whose team members were later encouraged to form new teams which would in turn allow the learning to extend and be embedded across the organisation; in this way, leadership would be distributed and learning would be sustained. The Academic Partner explained why they chose this “teaming” approach:

Whole-staff learning is really important, too. I would argue that you build the context and the capacity for whole staff learning. What we’ve done constantly is that we’ve built small teams of people who then go on to lead other teams of people. That’s exactly the model we used. It’s building sustainability. It’s building leadership. It’s a trickle-up effect. We have whole-school learning days, but the people who lead them are also the people who have developed the skills to do that in the smaller learning groups. (Academic Partner, Collum High School)

**Key findings at Collum High School**

My study investigated how the Quality Teaching framework and action learning came together in Collum High School’s QTAL project and whether evidence existed that the learning was sustained in some form. I also examined whether Collum High School’s
participation in QTAL contributed to sustained changes in teacher dispositions and school learning culture. Key aspects of the findings that have been discussed in this chapter are summarised in Table 6 below.

Table 6. Key findings at Collum High School.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Key findings</th>
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| Quality Teaching framework    | Quality teaching is embedded in QTAL teachers’ practice  
                                | Mixed support from the leadership for the Quality Teaching framework  
                                | Quality Teaching formalised in TARS and programming; it is perceived by some as an administration tool  
                                | Lesson observation and coding using Quality Teaching was not sustained following QTAL |
| Action learning               | QTAL teachers reported that action learning was sustained in the way professional learning is delivered  
                                | Little evidence of action learning in observations, document study  
                                | Action learning evident in Collum Learning Community meeting observation  
                                | Collum Learning Community members used action learning to implement curriculum projects across schools |
| Teacher dispositions          | QTAL teachers felt strongly that professional learning improved student outcomes  
                                | Willingness to share, professional trust, mutual support are collective dispositions of the Collum Learning Community  
                                | Some teachers unwilling to adopt change (may be generational)  
                                | Lack of competition between schools across the Collum Learning Community |
| School learning culture       | Most staff preferred in-school, collaborative professional learning  
                                | Few factors of professional learning community evident in Collum High School  
                                | Preference for practical, hands on professional learning |

At the time of this study, use of the Quality Teaching framework was evident at Collum High School where teachers are required to demonstrate its application for programming, however the lesson observation and coding that occurred as part of
QTAL were no longer included in the partner primary schools’ transition program.

During QTAL, the program involved a number of subject faculties at Collum High School; at the time of writing, however, it was being coordinated mainly by one person in the school, Vera, who had been a QTAL team member and firmly believed in using Quality Teaching to change teachers’ practice, a view that was also shared by all of the QTAL teachers who were interviewed. Vera plans and implements a range of transition projects with the partner primary schools throughout the year, mostly but not exclusively based in her subject area, the science faculty.

The three QTAL team members, Vera, Lani, and Maya, who still remained at Collum High School at the time of data collection, reported that action learning was the dominant mode of professional learning implementation in the school; however, observations from the two meetings that I attended do not support this view. Evidence is therefore unclear as to whether action learning had been sustained following QTAL.

The majority of teachers who were interviewed also reported that they preferred small-group professional learning, which QTAL team members indicated was the result of the school’s previous involvement in QTAL from 2006 to 2007. In addition, it was identified by the Academic Partner that action learning had been used by the Collum Learning Community prior to their collective participation in QTAL. Evidence of this was observed at the Collum Learning Community meeting that I attended. Further, principals reported that an action learning mode was used to discuss, plan, and implement shared current issues and initiatives. Evidence suggests that the QTAL Academic Partner, who had been associated with the Collum Learning Community over a period of more than ten years, may have influenced the sustained use of action learning which was sustained in the community’s professional learning practices.
Other findings indicate that similarities were evident in the dispositions of those teachers who participated in QTAL. Their willingness to share practice, high levels of professional trust, and mutual support were reported by teachers involved in QTAL, but not exclusively. These dispositions were also noted in the collective group of the Collum Learning Community, and were visible in practices undertaken by the CLC. It has been previously suggested that such dispositions can increase the social capital of the group when collectively shared by its members (Bourdieu, 1986; Louis et al., 1996), and in this case, these dispositions appeared to strengthen the relationships that existed between schools within the learning community.

Some fragmentation of school culture was however observed at Collum High School, as evidenced by the mixed messages that teachers received from a number of school leaders in relation to Quality Teaching, and by a small minority of teachers who indicated that they did not feel valued in the school. The structure and size of high schools can negatively impact on building cohesive school culture, due to the number of staff and separate faculties and the hierarchical structure of leadership (Louis et al., 1996). These factors may have impacted on the development of a strong professional learning community within the school.

Factors which enhance the development of professional learning communities, such as shared goals, collegial feedback on teaching practice, consistent leadership support, and enhanced teacher efficacy and agency, were also features of QTAL. Many of these factors were evident in the operation of the wider Collum Learning Community and, to a lesser extent, at Collum High School.
Chapter 8: Discussion

In the previous four chapters I reported on the qualitative data from four case study schools, Widdon Public School, Cesta Public School, Turley High School, and Collum High School. In my portraits of these cases, the research questions were addressed in relation to the ways in which each school’s participation in their particular collaborative professional learning project contributed to changes in teacher dispositions and school learning culture, and whether any identified changes were sustained over the longer term.

In this chapter, I discuss key themes which emerged from the cases contained within the previous chapters, and in particular I consider the patterns which intersect across the data and are featured in the case study schools. Comparing and contrasting these key themes across the cases, I firstly investigate the degree to which the pedagogical model that underpinned QTAL, the Quality Teaching framework, was sustained in the case study schools. In this section, peer observation and feedback associated with Quality Teaching is considered, as it was a key feature of QTAL and a burgeoning and convincing body of research purports the benefits of deprivatising teacher practice (Gore, Bowe, & Miller, 2012; Hord, 2004; Little, 2006; Louis et al., 1996; Newmann, 1996; Teague & Anfara, 2012). Next, the process of action learning is discussed, as this was the collaborative professional learning mode used during QTAL. Specifically, I aim to determine if schools’ involvement in QTAL influenced the way that professional learning was implemented after government funding ceased, and whether there was any reported impact on teacher dispositions and school culture, up to seven years hence. Finally in this chapter, key themes that emerged in the data are linked and their significance addressed in relation to the research questions, culminating in a framework
to guide schools and education systems in implementing collaborative professional projects which address local school issues.

**Sustainability of the Quality Teaching framework**

There are many forms of professional learning. Some you take lots of things from them, some you take nothing from them. But with Quality Teaching, it is the basis for everything in your classroom…from planning, teaching, everything. (Vera, QTAL team member, Collum High School)

As discussed in Chapter Two, the Quality Teaching framework was the pedagogical model that underpinned QTAL projects. It incorporates the elements of classroom practice and assessment for which there is a demonstrated positive effect on student outcomes (Gore & Ladwig, 2006). The model provides a means by which teachers can reflect on their practice and make judgements about the quality of their teaching. It was reported during interviews that the framework continues to be used in all case study schools, but to varying degrees. This was also supported by documentary evidence.

Nearly all those teachers who had been involved in QTAL expressed the view that sustained use of the Quality Teaching framework had improved their practice. This opinion was not consistently shared by those teachers who had not been directly involved in QTAL. These findings suggest that teachers need to be actively and collectively involved in a prolonged intervention like QTAL in order to change their views regarding their professional learning and their teaching practices.

The two secondary case study schools, Collum High School and Turley High School, both mandated the use of the Quality Teaching framework. Teachers who had been involved in QTAL reported that mandating the use of the pedagogical model encouraged them to focus on the elements of the framework when planning, teaching,
and assessing, while those who had not experienced QTAL were more likely to indicate that they used the Quality Teaching framework as it was a requirement imposed by the school. The latter group of teachers seemed to lack a depth of understanding of the principles underpinning the Quality Teaching framework. This finding supports the existing literature which suggests that a depth of understanding of the pedagogical principles underpinning any reform is necessary in order to sustain learning (Coburn, 2003; Thoonen et al., 2011).

An exception to this finding was observed in a small group of teachers at Turley High School and Cesta Public School, each with less than ten years’ teaching experience, who had specifically learned about Quality Teaching whilst at university and subsequently were very familiar with its use. As with the QTAL teachers, this particular group of teachers had deep knowledge and understanding of Quality Teaching due to their prolonged contact with the framework during their pre-service training which carried over into their teaching practice.

In contrast, school leaders at Cesta Public School did not mandate the use of Quality Teaching, although Quality Teaching was highly recommended and supported in the school. While it was expected that teachers participated in peer observation and lesson coding associated with Quality Teaching, few teachers actually participated, indicating that the balance of pressure and support (Guskey, 2002; Little, 1993; McLaughlin, 1987) which was a feature of QTAL may not have been present to the extent required for teachers to apply this strategy in their practice. This suggests that pressure is sometimes needed initially to encourage teachers to implement changes to their classroom teaching. With continued focus and support, and observed improvements in
student outcomes, teachers are then more likely to adopt and embed innovations into their practice.

Two important perspectives were raised by teachers at Cesta Public School which may explain why teachers did not take part in peer observation and feedback. Kimberley, a QTAL team member, felt that teachers were generally too busy to comply with school leaders who requested they participate in these activities, but as teachers were not held accountable, these requests often “sailed on by”. Delia added that such requests should be reinforced by school leaders if they want teachers to participate:

If you don’t remind people then it gets lost….No one followed it through. We shouldn’t have to put deadlines on teachers but I think [the school leaders] should have….It didn’t happen because there was no reminder.
(Delia, teacher, Cesta Public School)

The second perspective was offered by Marlene and Garth, who suggested that teachers were not confident in sharing their practice, and that this was the reason why teachers did not participate:

…because we were scared. We didn’t want people coming to watch us and code our lessons. (Marleen, teacher, Cesta Public School)

There weren’t enough people who saw the value in it…And teachers are notorious for not being comfortable being observed while they’re teaching.
(Garth, teacher, Cesta Public School)

Teachers at Cesta Public School suggested that a mandate from school leaders may have been what was needed to encourage teachers to participate in peer observation and feedback associated with Quality Teaching. Similar to Garth and Marlene, Lani, who
was a QTAL team member at Collum High School, also identified the importance of relationships and professional trust when sharing practice. She described the initial difficulty she experienced in building trust with her peer teacher, as she had missed the first half of the project due to being on maternity leave. Overall however Lani found the experience an overwhelmingly positive one that provided her with in-depth professional feedback, something she had not experienced before or since her participation in QTAL:

It comes back to that building of trust, in terms of sharing our practice. It’s something that we do that’s just so personal, isn’t it? And we do feel fragile. It’s best that you have that trustful relationship initially….It’s raw, you know, it’s like just opening yourself completely up. (Lani, QTAL team member, Collum High School)

Of the four case study schools, the only school that sustained the practice of peer observation and feedback (other than the New Scheme teachers who participated in this as part of their accreditation) was Widdon Public School. Teachers there chose peers with whom they felt most comfortable—where a positive relationship and professional trust had already been established—to share their practice. This appeared to be a linchpin of successful peer observation and feedback in the research.

The unsuccessful attempts at “deprivatising” (Little, 1990) practice at Cesta Public School suggest that for teachers to be comfortable in doing so, a school culture of collaboration and professional trust needs to be in place. Huffman and Hipp (2003) describe this necessary supportive school culture as “glue that is critical to hold…dimensions [of professional learning community] together” (p. 146), a view supported across a range of professional learning literature (Hall & Hord, 2011; Lichtenstein, McLaughlin, & Knudsen, 1991; Little, 1990). The need for adequate time to be allocated for teachers to practise new skills, as identified by Cesta Public School
staff in relation to their reluctance to participate in lesson observation and coding, is also identified as a necessary enabler if professional learning is to have a sustained impact on improving teaching practice (Aminudin, 2012; Timperley et al., 2007).

Mandates can work as an initial intervention, if they are widely supported at the local level (Hall & Hord, 2006, 2011; Fullan, 2005). In the longer term, however, teachers need to see and know that implementing the innovation actually improves their practice in classrooms, as evidenced by better quality learning outcomes for their students.

I think the improvement in student learning relates to improved teacher learning. You cannot doubt this, because the data is there, indicating what we’re doing is working. So we need to continue. (Linda, teacher, Widdon Public School)

We saw an improvement after we introduced some of the strategies in QTAL. Our results in HSIE increased markedly. I shouldn’t gloat, but they did. They were amazing. The School Certificate was our gauge….The biggest focus was lifting the bottom kids. It was the bottom end of the scale where there was the biggest improvement. (Kellie, QTAL team member, Turley High School)

Although document studies in both high schools provided evidence that the Quality Teaching framework was actually used for planning and programming (see Appendix 12 and 13), observations at Turley High School revealed a greater level of awareness in relation to Quality Teaching because it remained an ongoing professional learning focus in the school. It was reported by interviewees in all schools that a continued focus on new learning was necessary in order to embed reforms in teachers’ classroom practice. It appears that a sustained professional learning focus on a specific reform, as was the case in QTAL, rather than a number of reforms, is more likely to bring about changes
that can be sustained. This is critical as “professional learning experiences should be sustained and continuous, rather than short term and episodic” (Newmann et al., 2000, p. 259).

**Peer observation and feedback**

It is increasingly accepted that schools where teachers share their practice with peers have greater success in improving student learning outcomes compared to those where teachers work in isolation (Elbousty & Bratt, 2010; Hord, 2004; Lichtenstein et al., 1991; Little, 1990; Newmann, 1996; Rozenholtz, 1989). As stated above, Widdon Public School was the only case study school which had formalised and embedded the use of peer observation and feedback into their practice following their participation in QTAL, even though QTAL team members in all four case study schools reported that these strategies were a valuable part of the project. Reasons identified which explain why peer observation and feedback was not generally adopted in three of the four case study schools include a lack of professional trust, a school culture not conducive to sharing, time constraints, low teacher esteem, and a lack of ongoing support from school leaders. This may have also been related to the professional sharing that seemed to occur more seamlessly at Widdon Public School, the smaller case study school. A number of organisational factors were also in place there which helped to sustain learning: distributed leadership, a designated time for teachers to share their learning with the Principal, the support of an external knowledgeable professional, and a collaborative school culture that linked teacher learning to improved student learning based on ongoing data collection. Although the teachers directly involved in QTAL across case study schools all agreed that lesson coding associated with Quality Teaching had been a valuable collaborative learning strategy during their QTAL projects and that
the practice was worthy of being sustained, it was generally not adopted following QTAL.

Surprisingly, at the time of this study, Turley High School and Cesta Public School were investigating ways in which peer observation and feedback associated with Quality Teaching could be embedded in their schools, four years after project funding had ceased. The Principal of Turley High School reported that processes were not in place at the time of QTAL to support peer observation and feedback, however they were now ready to move forward and embed the strategy into their practice—not as a supervisory tool but as an additional support mechanism for teachers to reflect on their practice.

The reasons we are [now] moving into observations is not a supervisory measure but a supportive one…to ensure that the focus is on instructional leadership rather than administration, and sits nicely with our culture of support….The time was not right at QTAL because of various processes that were being enacted at that time. (Shelly, Principal, Turley High School)

Although most teachers who participated in peer observation reported that the feedback they received was useful as outlined above, there was also an underlying sense that teachers carefully select comments to peers in an effort to be polite.

At the end of the lesson we say, “I loved how you did this” or “that was great! Could I get that resource off you?” (Natalie, QTAL team leader, Widdon Public School)

I believe it is a positive thing, getting feedback from other teachers on your practice. People at Cesta are so positive…feedback is always constructive. (Genevieve, teacher, Cesta Public School)
At the time of QTAL, the Principal of Widdon Public School, expressed doubts as to whether the staff were critical enough in their feedback in order to move practice forward. Sian (Principal, Widdon Public School) described the process of teachers providing peer feedback as being “cloaked in middle class manners”, suggesting that peer feedback may have been too celebratory for fear of offending colleagues. Sian believed that providing critical feedback on practice was crucial for teacher improvement.

Unless someone is a reflective teacher then they will remain the same their whole career unless feedback is given. (Sian, Principal, Widdon Public School)

It is a tricky thing to do. An agreed language is key so the protocols have to be in place before the process starts. Are Widdon staff really there yet? They did host classroom visits but how honest the feedback is from their peers would be what I would question. I know it was something we were striving for when I left but hadn't achieved. (Sian, Principal, Widdon Public School)

Elmore (2007) explains that there is a strong current of “niceness” in teacher feedback to peers that make discussions about practice too celebratory, hindering the level of criticality required for deep discussion, reflection, and professional growth of teachers (City et al., 2009; Elmore, 2007). Peer feedback that is supported by evidence and uses an agreed language is more likely to positively impact on classroom practice than generic, evaluative comments about teachers (Bowe & Gore, 2012), as described by Natalie and Genevieve above. It seems that by focusing instead on what is actually observed in practice, discussion is depersonalised and feedback is useful and non-threatening, increasing the likelihood of “creating a safe place for learning” (City et al., 2009, p. 75). The aim of peer feedback and lesson coding using protocols provided in
the Quality Teaching resources (NSW DET, 2003b) is to provide a shared language for teachers to improve their practice through reflection and analysis, “empirically linking general qualities of pedagogy to improved student learning” (NSW DET, 2003b, pp. 55–56).

Similar to the Academic Partner at Widdon Public School, the Academic Partner at Collum High School did not encourage teachers to numerically code their lessons. He did however advocate using the language of the framework to discuss lessons observed so that teachers shared an understanding of what effective teaching looked like in the classroom, based on the Quality Teaching framework. The descriptors of the Quality Teaching Classroom Practice Guide (NSW DET, 2003b) were used here, but not the numbers, to provide peer feedback.

I used the descriptors [of the Quality Teaching framework]….They provided the criteria for the evidence that each teacher looked for….I encouraged teachers to refer explicitly to the words of the descriptors in their reporting and discussion. Often, of course this was the stimulus for discussion where evidence was disputed in the group. (Academic Partner, Collum High School)

What I did not like [about the Quality Teaching Coding sheets] was the rating and the evaluation rating. All that goes against anything I believe about what works with teacher learning. I just knew teachers wouldn’t rate themselves; that was ridiculous. With Widdon, there was no way I was going to use that framework too early in the piece because I didn’t want them rating themselves being good or bad against anything else but themselves. (Academic Partner, Widdon Public School)

Both Academic Partners encouraged teachers to explicitly identify evidence in their peers’ practice, using the language of the Quality Teaching framework to describe and
discuss what was observed during peer observation lessons. The Academic Partners’ reluctance to use the 1-5 coding in the Quality Teaching Classroom Practice Guide (NSW DET, 2003b) more than likely influenced Widden Public School’s decision not to use the Quality Teaching coding in the process of engaging in peer observation.

Despite this, there was agreement from teachers in all schools who had been involved in QTAL that peer observation and lesson coding was useful and that the numerical coding of lessons was in fact of benefit to teachers. Regardless of whether numerical coding and/or descriptors were adopted throughout QTAL, all four Academic Partners encouraged teachers to use the Quality Teaching resources (NSW DET, 2003b, 2003c) to provide peer feedback as a basis for reflection and collaborative discussion.

Overall, findings discussed in this section suggest that peer observation and lesson coding based on an agreed pedagogic model, like the Quality Teaching framework, holds the potential to break down teacher isolation and build shared understandings of what constitutes high quality instruction in classrooms. Shared understandings contribute to the building of trust and collaboration, a requisite for the formation of professional learning communities and “a powerful strategy for sustained, substantive school improvement” (DuFour, Eaker, et al., 2010, p. 242).

**Sustainability of action learning**

Action learning was the collaborative vehicle for teachers engaging in professional learning during QTAL. Similar to Quality Teaching, action learning was sustained to varying degrees across the four case study schools, and seemed to relate to the effectiveness of school-wide communication, the degree of professional trust and distributed leadership, and the level of teacher ownership of the reforms. All schools
that responded to the initial survey reported that they continued to use action learning in some capacity for professional learning after funding for QTAL was expended, and initial survey data, in addition to interview data suggested that sustainability seemed to be related to whether the practice “spread” across the school, rather than whether it was sustained in the small group. Action learning had a greater impact when it was shared with the larger group following QTAL, resulting in capacity building through collective knowledge creation, which contributes to the establishment of professional learning communities in and between schools (King & Newmann, 2001; Lichtenstein et al., 1991).

**Sharing new knowledge**

New knowledge created through the process of action learning during QTAL was shared by all four case study schools with the wider education field: Widdon Public School staff presented their work at national literacy conferences, Turley High School QTAL teachers shared their practices at regional teacher meetings, while Cesta Public School’s QTAL team contributed to a state-wide professional learning video, as did Collum High School along with their partner primary schools. The process of action learning seemed to contribute to building teacher confidence and efficacy in all four case study schools. The new knowledge produced through action learning was “owned” by the teachers involved and, as a result of the outcomes of their projects, they were keen to share their new knowledge with the wider education field. Although doing so exposed their work to public criticism and refinement, this had the cyclic effect of confirming to those teachers involved in action learning that their work produced important knowledge which was valued by the wider education field. This in turn was associated with increased professional confidence that fuelled further action learning.
Local teacher-led research that contributes to group knowledge, and is grounded in classroom practice and based on local data, is highly regarded by many; this is evidenced by the number of teachers (over 100) who attended the presentation in which Widdon Public School staff were invited guest speakers at a regional Australian Literacy Educators’ Association (ALEA) meeting to share their practices in relation to the school writing program that was developed through action learning. The esteem in which teachers hold local, collaborative professional learning opportunities, as evidenced by their voluntary attendance at the above meeting, suggests that teachers value opportunities to learn with and from each other, creating knowledge that specifically targets and potentially benefits students whom they teach.

**Professional learning project funding**

A particular strength of QTAL was that the project funding bought time for teachers to work together in an action learning mode, with external support from academic partners.

> You could actually see the collegial, professional learning that was happening through that action learning cycle and teachers having time. That’s what [QTAL] was for me. It was “time”. It was purely and simply to “buy time”. (Rob, Deputy Principal, Turley High School)

Widdon Public School received additional professional learning funding directly following QTAL, which enabled it to continue to evolve those strategies that proved successful during their professional learning project. In addition to providing teachers with time to work together using action learning, the additional funding was also used to finance a knowledgeable professional to support teacher learning, an identified antecedent of sustained professional learning (Aminudin, 2012; Aubusson et al., 2009; Hoban et al., 2005).
However, not all schools regarded additional funding as a means of sustaining learning for teachers or improving outcomes for students. There is a level of accountability attached to government funding which drives projects like QTAL, and schools may not wish to be bound by such obligations, particularly if the funding does not align with existing school priorities. Turley High School lost additional professional learning funding that they had previously received following QTAL, however school executive members were ambivalent about this as the funding would have resulted in teachers being absent from school for external professional learning, and was perceived as having the potential to cause an undesirable level of disruption in classrooms. This view highlights the need for flexibility in the delivery of professional learning to best suit local conditions, a finding that echoes the work of Wayne et al. (2008), who also found that professional learning could be disruptive to student learning “when requiring teachers to be out of the classroom on regular schooldays” (p. 470). Turley High School organised professional learning around what was already happening in the school, with the aim of maintaining consistency and building teacher capacity. This ensured that professional learning not only fostered teacher efficacy, but was job embedded, spread across the school, and supportive of existing structures. These are features that have been identified previously as factors which relate to sustainability and high collective efficacy, which in turn, are linked to higher levels of student achievement (Aminudin, 2012; Porter, 2011; Yendol-Hoppey & Dana, 2010).

Like Widdon Public School, Cesta Public School also received considerable additional government funding following QTAL, which was used to release a team of teachers with ICT expertise to support other teachers in their classrooms. The strategy was not particularly successful for two possible reasons: first, there may have been a lack of professional trust between teachers, as previously outlined; and second, teachers
perceived the team’s role as one of technical support, due in part to the existing lack of systems support for ICT within the school which, in this case, related to the tardiness of regional technical assistance needed to fix computers. This in turn prevented action learning from being implemented in classrooms and created a “mismatch between plan and intention” (Argyris, 1999, Preface). Such organisational barriers to teacher learning (Argyris, 1999; Schön, 1987) were difficult for the school to overcome.

One staff member at Cesta Public School regarded the additional professional learning funding as a “golden era” with “lots of fantastic programs being run in the school, and everything available” (Stan, QTAL team member). However, when discussion turned to ways in which the learning could be sustained “at the end of the year when the bucket runs dry” (Stan, QTAL team member), the response was unclear, suggesting that the provision of additional professional learning funds for schools may be a double-edged sword. On the one side sustainability is dependent on the use to which the funding is put, how it coheres with existing targets, and the infrastructure already in place to support the continuation of the learning once funding is expended. Some schools had the necessary conditions in place that enabled them to plan for sustainability. Widdon Public School planned to continue successful professional learning strategies they had put in place under QTAL by timetabling Assistant Principals to provide in-class support to teachers, and ensuring that data meetings with the Principal continued through the flexible allocation of school resources. They also planned to continue to “buy in” external assistance to support classroom teachers as they had had measurable success with these collaborative professional learning strategies throughout QTAL.

On the other hand, some schools made use of the funding when it was available but programs seemed to wane once the money was exhausted. It appears then that
sustainability is influenced by what schools choose to do with additional professional learning funds. Teacher learning impacts on student learning but that in turn is profoundly impacted by schools as learning organisations, and in particular by the establishment of necessary infrastructure which embeds and maintains the learning across the organisation over the longer term (Argyris, 1999; King & Newmann, 2001; Robinson, Lloyd, & Rowe, 2008).

**Academic partners in schools**

In QTAL, the academic partner role was central to sustaining an action learning approach. Academic partners provided collegial support to teachers as they worked together in a cyclic model of potential improvement. Academic partners were funded during QTAL, but most schools that responded to the survey in this study chose not to continue with the academic partner role when funding ceased. Some schools reported that the allocated partner did not meet their specific requirements, emphasising the importance of schools having a voice in the selection of academic partners and other knowledgeable professionals to ensure that there is coherence between the school and the external facilitator.

Three of the four case study schools however continued to maintain contact with their academic partners after funding ceased; in the fourth school, the academic partner retired and moved away, preventing the partnership from continuing. Only one of the four schools entered into a contractual arrangement with an academic following QTAL to continue in a similar role to that of the academic partner. At Widdon Public School, the Academic Partner, followed by the Literacy Coach, supported teachers both
individually and collectively as they attempted to transform their knowledge into practice, with reported success.

We have the opportunity to evolve in the practice. It’s ongoing and ever changes and you’ve always got that support. (Linda, teacher, Widdon Public School)

She knows how to get everyone on the same page. She never makes you feel like you’re silly. She knows how to guide you without you even knowing you’re being guided. (Natalie, teacher, Widdon Public School)

A consistent theme in the research was the importance of teachers at the local level maintaining ownership of the learning, through the academic partner taking on a facilitative role, assisting school teams in achieving their goals and respecting the local knowledge that teachers contributed to the group, both individually and collectively.

Part of it is respecting what everybody in the group knows and realising by pooling what everybody knows we’re going to be building on the knowledge that was developed. That was the whole rationale for action learning. It is recognising it’s the people in the context at the centre of the issue that know the most, not an “outside expert”! (Academic Partner, Collum High School)

Role negotiation at the outset ensured that ownership remained with the teachers in schools and not the academic partner. Ewing et al. (2010) described how some schools pressured academic partners to “take a more hands-on role” (p. 51), and how academic partners’ insistence on remaining critical friends, their intended role, was an identified cause of dissatisfaction in some schools.

However, this was not the situation in the case study schools. All academic partners were experienced in this kind of activity, and acknowledged the crucial importance of
schools maintaining ownership of their projects. Academic partners in the case study
schools intentionally negotiated their roles at the outset.

We talked about the academic partner role and what it might look like
at Widdon. I could offer expertise in facilitating the process, and in the areas
of writing and assessment; however, I wanted to draw out the considerable
expertise of the staff, because they all had expertise too…and I wasn’t going
to be a person who just walked in and told them what to do. (Academic
Partner, Widdon Public School)

One of the things I do in negotiating my work in schools, is I talk about
sustainability….The notion of sustainability is part of the conversation from
the start…I think the wider role of an academic partner is to help schools
think about how what’s happened is going to be sustained. It has to be part
of the conversation when you negotiate your way in. You say, “How are you
going to sustain this when I’m gone? What are we going to do to make sure
that happens?” (Academic Partner, Collum High School)

Academic partners ensured that teachers maintained ownership of their projects, such
that any knowledge that was collectively generated also remained in the school after the
academic partner moved on. The academic partner role, when it works well, seems to be
essentially one of support and guidance, an “outside expert” in the action learning
process (Ewing et al., 2010; Ewing et al., 2004; McCormack et al., 2006).

Action learning is a useful professional learning process for sharing teacher expertise,
however if there is no expertise in a particular area to meet a school’s emerging needs,
an external knowledgeable professional could be a viable option to move the learning
forward across the organisation. The need for an external knowledgeable professional
may be revealed as teachers realise through reflection that they do not have the skills
needed to address emerging local issues.
Researcher: You said your school is rich with tacit knowledge. But, what happens if the particular skills that you need are not in the school?

Rob (Deputy Principal, Turley High School): That’s where we go out and get them. We’re currently introducing the new syllabus documents…we’ve had to outsource here. The consultant we chose has spent time here already. She’s done research on this campus. She’s worked out what we need, and where our staff are at.

School leaders at Turley High School were careful to ensure that those who came into the school to support professional learning understood the school’s needs and the culture. This helped to ensure that coherence was maintained across the school and the wider education field, as the external knowledgeable professional brought a broad educational perspective and their “outsider knowledge” of current issues within the field into the school.

Changes in professional learning approaches

Schools reported that an action-oriented, collaborative approach became their preferred mode of implementing professional learning as a result of their QTAL experiences.

Yes [QTAL did impact on professional learning approaches in the school], around collaborative professional learning. It changed the way we go about things. Did QTAL change things? Yes I think it did. It was a catalyst for change. (Jan, Principal, Cesta Public School)

I think a lot more people got exposed to the process of action learning, and that opened up some different eyes as well. It’s not about going out to a workshop. It’s about looking at your students, looking at your practice, seeing what you can do and moving on from there. (Shelly, Principal, Turley High School)
Although the school leaders indicated that QTAL changed professional learning processes in their schools by exposing staff to action learning, teachers themselves needed to be familiar with the process of action learning in order for it to be a successful collaborative professional learning vehicle which changed teacher practice in classrooms.

My opinion about the potential of action learning to change teacher practice is if it is done well, it has enormous potential to change their practice. I’ve seen it over and over again. But it’s got to be done well. It is key people who make it work…who really understand what action learning is. (Academic Partner, Collum High School)

**QTAL themes**

*Impact on school culture*

School cultures based on professional trust and shared values are more likely to facilitate and sustain change (Hall, 2009; Hall & Hord, 2011; Hord, 2004). According to Hord (2004), relationships shift from an individual focus to collaboration through project work and to participation in joint decision making and leadership as schools move towards the formation of highly functioning professional learning communities. The majority of QTAL team members, through their ongoing involvement in significant project-based learning and the resultant deep learning associated with their projects, seemed to be open to work in ways they had in QTAL. This finding suggests that schools could possibly move more easily towards developing the norms of continuous, critical inquiry that underpin successful professional learning communities when schools participate in collaborative professional learning projects, like QTAL.
QTAL projects in each of the case study schools impacted on school culture in different ways. At Cesta Public School, the focus of their collaborative professional learning project was technology (ICT) in teaching and learning. This caused discomfort for some teachers who found it difficult to keep up with ever-increasing technological change, their dispositions and skills having been forged in a different educational context. Some of the more experienced teachers on staff were overwhelmed by escalating technology demands, and described feelings of disempowerment.

Of course I could see the incredible opportunities technology was offering but my lack of skill meant there was fear. My worst nightmare is 30 kids sitting there and there’s a glitch I can’t fix….And I can’t achieve what I set out to. [It results in] loss of control almost. That’s scary as a teacher. (Greg, retired Assistant Principal, Cesta Public School)

At Collum High School, a teacher, Maxine, expressed dissatisfaction with her perception of the school culture on a number of levels.

I feel like a lot of the time my ideas are really worthless. I don’t feel like [pause] I don’t get any kind of praise for any part of my job at the moment at this school. (Maxine, teacher, Collum High School)

While Maxine was not a QTAL team member, her perception was that the primary partners project, which began with QTAL in 2006, continued through to 2007, and was implemented during sport time so as to be cost neutral, had negatively impacted on the school sport program as interested teachers were relieved from sporting duties so that they could be involved in the primary partners program. Maxine believed that all teachers should participate in sport, and felt that she was not listened to or respected when she expressed her views in the school.
I don’t think that should be done in sport time but that’s the way it’s always been done and… I think it should be changed. I get the comments back, “Well, that’s how it’s always been done.” (Maxine, teacher, Collum High School)

At Turley High School, Richard also did not share a number of collective dispositions with his peers in relation to small-group learning, as evidenced by his reluctant participation in QTAL. In contrast to Maxine however, Richard, a QTAL team member who had a clear understanding of the school culture, participated in QTAL despite the fact that this caused him a degree of discomfort. Due to his leadership role, Richard felt a strong sense of responsibility. Additionally, a logic of practice at his school was that “Team Turley” valued what each teacher contributed to the collective whole of the school. As explained earlier, Richard acknowledged that he could have opted out of QTAL, yet chose to participate because of the expectation that teachers collectively supported school initiatives, and he did not wish to “let the team down”. Maxine did not share this willingness to support existing school initiatives in her school and so she did not support the Primary Partners program at Collum High School, which suggests less of a “team” culture at her school.

Michelle (QTAL team leader), on her arrival at Widdon Public School and prior to her involvement in QTAL, described the culture there as one of professional isolation: “I was on my own little island, doing what I thought was right.” Angela (QTAL team member) shared similar feelings when she first arrived at Widdon Public School:

I really felt isolated initially. I felt there was no one I could talk to for support, and being new, I was really reluctant to admit that I was struggling because I felt it reflected on me professionally if I said I wasn’t coping very well. (Angela, team member, Widdon Public School)
Juxtaposed with this, Widdon Public School teachers reported sharing a school climate of professional confidence, group cohesion, collaboration, and sharing post-QTAL. Like Turley High School and “Team Turley”, teachers at Widdon Public School described a collective responsibility to their colleagues that they articulated as “We’re all in!”, evidence of a shared vision in the school, the existence of a collaborative school culture, and the development of a supportive professional learning community over time, during, and following their participation in QTAL.

At Turley High School and Widdon Public School, staff seemed to share a collaborative school learning culture as evidenced by high levels of teacher trust, shared commitment, and distributed pedagogical leadership. This was present to a lesser degree at Cesta Public School and Collum High School. The sharing of teaching strategies learned from QTAL seemed to occur more seamlessly at these first two schools where knowledge was shared between the small group and the whole school. It is possible that this was a result of the shared collaborative school learning culture at Turley High School and Widdon Public School. At Turley High School, QTAL teachers were responsible for sharing what they had learned in the QTAL project with the whole school. These strategies were still evident four years after funding had ceased, and were regularly revisited to raise the awareness of new staff.

If the whole staff does it and we follow through by actively changing the way we engage with the kids in classrooms, it works and works well. [QTAL] was successful because everyone took it on….It became part of our school culture. (Albert, QTAL team member, Turley High School)

In other words, my analysis suggest that those schools that successfully sustained the learning up to seven years following their involvement with QTAL had a school culture
in place which privileged collective responsibility, meaningful collaboration, group cohesion, and high levels of professional trust. Teachers felt supported because there was distributed leadership; teachers owned the changes associated with collaborative professional learning in their individual and collective practice. Their shared cultural capital facilitated educational change and further professional learning, leading to the formation of strong professional learning communities.

**Impact of teacher dispositions**

The capacity of some case study schools to sustain the changes associated with collaborative professional learning was clearly superior to others. One aspect of a school’s capacity to embrace change relates to teacher dispositions, with dispositions varying based on the personal and professional experiences of teachers, impacting on school culture. Varying attitudes of different generations of teachers in relation to the Quality Teaching framework were evident particularly at Cesta Public School, and to a lesser degree at Turley and Collum High Schools. Greg, a recently retired Assistant Principal who had been at Cesta Public School for over twenty years, had a very different attitude towards the potential impact of the Quality Teaching framework in improving practice than did Genevieve, who had been in the school for a short period and had been teaching for only a few years. Greg regarded engagement with Quality Teaching as a rework of what had been done previously, whereas Genevieve saw the framework as a means of verifying her practice to ensure that it was the best that it could be. Some teachers were more open than others to acquiring new knowledge and skills, through using the Quality Teaching framework.
The conflicting attitudes of different generations of teachers at Cesta Public School may in part be attributable to the departure of the QTAL team leader (Shane) who was instrumental in promoting Quality Teaching. It was widely reported that his influence brought the staff together, bringing to the fore a collective purpose. Shane however believed that some teachers were “never going to change what they’ve always done”, suggesting that deeply held dispositions prevented some experienced teachers from embracing change. At the time of my study, key personnel had already left the school and the remaining teachers who had been involved in the project were attempting to continue to drive change initiatives with varying levels of success.

Schools’ participation in QTAL and subsequent collaborative professional learning projects effected changes in teacher dispositions and school culture to varying degrees. Teachers reported that they needed time to jointly plan and reflect on professional learning, as well as ongoing support from the leadership and others to embed changes associated with collaborative professional learning in their classroom practice.

Similar to the findings of Sunley and Locke (2009) and Thornton (2006), this supports the view that teachers are more likely to change their classroom practice as a result of professional learning if they have the opportunity to question their core beliefs in relation to reform agendas and to discuss how the changes may impact on their teaching.

As outlined previously, teacher resistance to change was reported in Cesta Public School, and to a lesser degree in Collum High School. Teachers’ resistance to change relates to their dispositions (Gore, Bowe, Clement, et al., 2012; Hord, 2004; Jurasaitė-Harbison, 2009; King & Newmann, 2001; Thornton, 2006). Intervention is often
required at the individual level to challenge teachers’ deeply held beliefs to help them to understand the reasons for change. Hall and Hord identified a need for an “implementation bridge” (2006, p. 10), a support mechanism that takes many forms, and scaffolds teachers through the change and implementation process. A bridge can be many things, including ongoing informal questioning by school leaders to ensure changes are implemented in practice. For example, Shane (QTAL team leader, Cesta Public School), who worked with Greg (retired Assistant Principal) in a team-teaching mode, attempted to influence Greg’s thinking and to support him in the change process. Although Shane was unsuccessful in shifting Greg’s deeply held dispositions in relation to his lack of confidence in using ICT in his practice, this strategy is an example of an implementation bridge.

Implementation bridges were also apparent at Widdon Public School in the form of in-class support, team teaching, designated teacher time with the Literacy Coach, and student-data tracking meetings involving the Principal and individual teachers. At Turley High School, examples of implementation bridges included weekly Principal email messages to staff and in-class support from school leaders. The Academic Partner at Widdon Public School described the process she used in her role to support the implementation of ongoing change.

You’ve got to put certain structures in place that allow it to work the way you want it to work. The structure might be as simple as a daily message from the Principal. There’s a whole range of things you might put in place to get things going. But the structure you choose will orchestrate a certain process happening. A process of learning…All I did was ground something that was working in the way we set things up. In any good professional development you can see this type of model working. (Academic Partner, Widdon Public School)
Teachers require varying levels of support for them to implement and sustain change and, even with ongoing support, some teachers are unwilling or unable to take on particular changes in their practice. Teacher dispositions are important determinants as to whether professional learning initiatives and reforms are successfully sustained (Borko et al., 2007; Gore, Bowe, Clement, et al., 2012; King & Newmann, 2001). This finding suggests that teacher dispositions need to be addressed as an integral part of the professional learning process in the form of ongoing support for teachers as they attempt to embed the changes associated with collaborative professional learning into their classroom practice.

QTAL did contribute to changes in teacher dispositions and school learning culture, as evidenced by both initial survey and case study data. In the initial survey data, teachers reported that schools’ participation in QTAL had a positive overall impact on moving teachers towards becoming professional learning communities. In the case study data, a range of teacher dispositions were identified that impacted reflexively on school learning culture, which teachers reported may have been related to their school’s participation in QTAL. Most changes to teacher dispositions that were identified as possibly linked to schools’ participation in QTAL related to changes in teacher beliefs about the benefits of collaboration and the formation of professional learning communities.

**Role of leadership**

School leaders have a crucial role in ensuring that teachers share a common purpose clearly linked to student learning. Addressing teacher dispositions and ensuring that the school’s infrastructure is able to support teachers in implementing and sustaining
changes associated with professional learning contributes to teachers sharing a common purpose. In this study, most interviewees articulated professional respect for their school leaders, often based on the particular leader’s ability to engender professional trust, teacher confidence, and collegial support. Teachers valued school leaders being active partners in professional learning, as well as providing opportunities for teachers to lead, contribute, and share ownership, ensuring that the learning was geared towards specific individual and school needs.

[Students’] results have improved markedly. A lot of it’s got to do with the Principal, who is an amazing woman. I think through her mentoring of the staff, she had this ability to build staff confidence—to sit with them as a friend as well as a leader, as well as a person who could offer expertise, and their confidence just grew. (Academic Partner, Widdon Public School)

The school leadership, they were very supportive. One of the deputies steered the whole project and was really the one to get people on board, and he was there, he would come down when the teachers came to observe and things like that. So [the school leaders] had a very active role. (Maya, QTAL team member, Collum High School)

I feel really privileged because I’ve not come across a school with such a supportive leadership. When I arrived at Cesta, “Wow!” I thought, “This is excellent!” Staff morale was high and you received ongoing leadership from above. You can do anything when you have that surrounding support. (Genevieve, teacher, Cesta Public School)

Especially Shelly [the Principal], it’s a school pride thing. You want to be part of her vision. She’s a very visionary leader. It’s the culture. When she says, “I’d like you to do this”, it’s like she’s passing on the baton. The way this school runs, it’s like they’re [the school leaders] passing on the baton for the future. They’re not keeping it to themselves. The school leaders really love education. You can see that they really care about the future of
the kids. I feel they’re giving bits of themselves for you to look after and nurture. (Ollie, teacher, Turley High School)

Change is difficult to sustain in times of high staff turnover (Coburn, 2003; Fullan, 2007), as evidenced at both Cesta Public School, and Collum High School, which may have been a contributing factor in relation to the limited sustainability of some key aspects of the collaborative professional learning projects in these schools. At Collum High School, only a core group of teachers continued to focus on the primary partners’ transition program following a number of significant staff changes, including the departure of the QTAL team leader and the arrival of a new principal. The remaining program lacked the scale it had when funded during QTAL, and although the project had continued for over eight years, key aspects of QTAL had not been sustained.

As previously outlined, Cesta Public School also experienced difficulties sustaining professional learning when a key leader unexpectedly left the school. This finding demonstrates the importance of professional learning being collectively owned by a team, with the focus on building learning communities rather than individuals owning projects, “ensuring initiatives become woven into the fabric of school life” (Schechter & Gannon, 2012, p. 733).

In comparison, at Widden Public School, where a change in leadership also took place following QTAL, the collaborative professional learning project continued on seamlessly as the new leader had a sound knowledge of the existing school culture and teachers jointly owned the learning. With support from the academic partner, the first principal had ensured that the infrastructure, including individual teacher and school capacity, empowered teachers to share ownership, and to build upon and sustain their learning.
You develop that cluster commitment. In order for all those things to work in a way that is successful, you’ve got to put certain structures in place that allow it to work the way you want it to work...the structure you choose will orchestrate a certain process happening...a process of learning, and as a result, it builds relationships. And when you get that relationship of community, then you start to build capacity among the people involved, they can see it feeds itself. You have to have somebody orchestrating or facilitating it...but it feeds itself. (Academic Partner, Widdon Public School)

This supports existing research which suggests that a school culture of commitment and ongoing school improvement can endure beyond changes in leadership with succession planning, distributed leadership, and shared ownership firmly in place (Reeves, 2009; Stoll et al., 2006).

In order for changes in practice to be sustained, long-term school leadership support is vital and must be tailored to suit local needs (Hall & Hord, 2006; Louis et al., 1996; Wilson, 2011). At Cesta Public School, teachers reported that they needed additional release time to implement peer observation and feedback associated with Quality Teaching, as well as ongoing critical discussion and leadership support which linked new learning to what was already known in order for them to follow through with an innovation. Indeed, a common theme across all interviews was that teachers preferred a sustained focus on one professional learning initiative at a time, with sufficient follow-up and support to ensure that changes in practice were well embedded and to avoid “innovation overload” (Owen, teacher, Turley High School). The need for sustained engagement with an innovation through consistent, distributed leadership and ongoing collaborative discourse is widely recognised, as this enables teachers to connect with, deeply understand, and make the changes necessary such that innovation is implemented in their practice (Barber, 2005; Fullan, 2005, 2007; Sloan, 2009).
In addition, the Principals at Turley High School (Shelly) and Widdon Public School (Sian) were both willing to take calculated risks when they perceived that such risks would improve the learning outcomes of teachers and students in their respective schools. This was in contrast to the Principals at Cesta Public School and Collum High School, who both worked instead within systems boundaries to elicit positive change in their schools.

As described earlier, both Shelly and Sian were leaders who “pushed the boundaries”. Sian refused to back down when a departmental officer advised her not to apply for QTAL funding, under the belief that the school’s staff were “not ready”, and again when she refused to implement departmental professional learning programs offered to her under National Partnerships funding, choosing instead to continue with the QTAL project that she knew needed to be further embedded in order for it to be sustained. Shelly displayed a similar “steely determination” when she was criticised by a departmental officer for her inflated school suspension data, which elicited the response, “Come and talk to me about the return suspensions, then we’ll see if we’ve got the problem or not”, suggesting that the strategy she had chosen was in fact working in the local context. Additionally, when a teacher advised her that students were incapable of leading peer support sessions, Shelly responded, “Yes, they can. I’ve done it before and am totally committed to sharing the leadership role with students and staff” (Shelly, Principal, Turley High School).

In contrast, the Principal at Collum High School expressed dissatisfaction with her inability to compensate staff for online professional learning with time in lieu, and moved through official channels in order to try to change the departmental policy to better meet the needs of her students and staff.
It’s [the online professional learning is] just not being acknowledged and credited. A lot of my staff are doing all this professional learning online in their own time….It’s a wonderful staff here. They just give and give….I wish to be able to compensate them. (Cheree, Principal)

The Principal of Cesta Public School also expressed frustration in accessing district technology assistance, which hindered a professional learning initiative aimed at increasing teachers’ ICT skills through team teaching and support from more technologically savvy staff.

In the system we have to log calls and it is complicated. Sometimes we log about five calls before we get help. We can’t get outside assistance because it blows our insurance. Most equipment is under warranty and you need to make phone calls if it stops working, to get it replaced. This is the system and it’s frustrating. Some people can troubleshoot more than others. We need the gear to work before we can team teach. (Jan, Principal, Cesta Public School)

These examples illustrate how the Principals of Collum High School and Cesta Public School worked within the existing education system to elicit positive change, while the Principals at Widdon Public School and Turley High School seemed more willing to push systems boundaries to achieve specific school professional learning goals. It is axiomatic that systems enablers and inhibitors impact school leaders’ capacity to facilitate positive change, and the research findings indicate that some leaders were more successful than others in manipulating systems barriers and turning them into learning opportunities.
**Whole-school focus**

There was limited evidence in this study to indicate that participation in the particular collaborative professional learning project investigated did in fact contribute to school-wide change at Cesta Public School and Collum High School, as there was a lack of consistency in responses of staff at both schools in relation to the impact and sustainability of the project. As discussed however, both of these schools had high staff mobility during and following QTAL, which may have impacted on the sustainability of the professional learning associated with QTAL. This finding aligns with Fullan (2007) who identifies that “staff turnover” is one of the most powerful factors to undermine continuation of change initiatives in schools.

Both Widdon Public School and Turley High School however continued to focus on the content and processes which had been initiated in their QTAL projects, and successfully shared their learning to include the whole staff. Many of the changes associated with their collaborative professional learning projects had become embedded in the culture of the school, and teachers shared a collective belief that the professional learning was important and worthy of sustaining.

The finding that sharing a collective belief in the importance of an innovation increases the likelihood of changes being embedded in teachers’ practice also aligns with Fullan’s phases of change (2005, 2007), and Lambert’s (2007) phases of lasting school improvement both of which were outlined in Chapter Two and describe how schools move through phases of change from initiation, to implementation and then continuation. According to these two particular models, it appears that teachers at Turley High School and Widdon Public School may have been further along the change continuum than teachers in Cesta Public School and Collum High School. Additionally,
the sharing of reforms from the small group to the whole staff seemed also to increase school capacity in sustaining change (Fullan, 2005, 2007; Newmann, 1996; Newmann & Wehlage, 2005).

Widdon Public School was the smallest case study school, and the majority of staff within the school were involved in the QTAL project. Those teachers who did not initially participate in QTAL eventually did so; the enhanced teaching practice which resulted from QTAL motivated these teachers to also become involved in the program. This could perhaps be explained by previous research findings which suggest that sustainability of professional learning may be easier to achieve in small schools due to greater ease of communication (Little, 2006; Louis et al., 1996; Stoll et al., 2006), however the learning was also observed to be sustained at Turley High School, and yet this was the largest case study school of the four. It is possible that learning may have been sustained over the longer term at both Widdon Public School and Turley High School not as a result of school size but because those staff members, including those not involved in QTAL, were kept well informed by the team throughout the project. In both schools, non-QTAL members were regularly updated on team activities.

The whole school wasn’t involved. It was a team of people that agreed to be part of it….We found by the end of [QTAL], because we would come back from meetings so excited, talking about different strategies, people were wanting to become involved in it. We would bring it to the staffroom, speak about our activities at staff meetings, and share the readings. (Natalie, QTAL team leader, Widdon Public School)

It is not possible to determine in this study whether school size was a contributing factor in the sustainability of collaborative professional learning across either of these schools. This research does suggest however that a school culture of collaboration and sharing
may have been associated with the changes that resulted in collaborative professional learning being sustained across the school.

**Use of data**

There was a strong emphasis on ongoing data collection at Widdon Public School, which drove the direction and pace of the professional learning and explicitly linked teacher learning with improved student learning. Professional learning that is based on local data and addresses specific student needs “challenges existing practice, paving the way for new teacher practice” (Timperley et al., 2007, p. x). Current assessment practices at Widdon Public School began with the school’s involvement in QTAL and grew to include a range of whole-school data collection and analysis strategies in which teachers engaged and collectively owned.

The finding that a new teacher at Widdon Public School was unfamiliar with the Quality Teaching framework and that it underpinned school planning and practice, demonstrated the ongoing need to ensure that new teachers are effectively inducted into the community. Although QTAL was implemented at Turley High School from 2008 to 2010, strategies that were part of the project remained an ongoing professional learning focus for four years after project funding ceased, which ensured that all teachers, including new teachers, were familiar with their use. This is supported by previous research which suggests that an ongoing focus at the local level in which there are clear links to student learning data and firmly established organisational and systems support in order for professional learning to be sustained (Barber, 2005; Bobis, 2004; Cordingley, 2008; Fullan, 2005).
**Professional learning communities**

Changes to school learning culture which were linked to schools’ participation in QTAL also included a range of factors consistent with schools moving towards professional learning communities. Again, some teachers identified that the pace of change in schools was corrosive to building positive school learning cultures, as was a focus on too many professional learning targets at any one time. Similar to previous research (Chong & Kong, 2012; Cordingley, 2008; Wei et al., 2009), these findings suggest that teachers learn more when professional learning is focused on a limited number of learning goals, which provides opportunities for discussion and deep learning, and increases the likelihood that teachers feel confident in transferring the learning into their classroom practice.

Certain teachers in particular schools reported that participation in collaborative professional learning made a positive impact overall. At Widdon Public School and Turley High School, these teachers reported that their school culture was collaborative, that leadership was distributed, and that there were high levels of professional trust, reflecting previously identified features of professional learning communities (DuFour, Eaker, et al., 2010; Erickson et al., 2005; Hall & Hord, 2011).

In contrast, some Cesta Public School teachers identified that there was instead a preference for privacy which inhibited the development of a more collaborative school culture, one in which pockets of individualism (Fullan & Hargreaves, 1996) were more evident. Staff from this school also reported that the rapid pace of change was counter to the formation of a positive school learning culture, as was an identified resistance to change observed among some of the more experienced staff. At Collum High School,
there was inconsistency in the feedback received regarding leadership, teacher empowerment, and professional trust which may have signalled a less positive school learning culture. Data collected from Widdon Public School and Turley High School staff were more consistent; changes in teacher dispositions and school learning culture related to participation in QTAL were mostly positive in both schools.

Although contested (see Chapter Two), professional learning communities are widely regarded as the “best-known means by which we might achieve truly historic, wide-scale improvements in teaching and learning” (DuFour, Eaker, et al., 2010, p. 432). A convincing amount of literature suggests that professional learning communities are a promising and highly regarded strategy for achieving sustained school improvement (DuFour, Eaker, et al., 2010; Hall & Hord, 2011; Hipp et al., 2008; Schmoker, 2004; Stoll et al., 2006).

**Conclusion**

Collaborative professional learning is significant when changes associated with the learning can be sustained over the longer term to improve practice and ultimately impact positively on student outcomes. Of the four cases in my study, changes that began with schools’ participation in QTAL were sustained to varying degrees. At Widdon Public School, staff reported that the changes which originated with QTAL were now the way they operated in classrooms every day. Teachers had adopted the changes because local and national data supported their implementation. It was reported that the use of strategies learned during QTAL and beyond was no longer driven by the leadership but owned by the staff, although the school’s educational leaders continued to be active participants in professional learning.
At both Widdon Public School and Turley High School, projects had been scaled up to include the whole school. Scaling involves changes in classroom practice, in which continuity of the changes and ownership by teachers are generalised beyond the original group (Coburn, 2003). This was not evident in the other two cases, Cesta Public School and Collum High School, where scaling appeared not to have been fully formed. This finding suggests that for professional learning to be sustained, it must be consistently shared and expanded beyond the small-group learning situation to the whole school, which mobilises all teachers and builds ownership and collective school capacity (Fullan, 2005; Newmann et al., 2000; Newmann & Wehlage, 2005; Rowling & Samdal, 2011; Schechter & Gannon, 2012).

My findings are summarised in a framework that identifies the factors which sustain professional learning over the longer term in schools, as revealed in this research. These factors are elaborated throughout Chapter Nine, and the summative framework can be seen in Figure 8 below.
In this chapter I have analysed findings across the four case study schools in relation to the ways in which collaborative professional learning projects contribute to changes in teacher dispositions and school learning culture. I have used my theoretical framework presented in Chapter Three to identify and discuss the factors which sustain collaborative professional learning, as acknowledged in existing research, and how these work in unison within schools where learning is sustained over the longer term.
In the ninth and final chapter of my thesis I present my theoretical contribution of this study and discuss implications for schools, systems, and future research in light of current directions within the field of education, particularly as this relates to the sub-field of teacher professional learning.
Chapter 9: Moving forward with collaborative professional learning

This thesis investigated the extent to which participation in collaborative professional learning had sustained impact on teacher dispositions, teaching practice, and school culture. The major research question was: “In what ways, if any, does participation in collaborative professional learning projects contribute to sustained changes in teacher dispositions and school professional learning culture?” Three subsidiary questions guided the investigation of the major research question in the study, and these were:

1. In what ways do collaborative professional learning projects impact upon teachers’ dispositions in relation to:
   - professional learning and collaboration;
   - classroom teaching practice; and
   - whole-school professional learning practices?

2. In what ways do schools’ involvement in collaborative professional learning projects impact upon professional learning culture, in terms of:
   - the approaches to and processes of professional learning; and
   - the ways in which teachers’ work and professional learning are organised?

3. If there is evidence of change in either 1 or 2 above, what indication is there that those changes have been embedded, sustained and/or modified over time?

These questions were devised to address the perplexing and challenging issue of how to sustain educational change in schools (Aubusson et al., 2009; Fullan, 2005; Lambert, 2007; Timperley et al., 2007). As noted in the introductory chapter, few studies have investigated the sustainability of professional learning over the longer term (Coburn,
2003; Erickson et al., 2005; Hargreaves & Goodson, 2006; Lambert, 2007; Mouza, 2009), defined in this research as more than two years post intervention. Governments continue to invest significant time and money for professional learning reforms for teachers, so it is essential that both the opportunity and financial costs achieve the best outcomes for students. Additionally, time for professional learning is often limited due to ongoing, increasing, and competing demands on teachers’ time. It is therefore important for schools and systems to be cognisant of factors that influence sustainability to maximise the benefits of time and money spent on professional learning.

In relation to teacher dispositions, this study found that participation in a significant professional learning intervention, QTAL, had impacted positively in an ongoing way on teachers’ dispositions. In general, teachers who had been directly involved in the intervention reported greater impact of the professional learning on their dispositions compared with teachers who had not been directly involved; these teachers reported a more mixed impact which was dependent on a number of factors.

The sharing of the learning from the small group to the whole staff seemed to be a critical factor in the degree to which this impact extended beyond the teachers who had direct experience of QTAL. Some schools scaled up the learning to the rest of the staff more successfully than others, and this appeared to be related to whether organisational factors were in place to support the continuation of the learning, such as having a school culture of collaboration and trust, distributed leadership, time set aside for teacher collaboration and reflection and evidence of positive impact on student outcomes. A teacher in one case study primary school reported that “the data indicates what we are doing is working, so we need to continue” (Linda, teacher, Widdon Public School). Put simply, if teachers believe that they can improve their teaching for the benefit of their
students, and improvements are reflected in a range of data, then they are more likely to change their practice to facilitate and sustain pedagogical change. This notion is consistent with the findings of Darling-Hammond and Richardson (2009) and Erickson et al. (2005).

One case study school, which was also a secondary school, used a mix of “pressure and support” (Shelly, Principal, Turley High School) to ensure that learning was provided to the whole staff by the small group. Expectations were clearly articulated to staff and followed through by the school leadership, and teacher learning was consistently revisited over time, so that new staff were familiar with theory that informed practice in the school in such a way that enabled new learning to remain an ongoing part of teachers’ teaching repertoires. This school, the largest of the four that participated in this research, had successfully sustained learning that originated from their collaborative professional learning four years previously. This finding contrasts to existing literature which suggests that it is easier to sustain learning in smaller schools (Hall & Hord, 2011; Little, 1999, 2005; Louis et al., 1996; Stoll et al., 2006). Additionally, the school had the highest proportion of QTAL teachers remaining on staff at the time of this study, a finding which aligns with the current body of research indicating that teacher mobility negatively impacts on the sustainability of professional learning (Florian, 2000; Fullan, 2007; Reeves, 2009; Stoll et al., 2006; Wayne et al., 2008). In my study, staffing stability appeared more important than size in supporting sustainability at the school level.

With regard to professional learning culture, my analysis found that schools’ involvement in collaborative professional learning impacted on school culture to varying degrees. Educational leaders in three out of the four schools reported that their
approach to professional learning had changed as a result of their involvement in QTAL. Professional learning moved toward action learning with teachers collaboratively investigating their practice. This demonstrates a change in the direction of overall school professional culture towards practices that were more collaborative in approach.

Widdon Public School, which chose to continue to fund an external knowledgeable professional following the cessation of project funding, found that this strategy had a measurable impact on teachers’ classroom work, as evidenced by a range of student learning data, as well as changes in the way professional learning was organised. The focus was on teachers increasing their understanding of pedagogy by developing greater insight into their practice (Gore & Ladwig, 2006; Guskey, 2003). At Widdon Public School, a professional learning community (Hord, 2004) grew from their involvement in their collaborative professional learning project.

They shared what worked and what didn’t work and that’s what happens when you’re beginning to build a professional learning community, as evidenced by that built-up trust. It was fine to say when something hadn’t gone well. It was all right to say you didn’t know…eventually they learnt that it was a safe place to fall. (Sian, Principal, Widdon Public School)

Changes were embedded in the infrastructure of this school, staff were committed to the changes, and there was a continued focus on and support for the changes over time. Professional learning was locally based and collaborative, with backing from external knowledgeable professionals who focused on supporting staff in the development of their particular learning needs, a mix of knowledge of subject matter, content knowledge, and pedagogy (Ball et al., 2008).
By engaging with teacher beliefs and theoretical understandings, there is potential for the collective efficacy of the school to increase, particularly when facilitated by supportive structures. If teachers believe they can elicit positive change in their practice which results in improved learning for their students, their ownership of and engagement with professional learning potentially increases. Professional learning informed by data builds teacher and school capacity, as was evidenced in the research, which informs future professional learning in a cyclic model.

My study adds to what we already know about school culture. Schools that exhibit high levels of professional trust and shared values are more likely to facilitate and sustain change (Hall, 2009; Hall & Hord, 2011; Hord, 2004). Hord (2004) outlined the process by which relationships shift from an individual focus to collaboration through project work and participation in joint decision making and distributed leadership, as schools move toward the formation of professional learning communities. In my study, this was evidenced by teachers’ descriptions of their team-based culture which were characterised by statements such as “Relationships, relationships, relationships” (Turley High School) and “We’re all in!” (Widdon Public School). Findings such as these suggest that ongoing involvement in significant project-based learning increases the potential for schools to sustain educational change.

Implications for schools and systems relate to the importance of building collaborative cultures in schools where teachers share their practice in the spirit of individual and collective improvement. Distributed leadership, where teachers feel a degree of ownership of the learning is a contributing factor to sustainability, as is the ongoing use of data to inform professional learning directions in a cyclic model.
I also found that in those schools where there existed the greatest evidence of sustained change, structures were clearly in place that supported the continuation of the learning. These supportive structures, as outlined previously, related to school culture. A school culture that is based on collaboration and professional trust, with infrastructure in place to support ongoing teacher learning and professional learning communities (DuFour, Eaker, et al., 2010; Hall & Hord, 2011; Hord, 2004), and where learning is shared, increases the likelihood that professional learning builds school capacity for continuous improvement (King & Newmann, 2001; Newmann et al., 2000).

Evidence demonstrating that schools’ involvement in collaborative professional learning led to sustained change varied across the four case studies. At Turley High School, the school engaged an external knowledgeable professional to assist with content delivery of new curriculum, a model that was adopted as a result of the school’s involvement with their collaborative professional learning project. Similarly at one primary school, Widdon Public School, the school persisted in the employment of an external knowledgeable professional in the form of a Literacy Coach who worked in a similar role to the academic partner and remained in the school for a number of years. That particular school also continued to focus on the same professional learning target over time following their involvement in the project, aligning with the literature which indicates that an ongoing commitment and continued focus is required over time in order to sustain change (Fullan, 2005, 2007, 2010; Hargreaves et al., 2007).

At two of the case study schools, the commitment and focus in relation to the changes associated with collaborative professional learning did not seem to be as widespread or embedded into the day-to-day learning of the school, as was the case in the abovementioned schools. Although one of the secondary schools, Collum High School,
had sustained their project for a longer period of time, it was not as intensive as it had been during the funding period and key elements of QTAL had not been sustained by the time of this study. At the other school, Cesta Public School, a key player had moved on, leaving a gap in the knowledge base at the school level which proved difficult to fill. The findings at Cesta Public School cohere with the literature which states that “charismatic leaders are negatively associated with sustainability” (Fullan, 2005, pp. 30–31) whereas distributed leadership is potentially additive, resulting in increased school capacity (Dinham et al., 2008; Lavie, 2006).

Further evidence that changes had been embedded and sustained at the larger secondary school, Turley High School, as a result of the school’s involvement in collaborative professional learning, was the team-based delivery of professional learning which focused on one particular target, where teams shared their learning and created an organised process in which the learning could be scaled up to the whole staff. This was also evident at the two primary schools, and teachers reported that this process of teaming may have been related to their positive experience in the collaborative professional learning project.

My work contributes to the literature on the sustainability of collaborative professional learning by retrospectively examining a serious reform effort, which encompassed the principles of effective professional learning as outlined in the literature (Hawley & Valli, 2000; Borko, 2004; Ingvarson, 2005; Timperley et al., 2007; Wei et al., 2009), up to seven years after funding for the project had ceased across four varied case studies. Although projects shared many similarities, the sustainability of the learning varied considerably across the four schools, demonstrating the situatedness of learning (Guba
& Lincoln, 1994; Jurasaite-Harbison, 2009; Riveros, 2012), and the importance of considering the local context for professional learning to be effective.

The final section of this chapter examines my findings in relation to the current direction of professional learning in education. Despite their unique cultures, similar themes emerged across the schools which offer insights into professional learning. Even though findings cannot be generalised to all schools, they offer compelling insights worthy of further study.

Schools’ participation in collaborative professional learning projects was found to impact on changes to teacher dispositions and school culture to varying degrees, as outlined in the school portraits. These portraits suggest that teachers need opportunities to question their core beliefs in relation to reform agendas and time to collaboratively discuss how proposed changes might impact on their classroom practice. Deeply held beliefs, based on teachers’ personal and professional histories, do play a role in the acquisition and adoption of practices learned during collaborative professional learning (Jurasaite-Harbison, 2009; Sunley & Locke, 2009; Thornton, 2006), and are important determinants as to whether professional learning initiatives and reforms are successfully sustained. The majority of changes concerning teacher dispositions identified in this research related to changes in teacher beliefs about the value of using data to inform professional learning and the benefits of collaboration and professional learning communities in building school capacity.

A number of teacher concerns were identified in the research that align with the literature and are known barriers to change (Bobis, 2004; Thomas et al., 2003). These teacher concerns were based around a lack of adequate time and resources allocated at
the school level in order for professional learning programs to be effectively implemented and supported (Goos et al., 2007; Ji-sun, 2008), as well as a lack of professional trust negatively impacting on teacher learning (Parise & Spillane, 2010). Teacher concerns in relation to lack of time and funding for collaborative professional learning were outlined across three of the case study schools, Turley High School, Collum High School and Cesta Public School.

Theories of sustainability and school change focus on whether changes are embedded in the infrastructure of the school, whether there are enough people committed to the change, and whether there is continued focus and support for the change over time (Fullan, 2005, 2007, 2010; Hargreaves et al., 2007). Although school contexts differed, successful strategies were identified across the case study schools which might assist others in implementing and sustaining change. My analysis of the data suggests that change must be embedded into the day-to-day learning of the school and collaboration clearly focused on linking instructional practice to student outcomes, in order for it to be sustained. This point supports Fullan’s view that “learning is the work, every day in every classroom” (Hargreaves et al., 2007).

The multifaceted issue of professional learning funding was an identified concern in relation to sustainability, as schools and systems strive to utilise government funding in ways that sustain professional learning initiatives, maximising their benefits for teachers and students over the longer term. At Cesta Public School, there was little in place to sustain professional learning funds beyond the boundaries of the funding period suggesting that, when funding ceases, so does the innovation unless schools have strong infrastructure in place to sustain the learning (Elmore & Burney, 1998). Another school, Widdon Public School, had strategies firmly in place so that they could continue
participating in collaborative professional learning after funding had been expended. School leaders at Turley High School however reported that they were “not unhappy” (Rob, Shelly; Turley High School) when they missed out on additional professional learning funding, as funding carried with it with a certain level of accountability. The accountability linked to government funding does not always align with existing school targets, suggesting that professional learning funding which is not tied to particular external funding sources affords professional learning teams a greater degree of autonomy to address specific, local needs (Erickson et al., 2005; Groundwater-Smith & Mockler, 2009; Mockler, 2013).

New South Wales government schools in recent years have moved away from a highly centralized finance structure towards school-based decision making and finance management, known as the Resource-Based Allocation Model or RAM (PricewaterhouseCoopers, 2013) under the Local Schools, Local Decisions initiative, a current education reform that provides NSW public schools with increased authority to decide how best to meet the needs of their students (NSW DEC, 2013). As schools are now in a position to fund their own professional learning initiatives to address locally identified needs, the QTAL model may be a useful addition to schools’ suites of professional learning options both now and in the future as they are increasingly required to operate within school-based management and funding allocation decisions at the local level under RAM.

Additionally, the Local Schools, Local Decisions (NSW DEC, 2013; PricewaterhouseCoopers, 2013) education reform provides government schools in NSW with autonomy to make decisions locally, providing schools with greater freedom to pursue professional learning agendas that target local needs. An example of this was
seen in one case study school, where an external knowledgeable professional was employed to facilitate the school in new curricula implementation, similar to the academic partner role that they engaged with in QTAL. National curricula implementation brings with it significant professional learning demands on teachers and schools. Project-based professional learning, linked to classroom practice and facilitated by external knowledgeable professionals, potentially supports schools in implementing new curricula when the identified skills required cannot be found in the school, as was the case at Turley High School in this study. As schools become more autonomous under Local Schools, Local Decisions, they can increasingly access resources to address professional learning needs at the local level.

However, increased autonomy carries with it increased teacher responsibility (Lichtenstein et al., 1991). Decentralisation, enhanced teacher responsibility, and autonomy do not always result in empowerment. Lightfoot (1983) identified that shifting instructional lines carried with them opportunities for individual autonomy but the attached responsibility was not always empowering. Teacher empowerment results from building professional knowledge that builds teachers’ individual and collective capacity for improvement (Newmann et al., 2000; Newmann & Wehlage, 2005).

Recent changes in education within Australia, in particular the burgeoning “performance and development” movement (AITSL, 2012b), is earmarked by some as an “age of compliance” (Groundwater-Smith & Mockler, 2009, p. 11) where current professional learning is perceived as focused on teacher accountability and competition rather than on support. Recent developments in education that are linked to the findings in this research include national professional standards for teachers. Project-based professional learning, like QTAL, potentially aids schools in addressing targeted, local
school needs, while at the same time assisting teachers in meeting systems’
accreditation and accountability requirements related to professional learning, as
prescribed in the Australian Professional Standards for Teachers, and in particular the
expectation that “all teachers actively engage in professional learning…that is relevant,
collaborative and future focused” (AITSL, 2012a).

Understanding the impact and sustainability of collaborative professional learning is
important to inform policy and decision making in relation to individual teacher
professional learning, school professional learning practices, and systems approaches to
professional learning and educational change. This study contributes to a critical
understanding of the impact of professional learning on teacher dispositions and school
culture, and the influences that sustain such learning. Findings in my study add to the
body of knowledge relating to how collaborative professional learning can be sustained
in schools in the longer term, informed to a large extent by Newmann, Fullan and Hord
who all argue the importance of building teachers’ collective dispositions, skills and
knowledge to bring about positive change in schools through building school capacity
and creating communities of learners.

The research reported in this thesis set out to address the issue of the sustainability of
collaborative professional learning, by investigating how educational change can be
sustained such that teacher quality is ensured and impact on student learning is
maximised. The particular problem that I investigated was the impact of schools’
involvement in collaborative professional learning on teachers’ dispositions and
learning culture, and the degree to which any identified changes were sustained over the
longer term, as much research has outlined factors that sustain learning over the short
term, with less emphasis on longer term sustainability. The study was premised on the
view that by examining sustainability more than two years following an intervention, enabling conditions that are in place in schools where changes associated with professional learning have been sustained, could be identified. The aim was to share findings with schools and education systems in relation to how professional learning can be effectively designed, implemented and supported in schools.

My study is set in an education context of considerable attention being paid to the issue of “teacher quality” both on a national and global level, in addition to significant government investment in teacher professional learning. The literature seems to privilege forms of professional learning which encourage teachers to work in collaborative groups, in a cyclic model of planning, acting, observing and reflecting. The collaborative professional learning project investigated in my study, QTAL, was unique in that there was a focus on both professional learning process and content. Action learning was the inquiry-based process used for collaborative professional learning in the QTAL project, which focused on improving the skills and knowledge of teachers with reference to the Quality Teaching framework (NSW DET, 2003c).

My main research findings, informed by my theoretical framework, were grouped according to three headings. The first heading, “contextual/external factors”, incorporated such factors as the inclusion of external knowledgeable professionals who worked alongside school teams and supported them in their learning. Another identified contextual factor that built school capacity was the formation of professional learning communities, which increased individual and collective capacity for school improvement. All schools in the research shared their learning with the wider education field, in doing so exposing their work to public criticism and refinement. Professional sharing confirmed to teachers that their work produced important knowledge which was
valued by the wider education field, building capacity through collective knowledge creation.

The issue of project funding, although an identified contextual factor that influenced sustainability, was found to be a “double edged sword” in that sustainability was dependent on the use to which the funding was put, how it cohered with existing targets, and the school infrastructure that was put in place which supported the continuation of the learning when funding was expended.

The second group of findings in relation to factors that sustained learning and built school capacity were “school level factors”. School level factors included influences such as schools being actively involved in change initiatives for a prolonged time, as it was found that it takes time for teachers to change their deeply held views in relation to their professional learning and their teaching practices. Although distributed leadership was identified as necessary to build collaborative school cultures, it seemed that change initiatives sometimes required a degree of mandate initially, with accompanying support, until teachers were convinced or otherwise that the changes resulted in improved student outcomes, evidence of the importance of ongoing data that explicitly linked teacher learning with improved student learning.

Peer observation and feedback was a focus of the QTAL project, yet, as reported previously, it was not sustained in three of the four case study schools. Teachers with direct involvement in the QTAL project reported that it was a useful strategy which encouraged them to reflect on and gain insights into their own teaching, and that of their peers. In the sole case study school where it was sustained, teachers chose the colleague whom they observed, which suggested that the strategy was more likely to be adopted if
there existed an established relationship of openness and professional trust among participating teachers. Additionally, a common view among teachers who did not participate in QTAL was that they were reluctant to participate in peer observation and feedback as they had “a fear of being judged” (Marleen, Garth; Cesta Public School) indicating that a school culture lacking in professional trust may inhibit the adoption of potentially transformative professional learning strategies. Identified school-level factors that supported sustainability included enablers such as designated time for teachers to meet, leadership support, funding for teacher release, and resources that removed structural obstacles and supported school change processes.

The third and final group of research findings in relation to factors that sustained learning and built school capacity were “teacher level factors”, some of which crossed over with contextual/external factors and school level factors, specifically the importance of a school climate of collaboration and professional trust, leading to the creation of professional learning communities and distributed leadership to support, embed and sustain learning. My findings suggested that teacher dispositions were a subset of school culture that impacted on contextual, school and teaching factors. Teacher level factors that built school capacity and sustained learning also included teachers sharing pedagogical principles, theoretical understandings and a common language to reflect on practice. In addition, it was found that norms of critical, continuous inquiry resulting from teachers researching their practice in the context of their own classrooms, in the process developing their pedagogical understandings and knowledge, led to teacher ownership of reforms and potentially significant pedagogical and school cultural change.
Future research in light of current directions within the field of education, may focus on the sustainability of project-based collaborative professional learning on a larger scale, and/or over a longer timeframe as this study investigated the question of sustainability from between two to seven years following the cessation of project funding. As my study focused on only four cases, a larger sample may make the findings more generalizable however caution is exhibited when generalising from individual cases, as each case is unique.

Finally, my study sits within the field of teacher professional learning and my theoretical contribution relates to the factors that build school capacity and sustain learning, adding to existing literature in the field. I argue that in order to sustain learning over the longer term, certain factors have to be in place at the contextual/external, school and teacher levels as outlined above. In my study, those schools that sustained their learning had these factors firmly in place, which enabled them, to varying extents, to sustain their learning more than two years post intervention. Evidence presented in this thesis points to the sustainability of collaborative professional learning being firmly linked to teacher dispositions and school learning culture. Those schools with high levels of professional trust and collaboration, where teachers shared their practice in the spirit of improving practice both individually and collectively, were more likely to sustain their learning. My thesis provides some new insights into professional learning that potentially strengthen the quality of teaching in classrooms, and ultimately, student learning outcomes.
References


## Appendix 1: Existing QTAL evaluative studies

<table>
<thead>
<tr>
<th>Title of study</th>
<th>Researcher(s)</th>
<th>Major findings</th>
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</table>
| Teachers as Learners | Robyn Ewing, David Smith, Michael Anderson, Robyn Gibson, Jackie Manuel (University of Sydney) | Action learning succeeds best in a school culture that supports learning, characterised by:  
- Trusting, collaborative working culture  
- Supported risk taking, learning from mistakes  
- Leadership actively committed to learning of all school community  
- Resources committed to support learning within a shared, collective mission that sees student and teacher learning as the core business of the school  
(Ewing et al., 2004, p. 15) |
| Final Report | Garry Hoban, Tony Herrington, Lisa Kervin, Robyn Ewing, Judy Anderson, David Smith | A number of “enabling factors” were identified as important in sustaining professional learning through action learning, grouped under three main headings:  
- “Workplace conditions”: leadership, antecedents, school culture, funding, time  
- “Content”: in QTAL this was the QT Framework in relation to each teacher’s practice  
- “Process”: action learning - reflecting, sharing, action, planning, questioning, observing, facilitating  
(Hoban et al., 2005, p. 7) |
<table>
<thead>
<tr>
<th>Title of study</th>
<th>Researcher(s)</th>
<th>Major findings</th>
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<tbody>
<tr>
<td><strong>Teaching and Learning and Leadership</strong>&lt;br&gt;Factors affecting the impact of professional development programs on teachers’ knowledge, practice, student outcomes and efficacy (2005)&lt;br&gt;Teachers surveyed 3 months after participating in AGQTP activities</td>
<td>Lawrence Ingvarson&lt;br&gt;Marion Meyers&lt;br&gt;Adrian Beavis (Australian Council of Educational Research)</td>
<td>Opportunity to learn or process variables had the largest effect on individual program outcomes&lt;br&gt;Relationship between content focus and impact on knowledge is significant across all 4 studies&lt;br&gt;The extent to which individual programs provide opportunities for active learning and reflection on practice is significant across all 4 programs&lt;br&gt;The level of PLC in a school impacts on teacher knowledge and practice&lt;br&gt;There existed some variations across programs on student learning outcomes and efficacy&lt;br&gt;Programs that built in opportunities for follow-up support were useful in providing feedback to teachers when trying out new skills&lt;br&gt;Duration of programs was found not to have direct effects on the impact measures of these studies, however timespan (length of time programs were supported) enabled PLCs to embed them in school culture. This variable includes time for teachers to jointly plan and reflect on teacher and student learning (Ingvarson et al., 2005, pp. 12–15)</td>
</tr>
<tr>
<td><strong>An Evaluation of the Australian Government Quality Teacher Programme</strong>&lt;br&gt;1999 to 2004 (2005)</td>
<td>Atelier Learning Solutions</td>
<td>Recommendations:&lt;br&gt;- AGQTP to link with the challenges identified in Teachers for the 21st Century and Australia’s Teachers: Australia’s Future&lt;br&gt;- Priority areas for the Programme be based on innovation in Australian schooling proposed by Australia’s Teachers: Australia’s Future&lt;br&gt;Evaluative data to provide information about:&lt;br&gt;- Progress against performance indicators&lt;br&gt;- Alignment between the project and education authority effort&lt;br&gt;- Alignment between the project and other school programs&lt;br&gt;- AGQTP to address emerging issues in Australian schooling that require a national understanding and a national base of evidence to inform future effort&lt;br&gt;- DEST to work with the National Institute for Quality Teaching and School Leadership to exchange information to establish national standards of teacher and school leader professional practice</td>
</tr>
<tr>
<td>Title of study</td>
<td>Researcher(s)</td>
<td>Major findings</td>
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<tr>
<td><em>Action Learning: What Works?</em></td>
<td>Peter Aubusson, Laurie Brady, Steve Dinham</td>
<td>Action learning promoted collaboration, produced action, fostered reflection, facilitated ongoing change, cultivated QT, stimulated changes to practice, enhanced the achievement of school learning outcomes and advanced teacher understanding, concern and utilisation (Aubusson et al., 2005, p. 2)</td>
</tr>
<tr>
<td>(2005)</td>
<td>(University of Technology Sydney) (University of Wollongong)</td>
<td></td>
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<tr>
<td></td>
<td>Term 4, 2004 until end Term 2, 2005</td>
<td></td>
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</tbody>
</table>
| *Meta-Analysis of QTAL Project*| Robyn Ewing, Susan Groundwater-Smith, Nicole Mockler, Tony Loughland, Alyson Simpson, David Smith, Jenni Way, Ann Cheryl Armstrong, Daniel Brooks | Meta-analysis of 135 school based projects from 2003-2007 and 57 in 2008-2010. Focus on 2008-2010 was the addition of QT framework and ICT. Collaborative professional learning is “school based learning in which teachers collaboratively identify their learning needs and then work together to address these needs” (p. 69) Enablers of school-based change:  
- QT framework  
- Integrated school based model for professional learning using action learning processes  
- Potential for significant pedagogical and school cultural change  
- Little evidence of sustainability of changes initiated by QTAL in report and sustainability an issue identified as requiring further research |
| (2010)                         |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
## Appendix 2: Literature search for “teacher professional learning” and “impact”

<table>
<thead>
<tr>
<th>Author / Year</th>
<th>Title</th>
<th>Empirical or Philosophical</th>
<th>Impact</th>
<th>Changed teacher practice</th>
<th>Changed school practice</th>
<th>Changed teacher dispositions</th>
<th>PLC</th>
</tr>
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<tbody>
<tr>
<td>Hall (2009)</td>
<td>Engaging In and Engaging With Research…</td>
<td>E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Marsh et al. (2008)</td>
<td>Supporting Literacy Across The Sunshine State…</td>
<td></td>
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<td>✓</td>
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<td>Langbort (2001)</td>
<td>The Professional Development of Effective Teacher…</td>
<td>E</td>
<td>✓</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Author / Year</td>
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<td>Empirical or Philosophical</td>
<td>Impact</td>
<td>Changed teacher practice</td>
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<tr>
<td>Shenton and Pagett (2007)</td>
<td>From “Bored” to Screen: The Use of IW for Literacy…</td>
<td>P</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td>✓</td>
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</tbody>
</table>
Appendix 3: Literature search for “teacher professional learning” and “sustainability”

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Type of article</th>
<th>Contents</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saunders et al. (2009)</td>
<td>School-Based Collaborative Professional Learning</td>
<td>Research-based (quasi-experimental)</td>
<td>Effects of PL teams on student outcomes over time</td>
<td>California, USA</td>
</tr>
<tr>
<td>Goos, Dole and Makar (2007)</td>
<td>Designing Professional Development to Support Teachers’ Learning in Complex Environments</td>
<td>Research-based (action research)</td>
<td>Supporting teachers’ ongoing professional learning in curriculum reform</td>
<td>Queensland, Australia</td>
</tr>
<tr>
<td>Hip, Huffman, Pankake and Olivier (2009)</td>
<td>Sustaining Professional Learning Communities: Case Studies</td>
<td>Research-based (multiple method 5-year study)</td>
<td>Sustainable professional learning communities School culture</td>
<td>Southwest USA</td>
</tr>
<tr>
<td>Kilbane (2009)</td>
<td>Factors in Sustaining Professional Learning Community</td>
<td>Research-based (collective case study)</td>
<td>Factors that sustain Retrospective study Impact of prior intervention</td>
<td>New York, USA</td>
</tr>
<tr>
<td>Wood (2007)</td>
<td>Teachers’ Learning Communities: Catalyst for Change for a New Infrastructure for the Status Quo?</td>
<td>Research-based (mixed methods)</td>
<td>Sustainability and school culture</td>
<td>Missouri, USA</td>
</tr>
<tr>
<td>Brownell, Adams, Sindelar, Waldron, and Vanhover (2006)</td>
<td>Learning From Collaboration: The Role of Teacher Qualities</td>
<td>Research-based (multiple case studies)</td>
<td>Teachers benefit from collaboration to varying degrees</td>
<td>Southeast USA</td>
</tr>
<tr>
<td>Erickson, Brandes, Mitchell, and Mitchell (2007)</td>
<td>Collaborative Teacher Learning: Findings From Two Professional Development Projects</td>
<td>Research-based (mixed-methods design)</td>
<td>Voluntary collaborative professional learning projects that were sustained</td>
<td>Australia and Canada</td>
</tr>
</tbody>
</table>
Appendix 4: NVivo Codebook

The study began with main themes taken from the literature that informed my theoretical framework, by Newmann (Newmann, 1996; Newmann et al., 2000; Newmann, et al., 1995; Newmann & Wehlage, 2005), Fullan (Fullan, 2007, 2008, 2010; Fullan et al., 2009; Fullan & Hargreaves, 1991, 1996) and Hord (Hall & Hord, 2006, 2011; Hord, 2004), who all argue the importance of building teachers’ collective dispositions, skills, knowledge, motivation and school based resources, to bring about positive change in schools through the creation of a “community of learners”. These identified themes, reflected in my research questions, are:

- Collaborative professional learning and sustained change
- Teacher dispositions impacting on the sustainability of collaborative professional learning
- Impact of collaborative professional learning on classroom practice and whole school professional learning practices
- Approaches to and processes of professional learning
- Changes associated with participation in collaborative professional learning projects.

Many more themes emerged during the analysis of data. Themes were classified according to the number of times they were identified in the data. Those themes identified in the research with more than 20 references, in order of most referenced themes, were:

1. **The role of the academic partner in CPL**

   **Description:** Any comments by interviewees about the academic partner role.

   **Text example:** “I think the AP role from my perspective is I learn as much as they do. I learn different things, but I learn as much. As an academic in schools I learn about schools, and that’s critical for anybody who’s working in Education”. (Academic Partner, Widdon Public School)

2. **The Quality Teaching framework**

   **Description:** Any comments made about the pedagogical model that underpinned QTAL, the Quality Teaching framework.

   **Text example:** “We had lots of discussions about the elements of quality teaching, what they look like, how we could improve and extend the use of the framework in classrooms. Intellectual quality was the
main element we focused on, as well as background knowledge and metalanguage”. (Retired Principal, CLC)

3. **The importance of leadership in CPL**

*Description:* Any comments by interviewees about the importance of leadership in sustaining collaborative professional learning.

*Text example:* “As far as the school leadership, they were very supportive. One of the deputies steered the whole project and was really the one to get people on board, and he was there, he would come down when the teachers came to observe and things like that. So they had a very active role”. (Lani, QTAL team member, Collum high School)

4. **Change**

*Description:* Identified changes associated with the schools’ involvement in collaborative professional learning projects.

*Text example:* “If you can teach them why the learning is important, something they can connect to, they are happy to learn. I think for me that was one of the major impacts in my classroom. And also that explicit teaching. I have a plan of what I want the students to learn and have a rich task at the end. Then I backward map to teach them the skills needed. So that’s something we planned and we used in this project and I still use in my classroom”. (Lani, QTAL team member, Collum High School)

5. **ICT and technology focused PL**

*Description:* How far the ICT professional learning was sustained in classroom practice.

*Text example:* the increased use of technology in the HSIE programs has translated into student centred learning and revision of course work. It has also led to an increased benchmark of expectations and standards. (Document, Turley High School)

6. **Collaboration**

*Description:* the process by which teachers learn with and from each other in their daily professional work.

*Text example:* “Where groups of teachers collaboratively work together on projects or initiatives to improve their teaching and the students’ learning”. (Survey data)

7. **School culture impacting on CPL**

*Description:* comments describing the school culture and how it impacts on teacher and student learning.

*Text example:* “Focus on school pride. Collective responsibilities with emphasis on achievements”. (Document, School Newsletter, Turley High School)
8. **Sustainability of collaborative professional learning**

*Description:* comments and/or evidence in relation to whether the learning associated with collaborative professional learning projects was sustained.

*Text example:* “We’ve been working with the primary school teachers for a while now—quite a few years; the confidence they have is evident in how they call up, text or email and say, “Can I talk to such and such”, or “I’m doing this and I’m stuck. Can you help me?” or “What have you got available that we can use eg: rock samples?” We say “How much do you need?” We drop it over. So just seeing that feedback and increased interaction between them, I think that project we initially did had a long time effect on this learning community, in terms of professional learning and sustaining it”. (Vera, QTAL team member, Collum High School)

9. **Issues related to sustainability**

*Description:* Issues that impact on the sustainability of CPL.

*Text example:* “It was a difficulty in that all of us moved on at one time, and that wasn’t really planned”. (Maddie, QTAL team member, Cesta Public School)

10. **Action learning**

*Description:* any comments made about the collaborative professional learning process of action learning that was used in QTAL.

*Text example:* “It is respecting what everybody in the group knows and realising by pooling what everybody knows we’re going to be building on the knowledge that was developed. That was the whole rationale for action learning. It is recognising it’s the people in the context, at the centre of the issue that knows the most. Not an outside expert.” (Academic Partner, Collum High School)

11. **Generational issues**

*Description:* Different dispositions and skills of teachers based on age.

*Text example:* “The issue is you have a group of older teachers who feel undervalued because they do not have the technology skills they need to have to be able to work in the current environment in schools”. (Academic Partner, Collum High School)

12. **Funding associated with collaborative professional learning**

*Description:* The impact of funding on collaborative professional learning and sustainability.

*Text example:* “If money dries up for professional learning, the cheapest way to do it is put it all online. I don’t think it’s best practice. To us, it’s having a HAT who leads professional learning initiatives across the school and beyond, linking us to other schools; sharing skills and expertise”. (Greg, EL, PPS)
13. **Political influences**

*Description:* Political influences that impact on sustainability.

*Text example:* “I kept up an informal connection for a while but as my workload increased at university, I just couldn’t keep it up. And in schools, the sense that “Oh, we’ve got to do the reports”, and “Oh, we’ve got to do this”. And that’s the politics. Gosh, it’s a shame!” (Academic Partner, Turley High School)

14. **Importance of data**

*Description:* Comments and/or evidence that data informs collaborative professional learning in the school.

*Text example:* “Explicit statement of results/strengths/weaknesses/class by class. Comparing high/low achieving students. Targeting QTAL team activities where students need the most help. Explicitly using data to inform teaching”. (Document, Turley High School)

15. **History of the school and its impact on CPL**

*Description:* History of CPL in the school and whether it impacted on sustainability.

*Text example:* “I think it was the start of our journey. I’ll never forget ... when I arrived at Widdon. They were considered to be a failing school and had been told as much. There was every consultant, “help”, you name it crawling over that place, trying to do whatever they could. The big wigs had been in and said, “This is rubbish. You’ve got to do something about it!” And the staff were quite flat”. (Sian, Principal, Widdon Public School)

16. **Small group learning**

*Description:* The contribution of small group collaborative professional learning to sustained changes in teacher dispositions and school learning culture.

*Text example:* “Small groups are always better because you get to know other people. In big groups you don’t get to know half the staff that are actually there. It [small group professional learning] builds professional trust and a collaborative work culture”. (Marg, teacher, Collum High School)

17. **Champion**

*Definition:* When one person leads a professional learning initiative in a school almost exclusively and its impact on sustainability.

*Text example:* “I think people take on too much sometimes without delegating as much as they should, so it’s shared. Yeah, that was that person’s personality as well, taking on too much. So in a school it is a good thing at the time [when one person champions a professional learning initiative] but probably long term it may not be...” (Delia, teacher, Cesta Public School)
18. **Effective communication**

*Description:* The importance of communication in sustaining learning associated with collaborative professional learning activities.

*Text example:* “People take turn sharing something. Even a website or a useful technology resource, shared through email as it may be more time efficient. We’re all uncomfortable to a degree with technology no matter what our skill level. You just have to do it. Communicating the good things as well when you need help, assists everyone to grow”. (Georgina, teacher, Cesta Public School)

19. **Impact**

*Description:* Reported impact of collaborative professional learning projects on teacher and / or student learning.

*Text example:* “There’s a lot of higher order thinking-type things like mind maps, different strategies to find out what kids know at the beginning of a unit that I still use to this day. The strategies we used [during QTAL] are useful to find out what they learned at the end of a unit too”. (George, QTAL team member)

20. **Ongoing support**

*Description:* Supportive conditions that support the sustainability of collaborative professional learning.

*Text example:* “I think it's great to have someone off class to help us. We need someone all the time for that...once a fortnight one person is off class”. (Kimberley, QTAL team member, Cesta Public School)

21. **Staff turnover**

*Description:* The impact of staff turnover on sustainability.

*Text example:* “When you move on, things need to be in place for others to step up in order for things to keep going”. (Kimberley, QTAL team member, Cesta Public School)

22. **Professional learning communities**

*Description:* the role of professional learning communities in collaborative professional learning.

*Text example:* “In order to grow a culture and for a culture to flourish things have to be in place. You have to have fertilised the ground. Professional learning communities have been around since 2000 or so. I think the best place for people to learn is in their local communities, using the skills and talents of the people in the schools”. (Neil, retired Principal, CLC)

23. **Twenty-first century learners**

*Description:* Comments about twenty-first century learners and skills, and the collaborative professional learning activities that develop these skills in schools.
Text example: “The next big thing coming is collaborative online learning so I have to look ahead twelve months and go, right we’re doing well with group-work; how do I move that to the next phase which is collaborative on-line learning?” (Bella, QTAL team leader, Turley High School)

24. **Collaborative Professional Learning linked to curriculum**

*Description:* curriculum links to school collaborative professional learning initiatives.

*Text example:* “This year we’re raising awareness of the new curriculum. We have additional funding for teacher learning. We use that TPL money very creatively. To cater for the range of career development in the school, including very early career development. I have to give them time to learn”. (Sian, Principal, Widdon Public School)

25. **Professional trust**

*Description:* Reference to the importance of professional trust in utilising and sustaining collaborative professional learning in practice.

*Text example:* “I do think it is important, that you need to have that sense of trust within, amongst the teachers, and the learning environment of the school. But…if the professional learning’s about using smart data and stuff like that, then coming back at a faculty level and applying it to your subject”. (Maya, QTAL team member, Collum High School)

26. **Transference**

*Description:* The process of “scaling up” or sharing collaborative professional learning from the small group to the whole staff.

*Text example:* “We were told to focus on the learning of the team, before bringing it on to the whole staff. Throughout the year, we’d share things, resources, training, we’d go and team teach”. (Shane, QTAL team leader, Cesta Public School)

27. **Teacher dispositions**

*Description:* the attitudes, perceptions or beliefs that contribute to teachers’ behaviour in their professional lives.

*Text example:* The majority [of teachers] were open to having me there and giving suggestions. I was invited into many classrooms to sit, and do lesson study…that told me an awful lot about those particular teachers. They had particular confidence levels, and they felt that they were doing a good job. (Academic partner, Turley High School)
Appendix 5: Initial survey

BACKGROUND

1. In what years did your school participate in an Australian Government Quality Teacher Program (AGQTP) Quality Teaching Action Learning Project (QTAL)?

   Please indicate.
   □ 2006–2007
   □ 2008–2010

2. What is the size of your school?

   □ PP1 (701+ students)   □ PH1 (> 900 students)
   □ PP2 (451–700 students) □ PH2 (1–900 students)
   □ PP3 (301–450 students) □ PC1 (451+ students)
   □ PP4 (160–300 students) □ PC2 (301–450 students)
   □ PP5 (26–159 students)   □ PC3 (160–300 students)
   □ PP6 (1–25 students)     □ PC4 (26–159 students)

3. What role did you have in the QTAL Project?

   □ School Principal or Executive not directly involved in the project
   □ School Principal or Executive and also the QTAL team leader
   □ School Principal or Executive and also a QTAL team member
   □ QTAL team leader
   □ QTAL team member
   □ None of the above

4. How many teachers were directly involved in QTAL?

   □ 1–2 teachers
   □ 3–4 teachers
   □ 5–6 teachers
   □ 7–8 teachers
   □ More than 8 teachers
   □ Whole staff
   □ Don’t know

5. Where were the teachers in the QTAL team from?

   □ Primary–one Stage only was represented (e.g. all Year 1, 2 teachers)
   □ Primary–a few Stages of the school were represented
   □ Primary–most stages of the school were represented
   □ Primary–all Stages of the school were represented
   □ Secondary–one KLA only was represented
   □ Secondary–more than one KLA was represented
   □ Across schools–please specify

6. How many of your original QTAL team remain in the school?

   □ All QTAL team members remain in the school
   □ Most team members remain in the school
   □ About half of the original team members remain in the school
   □ A few of the original team members remain in the school
   □ One team member remains in the school
   □ There are no longer any original QTAL team members in the school
ABOUT YOUR QTAL PROJECT

7. What was the main focus of your project?


8. Briefly state the outcomes of your project.


9. How often did the QTAL team meet?

☐ Once a week
☐ Once a fortnight
☐ Once a month
☐ Once a term
☐ Irregular intervals
☐ Other (please specify): ______________________

10. What were the main activities of the QTAL team?

*Please indicate all that apply.*

☐ Learning about the process of action learning
☐ Learning about the Quality Teaching framework and resources
☐ Learning about curriculum documents and resources related to project topic
☐ Producing related teaching resources to share across the school
☐ Planning and writing units of work with team
☐ Peer observation and reflection on pedagogy
☐ Learning and sharing teaching strategies
☐ Team discussion about student work samples and assessment
☐ Guest speakers and resource people to deepen knowledge and skills related to project
☐ Overview of current research, reflection and discussion
☐ Whole staff sharing of QTAL resources and activities
☐ QTAL team led professional learning activities with staff
☐ Academic partner led professional learning activities with staff
☐ Other (please specify): ______________________
☐ Don’t know
Please indicate your response to the following questions by circling the appropriate number on the following scale:

<table>
<thead>
<tr>
<th>Use NA for NIL or not applicable</th>
<th>Not at all</th>
<th>A little</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

11. To what extent were the following aware of your QTAL project:

   School executive 1 2 3 4 5 NA
   QTAL team members 1 2 3 4 5 NA
   Staff members not on the QTAL team 1 2 3 4 5 NA
   Whole school 1 2 3 4 5 NA

12. To what extent was the QTAL project submission developed by:

   School executive 1 2 3 4 5 NA
   QTAL team members 1 2 3 4 5 NA
   Staff members not on the QTAL team 1 2 3 4 5 NA
   Whole school 1 2 3 4 5 NA

13. To what extent did the QTAL project submission build on a school initiative that was current at the time the project was implemented?

   1 2 3 4 5 NA

14. To what extent do you think QTAL improved the quality of student learning outcomes in your school?

   1 2 3 4 5 NA

**IMPACT OF QTAL ON SCHOOL PROFESSIONAL LEARNING CULTURE**

15. What is your understanding of the term ‘professional learning culture’?

   [Blank]

16. To what extent did the school’s involvement in QTAL impact on the professional learning culture of the school?

   1 2 3 4 5 NA
17. To what extent has action learning been sustained as a professional learning tool in the school?

1  2  3  4  5  NA

18. To what extent does the Quality Teaching framework remain a focus in the school?

1  2  3  4  5  NA

19. To what extent did the learning that occurred in the QTAL team carry over to the whole staff?

1  2  3  4  5  NA

20. The QTAL professional learning model was one of groups of teachers working collaboratively “with and from each other” to address an identified school based issue. What is your assessment of this delivery method in terms of the impact on the professional learning of the team?

*Please circle the number that, in your opinion, corresponds with the impact of QTAL on professional learning.*

<table>
<thead>
<tr>
<th>Strong negative impact</th>
<th>Negative impact</th>
<th>No impact</th>
<th>Positive impact</th>
<th>Strong positive impact</th>
<th>Not applicable</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

21. How would you rate the OVERALL impact of your school’s participation in QTAL on the professional learning culture of the school?

1  2  3  4  5  N/A

22. Do you think the QTAL activities brought about long term change in teaching practices at your school?

*Please circle appropriate response only.*

1. Yes  2. No  3. Don’t know

23. Did the school commit further resources to continue the activities commenced as a result of QTAL?

1. Yes  2. No  3. Don’t know

24. Did the school sustain a professional relationship with the academic partner after funding for the project ceased?

1. Yes  2. No  3. Don’t know
25. What would have made the impact of QTAL more sustained in the longer term at your school?

*Please indicate all that apply.*

- [ ] Nothing
- [ ] Further external input
- [ ] Further in-school input
- [ ] More external support
- [ ] More support from QTAL coordinators
- [ ] Collegial support from outside the school
- [ ] Can you think of anything else? (please specify): ______________________
- [ ] Don’t know

26. What professional learning projects have your school been involved in since QTAL?


27. What professional learning projects are your school currently involved in?


28. Have any of these projects used collaborative professional learning as a model?

1. Yes  
2. No  
(please circle)

If yes, which one/s?


29. Have any of these projects attracted special program funding?

If yes, which one/s?


30. Do you have any further comments about your school’s involvement in QTAL?


Circle your response that indicates your willingness to participate further in the study.

Please indicate whether you would be prepared to be a case study school which would involve the researcher visiting your school (details to follow if your school is selected as a case study).

1. Yes 2. No

Thank you once again for your participation.
Appendix 6: Research questions linked to initial survey

Major research question (MRC)

In what ways does participation in collaborative professional learning projects contribute to changes in teachers’ dispositions and school professional learning culture?

Subsidiary questions

1. In what ways do collaborative professional learning projects impact upon teachers’ dispositions in relation to:
   - professional learning and collaboration; (S1a)
   - classroom teaching practice; and (S1b)
   - whole-school professional learning practices? (S1c)

2. In what ways do schools’ involvement in collaborative professional learning projects impact upon professional learning culture, in terms of:
   - the approaches to and processes of professional learning; and (S2a)
   - the ways in which teachers’ work and professional learning are organised? (S2b)

3. If there is evidence of change in either 1 or 2 above, what indication is there that those changes have been embedded, sustained and/or modified over time? (S3)
<table>
<thead>
<tr>
<th>Survey question</th>
<th>Link to research questions</th>
<th>Statistical analysis</th>
<th>Research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Determine temporal nature of professional learning</td>
<td>Correlation between when project was undertaken and PLC (Q21)</td>
<td>MRC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correlation between when project was undertaken and changes to teacher practice in class (Q13)</td>
<td>S1b, S1c S2a, S2b S3</td>
</tr>
<tr>
<td>Q2</td>
<td>Determine whether size of school is a variable to consider</td>
<td>Correlation between size of school and:</td>
<td>MRC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Professional learning culture (Q15)</td>
<td>S1b, S1c</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Action learning (Q16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- QT framework (Q17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Change in long-term teaching practices (Q21)</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>Determine whether various team members shared the same perceptions about project</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>Determine how many teachers were directly involved in project</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>Determine whether the team was representative of whole school or part thereof</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>Determine whether participating teachers remain in the school and whether</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>this is a factor that impacts on whether learning is sustained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>Determine content focus of project</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>Frequency of meetings</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q9</td>
<td>Main activities of team</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q10</td>
<td>Commitment of leadership to project</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Survey question</td>
<td>Link to research questions</td>
<td>Statistical analysis</td>
<td>Research questions</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Q11</td>
<td>Development of submission</td>
<td>Simple descriptive statistics</td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>Links to whole school plan</td>
<td>Simple descriptive statistics</td>
<td>MRQ, S1c</td>
</tr>
<tr>
<td>Q13</td>
<td>QTAL resulted in improved student outcomes</td>
<td>Simple descriptive statistics</td>
<td>S1b, S1c</td>
</tr>
<tr>
<td>Q14</td>
<td>Determine understanding of PLC</td>
<td>Qualitative response</td>
<td>S1a, S1b, S1c, S2a, S2b</td>
</tr>
<tr>
<td>Q15</td>
<td>Determine impact of QTAL on PLC</td>
<td>Simple descriptive statistics</td>
<td>S2a, S2b, S3</td>
</tr>
<tr>
<td>Q16</td>
<td>Determine whether process of action learning was sustained</td>
<td>Simple descriptive statistics</td>
<td>S2a, S2b, MRQ</td>
</tr>
<tr>
<td>Q17</td>
<td>Determine whether content – QT framework was sustained</td>
<td>Simple descriptive statistics</td>
<td>S1a, S1b, S1c, S2</td>
</tr>
<tr>
<td>Q18</td>
<td>Determine whether QTAL team learning was embedded in whole school learning</td>
<td>Simple descriptive statistics</td>
<td>MRQ, S1c, S2a, S2b, S3</td>
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<tr>
<td>Q19</td>
<td>Determine teachers’ views of action learning as a mode of professional learning</td>
<td>Simple descriptive statistics</td>
<td>S1a, S1b, S1c, S2a, S2b</td>
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<tr>
<td>Q20</td>
<td>Determine overall impact of QTAL on PLC</td>
<td>Simple descriptive statistics</td>
<td>S2a, S2b, S3</td>
</tr>
<tr>
<td>Q21</td>
<td>Determine whether QTAL brought about long term change in teaching practices</td>
<td>Simple descriptive statistics</td>
<td>S1b, S3</td>
</tr>
<tr>
<td>Q22</td>
<td>Determine whether school committed further resources to sustain QTAL</td>
<td>Simple descriptive statistics</td>
<td>S3</td>
</tr>
<tr>
<td>Q23</td>
<td>Determine teacher perceptions of impact and sustainability</td>
<td>Simple descriptive statistics</td>
<td>S1a, S1b, S1c, S2a, S2b, S3</td>
</tr>
<tr>
<td>Survey question</td>
<td>Link to research questions</td>
<td>Statistical analysis</td>
<td>Research questions</td>
</tr>
<tr>
<td>-----------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Q24</td>
<td>Future directions professional learning</td>
<td>Qualitative response</td>
<td></td>
</tr>
<tr>
<td>Q25</td>
<td>Current professional learning projects the school is involved in</td>
<td>Frequencies Qualitative response</td>
<td></td>
</tr>
<tr>
<td>Q26</td>
<td>Process of future professional learning</td>
<td>Simple descriptive statistics</td>
<td>S2a, S2b S3</td>
</tr>
<tr>
<td>Q27</td>
<td>Future funded projects</td>
<td>Simple descriptive statistics</td>
<td>S1a, S1c S2a, S2b</td>
</tr>
<tr>
<td>Q28</td>
<td>Further comments</td>
<td>Qualitative response</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7: Semi-structured interview questions

(Teachers previously involved in QTAL who remain in the school were interviewed. Other teachers in the school who have been involved in collaborative professional learning projects were also offered the opportunity to be interviewed)

Setting the scene: discussion stimulus

1. The research is about professional learning and how it contributes to changing school culture and teacher dispositions. As a teacher who has been involved in professional learning projects, let’s begin by talking about how you feel about professional learning.

QTAL: whole school

2. Tell me about the QTAL project you were involved in. Some particular things I’m interested in are:
   - What was the project about?
   - What was your role in the project?
   - How did the project work? I am interested in organisation of the project, activities, impact on classroom teaching, anything…
   - Was the whole school involved? Explain.
   - How did the QTAL team share their learning with the whole staff?
   - Did you feel supported by the school leadership during the project? Explain.
   - Would you like to comment on the importance of leadership in relation to your school’s involvement in QTAL?
   - In your opinion, what professional learning resulted from QTAL for
     a. The QTAL team?
     b. Whole staff?
   - What was your overall impression of the success or otherwise of your school’s involvement in QTAL? We are interested in any strengths or weaknesses you identified through the school’s involvement in the project.
   - Looking back, how could your QTAL project have been improved?

QTAL: individual teacher learning

3. Tell me about any changes you made in your classroom that may have been related to your QTAL experiences.
   - Do any of these changes remain and if so, can you tell me about them?
   - How did you feel about learning in a group?
   - Compare QTAL with other professional learning you have been involved in. Would you please comment on any differences you noticed?

Action Learning

4. QTAL involved groups of teachers learning together in an action learning mode. Let’s unpack this concept together:
   - What do you understand by the term ‘action learning’?
   - Did your team receive any training in the process of action learning? If yes:
     - What did the training involve?
     - By whom were trained?
     - Did any of that training carry over to the rest of the staff?
     - What do you think about the training you received?
   - I’m interested in the potential of action learning for improving teachers’ professional practice. Do you have an opinion on this?
   - Did the whole staff take on board action learning following QTAL? Explain.
   - Has there been any evidence of action learning at your school since QTAL?
Quality Teaching framework

5. An underpinning of QTAL was to introduce and implement the QT framework into NSW schools. Let’s jointly establish what we understand by the Quality Teaching (QT) framework:
   - How did you learn about the QT framework?
   - Do you feel the QT framework is important? Please comment.
   - How was the QT framework used in your QTAL project?
   - Describe any whole staff professional learning related to the QT framework at your school.
   - Is QT still on the professional learning agenda at your school? Can you share any evidence that supports this view?
   - How do you address the QT framework in your classroom? Has this changed over time?

School Learning Culture

6. How does professional learning work at this school?
   - What sort of professional learning activities do you find most useful?
   - What do you understand by the term ‘school learning culture’?
   - What three words would you use to best describe the school learning culture at your school?
   - Do you feel QTAL was taken up by the whole staff? Explain.
   - How has QTAL impacted on the professional learning culture of your school?
   - Do you think learning from QTAL has been embedded in the school learning culture? Explain.
   - Do you have anything else you would like to add about any aspect of what we’ve discussed?

Thank you for your time.
Appendix 8: University Ethics Approval Letter

HUMAN RESEARCH ETHICS COMMITTEE

Notification of Expedited Approval

To Chief Investigator or Project Supervisor: Professor Jennifer Gore
Cc Co-investigators / Research Doctor Nicole Mockler
Students: Ms Lorraine Beveridge
Re Protocol: A study of the impact and sustainability of collaborative professional learning in schools.
Date: 27-Apr-2012
Reference No: H-2012-0055
Date of Initial Approval: 24-Apr-2012

Thank you for your Response to Conditional Approval submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under Expedited review by the Chair/Deputy Chair.

I am pleased to advise that the decision on your submission is Approved effective 24-Apr-2012.

For noting:

1. Participant Information Statement (Case Studies)
   a. Please include the contact details of support organisations on the Participant Information Statement itself, rather than offering to provide such information 'if required'. By providing this information in advance, participants will be able to contact an appropriate counselling service, without necessarily having to raise the matter directly with the researcher.
   b. Please improve the readability of the document by including relevant sub-headings on the final page (e.g. What are the risks and benefits of participating? How will the collected data be used? 'What do you need to do to participate?' etc)

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of
annual progress reports. If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.

The full Committee will be asked to ratify this decision at its next scheduled meeting. A formal Certificate of Approval will be available upon request. Your approval number is H-2012-0055.

If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants. You may then proceed with the research.

Conditions of Approval

This approval has been granted subject to you complying with the requirements for Monitoring of Progress, Reporting of Adverse Events, and Variations to the Approved Protocol as detailed below.

PLEASE NOTE:
In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

• Monitoring of Progress

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

• Reporting of Adverse Events

1. It is the responsibility of the person first named on this Approval Advice to report adverse events.
2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.
3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form within 72 hours of the occurrence of the event or the investigator receiving advice of the event.
4. Serious adverse events are defined as:
   o Causing death, life threatening or serious disability.
   o Causing or prolonging hospitalisation.
   o Overdoses, cancers, congenital abnormalities, tissue damage, whether or not
they are judged to be caused by the investigational agent or procedure.

- Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
- Any other event which might affect the continued ethical acceptability of the project.

5. Reports of adverse events must include:
   - Participant's study identification number;
   - date of birth;
   - date of entry into the study;
   - treatment arm (if applicable);
   - date of event;
   - details of event;
   - the investigator's opinion as to whether the event is related to the research procedures; and
   - action taken in response to the event.

6. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

- Variations to approved protocol

If you wish to change, or deviate from, the approved protocol, you will need to submit an Application for Variation to Approved Human Research. Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. Variations must be approved by the (HREC) before they are implemented except when registering an approval of a variation from an external HREC which has been designated the lead HREC, in which case you may proceed as soon as you receive an acknowledgement of your Registration.

Linkage of ethics approval to a new Grant

HREC approvals cannot be assigned to a new grant or award (ie those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Professor Allyson Holbrook
Chair, Human Research Ethics Committee
Progress Report Acknowledgement

To Chief Investigator or Project Supervisor:  Professor Jennifer Gore
Cc Co-investigators / Research Students:  Doctor Nicole Mockler
                                                Ms Lorraine Beveridge
Re Protocol:  A study of the impact and sustainability of collaborative professional learning in schools.
Date:  25-Mar-2014
Reference No:  H-2012-0055

Thank you for submitting your Annual Progress Report to the Human Research Ethics Committee (HREC) in relation to the above protocol.

Your report has been accepted and your HREC approval for the above research remains valid. Continuation of this approval will again be subject to the provision of an annual progress report by the due date approximately one year from now.

The timely submission of your report is greatly appreciated.

Human Research Ethics Administration

Research Services
Research Integrity Unit
The Chancellery
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 17894
F +61 2 492 17164
Human-Ethics@newcastle.edu.au

Appendix 9: SERAP Ethics Approval Letter

Ms Lorraine Beveridge
21 Hunter Street
EAST MAITLAND NSW 2323

BOX/024271
DOC14/165741
SERAP 2012030

Dear Ms Beveridge,

I refer to your application for extension of your research project "The impact and sustainability of inquiry-based teacher professional learning" in NSW government schools. I am pleased to inform you that your application has been approved.

This approval will remain valid until 25 March 2015.

No researchers or research assistants have been screened to interact with or observe children for the purposes of this research.

When your study is completed please email your report to serap@det.nsw.edu.au.

Yours sincerely,

Dr Robert Stevens
Manager, Quality Assurance/Research
4 April 2014

Policy, Planning and Reporting Directorate
NSW Department of Education and Communities
Level 1, 1 Oxford Street, Darlinghurst NSW 2010 – Locked Bag 53, Darlinghurst NSW 1300
Telephone: 02 9244 3300 – Email: serap@det.nsw.edu.au
## Appendix 10: Document study for Widdon Public School

<table>
<thead>
<tr>
<th>Doc no.</th>
<th>Item</th>
<th>Description</th>
<th>Source</th>
<th>Relevance to study</th>
</tr>
</thead>
</table>
| 1       | Teacher handout | 1 page | QTAL teacher | Evidence of CTJ to ensure all teachers collect pre-test data  
Statement written collaboratively by teachers |
| 2       | Student Voice Research article | Research article – PPT – “What is student voice?” | QTAL teacher | Using student voice to ensure students have regular input / feedback  
Links to QT model  
Student feedback in writing. This has directly evolved from QTAL |
| 3       | Funding application | Details of project, application | QTAL teacher | Original application listing project focus, timeline, action plan |
| 4       | Tuning protocol | 4-page document provided by QT consultant | QTAL training conference | Training for collaborative professional learning for QTAL teams |
| 5       | AGQTP Timeline 2008 | 4-page handout | QTAL teacher | Part of QTAL accountability process. Funding had to be accounted for on an ongoing basis as part of the funding accountability related to federal funds |
| 6       | Marking key | 1-page table | QTAL teacher | Marking key for Stage 1 Writing. Writing was the focus of QTAL. This key was produced before the project and used as a resource for teachers in the project |
| 7       | Documents / emails | Revised action learning plan  
Team information handout | QTAL teacher | Explanation of project by team used to share at Sharing Conference  
AGQTP web-board information shows how a continued focus of QTAL was ICT, and increasingly in the later phases of project |
<table>
<thead>
<tr>
<th>Doc no.</th>
<th>Item</th>
<th>Description</th>
<th>Source</th>
<th>Relevance to study</th>
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<tbody>
<tr>
<td>8</td>
<td>Excerpts of literacy texts utilised by QTAL team</td>
<td>Literacy on Track - developing writing rubrics. Book excerpt</td>
<td>QTAL teacher</td>
<td>Developing rubrics for narrative writing - to support the development of school writing rubrics</td>
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<tr>
<td>9</td>
<td>Teacher handout</td>
<td>QT framework and My Teaching</td>
<td>QTAL teacher</td>
<td>Worksheet for teachers to articulate how they intend increasing QT elements in their teaching</td>
</tr>
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<td>10</td>
<td>Textbook</td>
<td>Mosaic of Thought by E. Keen &amp; S. Zimmerman</td>
<td>QTAL teacher</td>
<td>Comprehension text book used for collaborative professional learning throughout 2012</td>
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<td>11</td>
<td>ALEA advertisement</td>
<td>Meeting advert for Widdon PS at local ALEA meeting</td>
<td>Academic Partner / Literacy mentor</td>
<td>Flyer for meeting. Widdon PS teachers sharing their journey improving their Writing outcomes through collaborative professional learning</td>
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<td>12</td>
<td>Spelling Program</td>
<td>Words Widdon’s Way School is not willing to share this program Homework spelling checklist Widdon Proof - reading symbols, built on for each stage</td>
<td>Buddy Teacher *Modified by: Words their Way Word Study for Phonics, Vocabulary and spelling Bear &amp; Invernizzi, Templeton, Johnson, Pearson, 2012</td>
<td>Modified Spelling Program Whole-school approach for teaching spelling What good spellers do Read and Spell Strategy English K-6 scope and sequence Websites and resources Ref: The Word Spy by Angela Dubosarsky (shortlisted 2009) <a href="http://www.spellingcity.com">www.spellingcity.com</a> <a href="http://www.popcap.com/games/free/bookworm">www.popcap.com/games/free/bookworm</a> When two vowels go walking- Youtube Middle level word sort Pinterest site</td>
</tr>
<tr>
<td>13</td>
<td>Information Report Writing Assessment Guide</td>
<td>Modified version of NAPLAN Information Report Writing Booklet</td>
<td>Buddy Teacher - used by all teachers when assessing information reports</td>
<td>Writing was the focus of QTAL project</td>
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<tr>
<td>Doc no.</td>
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<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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<tr>
<td>14</td>
<td>Data meeting</td>
<td>Audio clip of meeting</td>
<td>Buddy teacher and QTAL Teacher</td>
<td>Teachers discussing student work samples. Rich tasks using a range of technology devices</td>
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<td>Data meeting</td>
<td>Video clip of data meeting</td>
<td>Buddy teacher and QTAL Teacher</td>
<td>Teacher sharing - K-6 perspective&lt;br&gt;Stage 3 teacher explaining her data tracking to S1, who reciprocated by explaining the Writing data tracking of clusters of students in her class</td>
</tr>
<tr>
<td>16</td>
<td>Bourke Reading Interviews</td>
<td>Students interviewed randomly to determine their perceptions of reading and writing</td>
<td>QTAL teacher</td>
<td>Valuing teacher voice. Teacher feedback from students to direct teaching. Links include valuing student feedback</td>
</tr>
<tr>
<td>17</td>
<td>Reading longitudinal staff feedback survey</td>
<td>1-page sheet</td>
<td>QTAL teacher</td>
<td>Teachers reflect on their teaching of reading from a personal perspective&lt;br&gt;Links to syllabus - teacher reflection</td>
</tr>
<tr>
<td>18</td>
<td>Reading at Widdon PS Draft</td>
<td>42 pages</td>
<td>Professional learning meeting</td>
<td>Whole school approach to reading&lt;br&gt;Beliefs in front&lt;br&gt;Daily reading hour&lt;br&gt;Explicit articulation of literacy block.&lt;br&gt;Teachers needed to collaboratively complete reading school policy</td>
</tr>
<tr>
<td>19</td>
<td>Notes from discussion with Literacy coach</td>
<td>Written notes&lt;br&gt;Litecy mentor refused permission to record meeting</td>
<td>Notes of discussion with Literacy Mentor</td>
<td>Literacy coach did not use the QT framework. She used “In Teachers Hands project” rather than QT because it has an additional category of respect</td>
</tr>
<tr>
<td>20</td>
<td>Soft place to fall picture</td>
<td>flickr image cc</td>
<td>Analogy of school culture shared by Principal</td>
<td>Teachers at Widdon PS encouraged to share mistakes and see them as valuable learning experiences</td>
</tr>
<tr>
<td>21</td>
<td>Flyer - ALEA</td>
<td>Flyer for meeting</td>
<td>Literacy Mentor</td>
<td>Widdon PS teachers presented at this meeting. They talked about their journey providing writing feedback to their students. There were over 100 local area teachers at this meeting. All Widdon PS teachers attended, although not all teachers presented</td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tr>
<tr>
<td>22</td>
<td>JPEG Action learning model</td>
<td>JPEG of model used during presentation at ALEA</td>
<td>QTAL team</td>
<td>An action learning model shared by the literacy coach, sourced from the academic partner's doctoral research.</td>
</tr>
<tr>
<td>23</td>
<td>Glogster</td>
<td>JPEG of computer screen. Glogster - visual network player glog=graphic blog &amp; creativity</td>
<td>Provided by school QTAL team leader, Natalie</td>
<td>An ICT tool used by students in language arts to create video clips of their writing and stories, to share online. High student engagement.</td>
</tr>
<tr>
<td>24</td>
<td>Champions Read</td>
<td>Poster/ JPEG</td>
<td>on display in school</td>
<td>Poster fostering a love of reading. Evidence of school culture</td>
</tr>
<tr>
<td>25</td>
<td>Desert Island JPEG</td>
<td>Image flickr</td>
<td>Provided by QTAL team leader.</td>
<td>“Before QTAL we were all separate little islands. We all did our own thing in isolation. Then, in the project we started to collaborate, share practice and discuss our strengths and failures in the classroom. We have gone from strength to strength ever since”</td>
</tr>
<tr>
<td>26</td>
<td>Handout ALEA</td>
<td>PPT file</td>
<td>handout distributed at meeting</td>
<td>Overview of how writing is taught at Widdon PS and how the process evolved. Important visuals included of data tracker, and AL cycle</td>
</tr>
<tr>
<td>27</td>
<td>Memo from discussion with Literacy Mentor.</td>
<td>Memo, NVivo</td>
<td>Written by researcher Reflection</td>
<td>Literacy Mentor shared how she came to be in the school, her involvement and perceptions of the school including school culture, leadership</td>
</tr>
<tr>
<td>28</td>
<td>Noticeboard</td>
<td>JPEG</td>
<td>Taken by researcher</td>
<td>Emphasis on communication, literacy, importance of home / school partnership</td>
</tr>
<tr>
<td>29</td>
<td>Peer feedback</td>
<td>JPEG</td>
<td>Taken by researcher</td>
<td>Example of peer feedback provided during lesson observation of QTAL team leader</td>
</tr>
<tr>
<td>30</td>
<td>We love reading</td>
<td>Poster</td>
<td>On display in school</td>
<td>Focus on school targets</td>
</tr>
<tr>
<td>31</td>
<td>Welcome to Widdon PS</td>
<td>Sign in school</td>
<td>On display in school</td>
<td>Shows physical environs of school</td>
</tr>
<tr>
<td>32</td>
<td>School playground</td>
<td>JPEG</td>
<td>Taken by researcher</td>
<td>Small school environs. Inclusive class setting</td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tr>
<tr>
<td>33</td>
<td>Email</td>
<td>Email copy</td>
<td>Conversation between researcher and Literacy Mentor</td>
<td>Literacy mentor outlined her role in the school. She agreed to meet with me for 30 minutes but did not wish to be recorded or formally cited in the research.</td>
</tr>
<tr>
<td>34</td>
<td>Writing folders</td>
<td>JPEG</td>
<td>Provided by QTAL team leader.</td>
<td>Natalie devised a means of sticking two folders together with superglue so students can file and use the modified folders as a writing tool. Creativity is valued at Widdon Public School.</td>
</tr>
<tr>
<td>35</td>
<td>Writing checklist chart</td>
<td>JPEG</td>
<td>Provided by QTAL team leader</td>
<td>Data tracker used to track individual student progress, and to discuss progress with Principal at fortnightly data meetings.</td>
</tr>
</tbody>
</table>
### Appendix II: Document study for Cesta Public School

<table>
<thead>
<tr>
<th>Doc no.</th>
<th>Item</th>
<th>Description</th>
<th>Source</th>
<th>Relevance to study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2012 unit proforma</td>
<td>Proforma put forward so staff can discuss a common programming format</td>
<td>Kinder teachers 2012, Cesta PS</td>
<td>Sustainability of QT. Need to explicitly plan for QT in programming. Identified need by staff</td>
</tr>
<tr>
<td>3</td>
<td>Cesta Public School Word Web</td>
<td>Diagram, NVivo</td>
<td>Interview data / NVivo</td>
<td>Cesta PS NVivo Word query tag cloud. Most common words in interviews “learning, school, teachers, think”</td>
</tr>
<tr>
<td>4</td>
<td>Memo Cesta PS Visit 23-8-12</td>
<td>Memo, NVivo</td>
<td>Researcher’s field notes</td>
<td>Interest of particular staff in research. Organising a contact visit at the school for conducting interviews</td>
</tr>
<tr>
<td>5</td>
<td>Interview transcripts by Academic Partner</td>
<td>MS Word</td>
<td>Provided by Academic Partner</td>
<td>Evaluative interviews by Academic Partner during QTAL. Team members described their dispositions towards the project</td>
</tr>
<tr>
<td>6</td>
<td>PBL charts</td>
<td>Posters (3) on display in school</td>
<td>Photographed by researcher</td>
<td>Shows an example of ongoing action learning in the school following QTAL</td>
</tr>
<tr>
<td>7</td>
<td>Role statement of Academic Partner</td>
<td>MS Word</td>
<td>Provided by Academic Partner</td>
<td>Interactions, visits, planning meetings and agendas of AP during visits to school. Shows the frequency and agendas of meetings</td>
</tr>
<tr>
<td>8</td>
<td>Issues for consideration</td>
<td>MS Word</td>
<td>Provided by Academic Partner</td>
<td>A summary of issues identified by QTAL team during AP interviews early in the project (Sept. 2008)</td>
</tr>
<tr>
<td>9</td>
<td>KS Integrated Unit of work on built environments</td>
<td>MS Word</td>
<td>Provided by Kinder teacher</td>
<td>Example of one stage attempting to integrate QT framework into their programming and lesson planning, with the intent of sharing with the whole staff at Cesta PS</td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tr>
<tr>
<td>10</td>
<td>Memorandum of Understanding</td>
<td>MS Word</td>
<td>Provided by Academic Partner</td>
<td>Work plan of Academic Partner at Cesta PS showing project plan from Academic Partner’s perspective</td>
</tr>
<tr>
<td>11</td>
<td>Emails with Principal</td>
<td>Email</td>
<td>Provided by researcher</td>
<td>Two queries to Principal: (1) To determine location of school visits by the QTAL team, and (2) to determine the funding source for PBL, a PL initiative following QTAL</td>
</tr>
<tr>
<td>12</td>
<td>Photos (13 separate images)</td>
<td>JPEGs</td>
<td>Provided by researcher with permission of the school</td>
<td>Evidence of school culture, school motto, practices in the school, programs that the school is currently involved in</td>
</tr>
<tr>
<td>13</td>
<td>Scope and Sequence – Term 4, 2012</td>
<td>MS Word</td>
<td>Provided by QTAL team member</td>
<td>Evidence that the content of QTAL (ICT Scope and sequence written during QTAL) has been sustained in the school</td>
</tr>
</tbody>
</table>
## Appendix 12: Document study for Turley High School

<table>
<thead>
<tr>
<th>Doc no.</th>
<th>Item</th>
<th>Description</th>
<th>Source</th>
<th>Relevance to study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>“Strategies for Learning” - Booklet</td>
<td>20-page booklet shared with staff to assist them in implementing strategies in IQ domain of QT framework</td>
<td>George, from a seminar he attended, “Eric Fragenheim” Aug, 2008</td>
<td>Evidence of QT-HOT Collaborative teaching strategies Sharing teaching experiences with staff</td>
</tr>
<tr>
<td>2</td>
<td>QTAL Reflection and Sharing Journal Booklet of Classroom Practice, personal reflections</td>
<td>George, QTAL team member</td>
<td>Teachers encouraged to rank their lessons / strengths / weaknesses and share findings with colleagues</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>QTAL Reflection and Sharing Journal 2 Booklet of Classroom Practice personal reflections (partially completed)</td>
<td>George, QTAL team member</td>
<td>Teacher reflected how he could have strengthened his lesson - to address reluctant writers - sentence starters, TXXXC, writing</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Unit of work - Geography “Australia and its regional and global contexts” student workbook</td>
<td>Vince, teacher</td>
<td>Shows evidence that QT elements are embedded in units taught across the school</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Unit of work - English “Websites” an integrated English based unit</td>
<td>Kylie, New-scheme teacher</td>
<td>Embedded QT elements. ICT focus. Rich assessment task - ‘create own website’. Shows QT is not just in HSIE but is embedded across the school</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Information booklet for students, workbook “Case Study: Gough Whitlam 1972–1975” Teaching resource</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>Use of TXXXC strategy to support student writing across the school</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Student Worksheet TXXXC “Changing rights and Freedoms for Women” Teaching resource</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>Writing sample - Yr 8 student using TXXXC, plus technical word bank - evidence of explicit teaching of metalanguage</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>AGQTP Student Survey Survey administered to students prior to beginning QTAL, to utilise student voice in planning of project</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>Collated student responses. Used student voice to determine direction and content of QTAL. Pre and post test data graphically represented showing student growth in focus areas of project</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Completed Student workbook ‘Changing Technology’</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>Strategies learned during QTAL to support QT incl. Mind Mapping, Timelines, TXXXC, Internet Searches</td>
<td></td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tr>
<tr>
<td>10</td>
<td>TXXXC</td>
<td>What is it? Teacher handout and copy of professional learning PPT describing how to teach the TXXXC strategy</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>TXXXC across the school. Started being used with QTAL and this is evidence of whole school adoption of the teaching strategy</td>
</tr>
<tr>
<td>11</td>
<td>Student unit contract and support documents</td>
<td>“Australia and Vietnam - a black and white war” Checklist, explicit quality criteria, mindmap TXXXC, student marking criteria, student writing samples (2)</td>
<td>Kellie, QTAL team member</td>
<td>A strategy that began with QTAL has evolved and been adopted across the school. Evidence of sustainability</td>
</tr>
<tr>
<td>12</td>
<td>1-page goals for QTAL 2009</td>
<td>Mid project goal setting and reflection statement from QTAL project group</td>
<td>Bella, QTAL team leader</td>
<td>Planning for improving national testing results through explicit teaching Evidence of increased HOT-addition of Why? Why? Why? Qualities of an excellent teacher Qualities of a great school Evidence of team goal setting, explicit quality criteria and collaboration</td>
</tr>
<tr>
<td>13</td>
<td>Newspaper article</td>
<td>“QT Matters” Side by Side. Issue 27, August 2009</td>
<td>Bella, Tina Joint QTAL team leaders</td>
<td>Article outlines the initial findings of SIPA study. Reinforces teacher quality as the key to improve student outcomes, 2004–2007</td>
</tr>
<tr>
<td>14</td>
<td>Reflective Team notes - 4 pages</td>
<td>Quizzing Student Achievement - Shifting with the world</td>
<td>Bella, QTAL team leader</td>
<td>Explicit statement of results / strengths / weaknesses / class by class Comparing high/ low achieving students. Targeting QTAL team activities where students need the most help. Explicitly using data to inform teaching</td>
</tr>
<tr>
<td>15</td>
<td>QTAL Application for Funding</td>
<td>Explicit teaching and learning of literacy strategies to enhance growth in all students in School Certificate results in History, Geography, Civics and Citizenship</td>
<td>Tina, QTAL team leader</td>
<td>Project targeted QT elements of deep understanding, substantive communication, connectedness and explicit quality criteria Targeting literacy in a KLA</td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tr>
<tr>
<td>16</td>
<td>My School Website</td>
<td>My School website</td>
<td>Summary of school population. Some writing growth evident in statistics over past 4 years since QTAL.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>School Newsletter Turley Talks 11-10-12</td>
<td>School administration</td>
<td>Focus on school pride. Collective responsibilities emphasis on achievements. Evidence of school culture.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Email from Principal to all staff. Weekly email communication ‘Turley’s Place in the Asian Century’</td>
<td>Bella, QTAL team leader</td>
<td>Asian studies / International Studies link to current political focus. Demonstrates how the school is ahead of the game in many ways. Shows effective communication.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Teaching strategy Lesson Study</td>
<td>Bella, QTAL team leader</td>
<td>A strategy that is still used in the school that originated with QTAL. Collaborative professional learning strategy.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Collaborative teaching strategy plus lesson study handout Collaborative strategy to assess QTAL in the school</td>
<td>Bella, QTAL team leader</td>
<td>Evaluated AGQTP in the school. 3 persons: justifier, questioner, recorder. QTAL activity handout.</td>
<td></td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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<tr>
<td>22</td>
<td>Professional competence lesson observation</td>
<td>Modified lesson observation coding sheets that the head teacher mentor uses with her New Scheme teachers</td>
<td>Dee, Head Teacher Mentor</td>
<td>Shows lesson feedback is still being implemented but really is just the domain of New Scheme teachers and their mentors on a formal basis</td>
</tr>
<tr>
<td>23</td>
<td>QT to support the NSW Professional Teaching Standards</td>
<td>2 booklets</td>
<td>Dell, Head Teacher Mentor</td>
<td>Links professional teaching standards and the QT framework</td>
</tr>
</tbody>
</table>
## Appendix 13: Document study for Collum High School

<table>
<thead>
<tr>
<th>Doc no.</th>
<th>Item</th>
<th>Description</th>
<th>Source</th>
<th>Relevance to study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning document, “Cluster strategies for building secondary-primary relationships”</td>
<td>Activities and strategies for Stage 3 and 4 teachers to use as a basis for sharing and collaboration</td>
<td>Academic partner</td>
<td>Evidence of collaboration between secondary and partner primary schools, Supportive conditions - evidence of time for teacher to plan, build supportive relationships</td>
</tr>
<tr>
<td>2</td>
<td>Cluster Executive meeting minutes</td>
<td>Meeting agenda containing: Forming executive networks to plan and implement professional learning activities across the cluster</td>
<td>Retired Principal - Collum High School</td>
<td>Evidence and examples of cluster professional learning planning during QTAL</td>
</tr>
<tr>
<td>3</td>
<td>Summation and reflection document</td>
<td>Contains: - Preamble - Linkages areas - Achievements - Joint submissions</td>
<td>Partner primary school Principal</td>
<td>Evidence that the cluster Principals group has been sustained since QTAL ($32,500 AGQTP grant for QTAL middle school Maths, Science, HSIE)</td>
</tr>
<tr>
<td>4</td>
<td>Formation of regional learning community</td>
<td>Statement outlining the formation of a regional learning community, into which the Collum Learning Community (CLC) links</td>
<td>Partner primary school Principal</td>
<td>4 learning groups established of which Collum Learning Community is one, Further evidence of sustainability</td>
</tr>
<tr>
<td>5</td>
<td>Planning document</td>
<td>List of additional funding sources for each partner school to aid in linking schools in the cluster</td>
<td>Partner primary school Principal</td>
<td>Shows level of openness and honesty between schools within the CLC, Evidence of professional learning community</td>
</tr>
<tr>
<td>6</td>
<td>CLC Planning Conference Agenda 15-2-2008</td>
<td>Agenda of the 2-day conference for all CLC schools. Outline of professional learning programs implemented across schools in cluster</td>
<td>Academic Partner</td>
<td>Evidence of the focus on student data in PLC during QTAL</td>
</tr>
<tr>
<td>Doc no.</td>
<td>Item</td>
<td>Description</td>
<td>Source</td>
<td>Relevance to study</td>
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</tbody>
</table>
| 7      | Progress report Phase 1 QTAL - Oct, 2006 | Progress report on the QTAL project six months after it had begun, to aid planning for Phase 2 of the project. Measuring effectiveness and impact of QTAL | Academic partner            | Identified issues re QTAL end Phase 1:  
- More focused meeting times, more frequently  
- Need to record activities as explicit evidence of teacher learning |
| 8      | Email                                     | Email correspondence with retired partner Primary Principal, Neil                               | Self / retired partner Principal | Outline of research and data collection with questions related to the study. Neil has corporate knowledge of the CLC during QTAL |
| 9      | Source Ideas professional development     | ‘From school improvement to sustained capacity’                                                 | Education Queensland        | This program was an activity of the CLC during QTAL and fostered distributed leadership in schools to build professional trust and capacity within the professional learning community |
|        | From School Improvement to Sustained Capacity – A Parallel Leadership Model               | School Leaders engaged in a six-step process to achieve this outcome, in the ‘SOURCE’ model   |                             |                                                                                                          |
| 10     | Email                                     | Correspondence between self and Learning Support Officer Collum High School, answering researcher’s follow up questions to her interview | Learning Support Officer Collum High School | Explanation of specialist school title and what it means for the learning opportunities of Collum High School students  
This initiative was not sustained |
| 11     | Email                                     | Correspondence between self and Head Teacher, Collum High School answering researcher’s follow up questions to his interview | HT Collum High School       | Professional learning focus in the school is currently ICT  
Explanation of how the tied grant is allocated and PL models currently used in the school. Flexible use of professional learning funds that is currently undertaken in the school |
<p>| 12     | Academic conference paper EERA (2008)     | From Teaching to Learning - Towards Collective Responsibility for Student Learning…             | Academic Partner            | The formation of the CLC professional learning community, how it operations and implications for its members from an insider’s perspective |</p>
<table>
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<tr>
<th>Doc no.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Document</td>
<td>Collum High School Professional Leadership Plan</td>
<td>Deputy Principal, Collum High School</td>
<td>School based means of monitoring individual professional learning opportunities and ensuring they align with goals of the school Evidence of coherence of professional learning</td>
</tr>
</tbody>
</table>