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Coaching teachers:

Professional Learning Leaders exploration of practice and identity through collaborative inquiry.

A thesis
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ABSTRACT

This research is a study of the development of coaching practice and sense of identity of three middle leaders in a primary school who are responsible for leading professional learning. It is of interest because significant responsibility for leading teacher professional learning has been handed to middle leaders since the devolution of management to schools. However little is known about how this leadership of learning is implemented and how leaders might develop for this responsibility. Collaborative inquiry is explored as an approach where middle leaders have space to learn theoretical frameworks, practise coaching skills in an authentic situation and examine the impact. The purpose is to stimulate reflection and guide systematic inquiry into coaching practice for action and change.

The ethnographic methodology was deliberately used to allow the research participants to make sense of their world in which they act as coaches. Through linking action and research, ideas about coaching teachers to be skilled critical inquirers were tried as a means of knowledge creation (Cohen, Manion, & Morrison, 2003). The use of participatory action research ensured that the Professional Learning Leaders (PLLs) could work collaboratively to understand the situation supported by myself as a participant researcher. Within five convergent group interviews the PLLs engaged in dialogue and reflection about their practice and the observed impacts of coaching three teachers in a group to be skilled critical inquirers of their classroom practice. Professional literature was used to support their inquiry.

The findings confirm that facilitation of reflective dialogue is difficult because it involves challenging the beliefs of others while maintaining an environment of trust. The view that the most effective professional development is collaborative, situated and participatory is also confirmed. Although confirmations are not new information, the learning and involvement in the process through a supported collaborative inquiry approach was a new and transformational experience for the participants where knowledge was created and people changed.

The findings reveal that improved coaching practice and identity learning occurred interdependently. Being a coach in the dual position of middle leader and teacher was discovered to cause conflicts. Collaborative inquiry into the causes and impacts of these conflicts helped to clarify the role and responsibility of coaching.

The findings suggest that the roles and practice of senior and middle leaders in relation to enhancing teaching and learning in the school must be examined closely. School leaders need to consider how they can structure and support collaborative inquiry for professional learning and building leadership capacity. Drawing on the discoveries and understandings of coaching practice and collaborative inquiry, this research presents a diagram that illustrates the significance of collaboration in the process of improving coaching practice and identity learning.

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I wish to acknowledge the support of my Principal who encouraged me both personally and professionally. She also built the capacity of other teachers in the school to take on additional responsibilities which enabled me to focus on this research. This has benefitted many people professionally.

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1 CHAPTER ONE: INTRODUCTION

1.1 Background

This study delves into the potential of distributed leadership practice, coaching and collaborative inquiry for the purpose of improving teaching and learning.

In the New Zealand education system, teachers and leaders in schools are highly responsible for student learning and achievement. This is evident in government initiatives such as the registered teacher criteria (New Zealand Teachers Council (NZTC), 2010), New Zealand Curriculum standards and Nga Whanaketanga Rumaki Maori (Ministry of Education (MOE), 2010).

Teacher use of critical inquiry, based on professional literature, with members of their learning community to refine their practice and raise student achievement is the twelfth criteria of quality teaching to be met by fully registered New Zealand teachers (NZTC, 2010). Teachers are expected to be effective pedagogical practitioners and skilled critical inquirers for improved teaching practice and student learning.

Since any teaching strategy works differently in different contexts for different students, effective pedagogy requires that teachers inquire into the impact of their teaching on their students. (Ministry of Education, 2007. p. 35)

External evaluations have shown that teachers need a great deal more assistance in developing the skills to collect, interpret and use evidence about the link between their teaching and the learning of their students (Education Review Office, 2009; Robinson, Hohepa, & Lloyd, 2009). There is a danger that *teaching as inquiry* (MOE, 2007) can become data driven practice of a technical nature which demotivates teachers, because the social-cultural factors of a teaching-learning environment are ignored (Biesta, 2007; Hargreaves, 2009) Bascia and Hargreaves (2000) describe four aspects of teachers' work that need attention for educational change to be successful: technical, intellectual, socio-emotional and socio-political.

They claim that more recent large-scale reforms have emphasised the technical aspects and not taken account of the more complex aspects of teachers' work. Others agree that short term, quick fix programmes or interventions impact on surface changes in action, where beliefs are not interrogated so the status quo is perpetuated (Short & Burke, 1996; West-Burnham & Coates, 2005). This study examines how teachers and leaders can explore and make meaning of their practice through collaborative inquiry with potential for action and change.

Teachers need support to inquire into their practice, therefore school leaders need to consider how they can provide this opportunity if they want teaching and learning to improve. Robinson (2003) claims that coaching teachers in action inquiry in relation to their classroom context can motivate teachers and have a deeper and more sustainable impact on their beliefs and practice. The role of coaching varies according to the context, situation and purpose of the activity. Coaching teachers within a collaborative inquiry approach requires leadership practice that differs from the traditional individual leader model.

Distributed leadership is difficult to define and there is limited research on how it is enacted. It can generally be agreed that to distribute leadership according to any purpose there needs to be people who can practice in their leadership roles. In models of distributed leadership, particularly in New Zealand schools, responsibility for teacher professional learning is being handed to middle leaders in schools while senior leaders are responsible for building leadership capacity. However it cannot be assumed that school professional learning leaders have knowledge and understanding for this responsibility. A need to build leadership capacity for leading collaborative professional learning is implied. Middle leaders need time, space, support and challenge to develop in their roles. Collaborative inquiry is explored as an approach to building leadership capacity in coaching practice and for supporting teaching practice inquiry.

1.2 Researcher Background

At the time of this research project I was on study leave from my position as Deputy Principal of a primary school, which I have held for three years. While completing the research I was appointed to my first principal position for the coming new year. Prior to this I was employed for six years as an advisor in the Assess to Learn teacher professional development project by School Support Services at the University of Waikato, Hamilton, New Zealand. These nine years had a significant impact on my learning and development and have contributed to my positive disposition towards study and learning. I completed a post graduate degree in education during this time.

As a past facilitator of professional development and learning in primary and secondary schools and a current Deputy Principal in a primary school, I am passionate about providing learning opportunities for teachers and school leaders that are relevant and challenging. I contend that school leaders are responsible for ensuring that their staff can meet the responsibility to raise student achievement. I believe that this requires distributing leadership for leadership development. This research project provides an opportunity for three professional learning leaders to explore their coaching practice and within this process to coach several teachers to inquire into their teaching practice.

I have completed Master of Education papers including educational leadership and a paper in coaching and mentoring. These papers have enabled me to engage in the process of coaching others and prompted me to build the capacity of others to be leaders and coaches. My experiences and learning in education along with a sense of advocacy and support for teachers and school leaders have led to the development of my research question;

What did three middle leaders do to coach a group of teachers in the context of teaching practice inquiry and what do they learn about themselves as coaches through collaborative inquiry?

1.3 Research Aim

The research aim was to study the development of coaching practice of professional learning leaders through collaborative inquiry. It was driven by a quest to understand how to support teachers in the development of skills, knowledge and dispositions of a critical inquirer.

This research is aimed at the improvement of leadership and teaching practice for student learning and achievement. It could be of interest to policy-makers in light of the current implementation of New Zealand Curriculum Standards. Student learning outcomes are a major government focus and it is important for school leaders to think critically about how government initiatives for this purpose can benefit the learning of both teachers and students. This research may open up opportunities for further study into whether teachers who continuously inquire into their practice are more confident and competent in making overall teacher judgements about students learning progress and achievement. It will contribute to the world of educational research where knowledge continues to be advanced with each research project acting as another instrument of theory. The discoveries in this study will supplement research in the field of school leadership practice of coaching teachers for professional learning.

1.4 The Research Design

Within this action research the professional learning leaders (PLLs) inquire into their coaching practice through cycles of planning, acting and reviewing. They facilitate meetings with a small group of teachers to support the development of teaching practice inquiry. Review and reflection takes place in group interviews conducted by myself as the researcher. In the role of researcher/coach reflective interviewing strategies are used to facilitate reflective dialogue in five sessions held fortnightly. As the lead researcher, engaged in reading and reviewing other studies I share theories and literature with the PLLs to facilitate meaning making.

1.5 The Research Report

Chapter one sets out the research aim and some background to the three main contributing topics; distributed leadership, coaching and collaborative inquiry and the theme of identity which emerges in the research findings. Included in this chapter is an overview of the research design and personal background of the researcher.

In chapter two some key literature in areas of distributed leadership, coaching and collaborative inquiry is explored. A view is presented that continuous supported learning for professional learning leaders who are coaching teachers is crucial because of the challenges and complexities of coaching practice and associated identity learning.

In chapter three the research design is explained and expressed as a qualitative approach, with an action research methodology.

The findings from the data analysis and collation are reported in chapter four under three main headings; coaching practice, identity learning and collaborative inquiry.

Chapter five answers the research question. Key findings and literature from chapter two are linked in a discussion to show the significance of and support for these findings. Limitations of this study and recommendations for future research are suggested.

CHAPTER TWO: LITERATURE REVIEW.

In this literature review, attention is drawn to studies, predominantly from New Zealand, Australia, Great Britain and Unites States of America, that pertain to distributed leadership, coaching, collaborative inquiry and identity. Literature on teaching practice inquiry as the coaching context is also reviewed. In section one, literature on distributed leadership and middle leadership is examined. Socio-cultural activity theory (Engestrom, 1999) is presented as a framework for exploring leadership development and capacity building. Section two reviews literature on coaching, encompassing facilitation of dialogue and the significance of an environment of trust. In section three, literature on collaborative inquiry and teaching practice inquiry is reviewed. Ideas from literature, about identity as a theme which emerged in this study, are explored in section four.

2.1 Distributed Leadership

In the literature sourced, it is acknowledged that there is little evidence of research into the enactment and impact of leadership development for distributed leadership practice (Cardno, 2005; Fitzgerald & Gunter, 2006; Robertson, 2008; Spillane, Halverson, & Diamond, 2004). This implies a void of research into the practice of those involved in developing leadership capacity.

New Zealand schools have traditionally been led by an individual and organised as hierarchies. However in the 21st century the school environment is becoming more complex, uncertain and subject to rapid change. In this era one-person leadership cannot be relied on if schools are to improve and sustain improvement (Robertson, 2009; Spillane et al., 2004; Storey, 2004; Williams, 2009). Leadership that is focused on collaboration of a leadership team is needed rather than a solo hero model (Hallinger, 2003; Hartley, 2010; Storey, 2004). Spillane et al. (2004) define leadership as "activities engaged in by leaders, in interaction with others in particular contexts around specific tasks" (p.5) and claim that

sustained focused inquiry into leadership practice of a distributed nature is necessary. This description suggests that leadership practice is collaborative. While the potential for distributing leadership in collaborative communities is acknowledged in the literature, there is a dearth of evidence that shows how this leadership practice is experienced, enacted and developed (Fitzgerald & Gunter, 2006; Lambert, 2003; Williams, 2009).

The concept of distributed leadership is difficult to define and becoming more so as models are adapted and theories built upon. The literature presents two reasons for developing distributed leadership: continuous school transformation (Lambert, 2003; Williams, 2009) and building a collaborative culture (Feldman, 1999). In organisational theory, the structure of distributed leadership is considered to be an organisational concept that leads to change (Bass & Steidlmeier, 1999; Gronn, 2008; Hallinger, 2003; Williams, 2009). It is based on knowledge not position (Frost & Harris, 2003). This view of shared leadership and organisational learning reinforces second order change aimed at increasing the capacity of school members to produce first-order effects on learning, ultimately changing the organization's norms. Some writers have challenged the understanding and practice of distributed leadership because of the complexities of who does the distribution, who receives it and how it is enacted (Fitzgerald & Gunter, 2006; Gronn, 2008; Storey, 2004). This challenge is underpinned by the belief that practice is dualistic premised by a leader-follower idea where leadership is carried out through others rather than with others (Houston, Blankstein, & Cole, 2008). In this view a transformational leader is seen as the goal-setter who inspires others to join in working towards those goals.

However an organisational view of a transformational leader is becoming outmoded as the professional community matures (Andrews & Crowther, 2002; Morgan, 2006). Building leadership capacity is crucial for distributing leadership and many agree that it is developed through collegiality, collaboration, reflection, dialogue, problem exploration, mutual trust and support emanating from structures that promote shared decision making and distributed leadership (Frost & Harris, 2003; Gurr et al., 2006;

Smith, 2001). In this community perspective both positional and informal leaders grow individually and contribute to the development of the school. Leadership capacity and a collaborative culture are built interdependently. Teachers are able to flourish as non-positional leaders and there is a mutual influence between leadership and the growth of professional learning communities where meaning and knowledge is created through focusing on processes of learning and teaching as the core activity (Andrews & Crowther, 2002; Durrant, Dunnill & Clements, 2004; Morgan, 2006). In shared followership (Sergiovanni, 2007) everyone is accountable to enacting and developing the schools beliefs, values and ideas even though roles and responsibilities differ. Lambert (2005) proposes this as broad-based (involving many people) skilful (comprehensive understanding of and demonstrated proficiency) participation in the work of leadership. In this view the school needs skilful teacher leaders who understand the shared vision of the school, the full scope of the work and are able to carry it out. Features of the daily work are reflection, inquiry, conversations and focused action.

In the literature reviewed it is evident that there is significant interest and argument for leadership as a team practice. However, the challenge lies in understanding theories of leadership and change and the enactment and impact of leadership development for distributed leadership. Further practitioner research is needed where links between theory and practice can be made.

2.1.1 Socio-cultural activity theory (SCAT)

Spillane et al (2004) claim that Engestrom (1999) offers a framework which is theoretically grounded in SCAT for inquiring into leadership practice beyond investigating and developing lists of strategies. They claim that surprisingly few authorities on distributed leadership have placed leadership practice and learning within the conceptual framework of socio-cultural activity theory. My literature search which uncovered a small number of articles on research into early childhood teaching and school leadership practice or learning in relation to socio-cultural theory confirms this claim.

In SCAT concepts of leadership are not invested in an individual but in a team/community approach (Day, 2003; Engestrom & Kerosuo, 2007; Gronn, 2008; Gurr et al., 2006) where knowledge is created within and through practice in a continuously changing world (Lee, 2005). This theory is rooted in Vygotsky's (1981) work in human cognition and action. Vygotsky contends that human beings can achieve new learning and objectives. Engestrom and Kerosuo (2007) add that new knowledge is created within organisations focusing on activity for change, growth or development rather than theories. Within roots of cognitive activity theory, SCAT informs a holistic practice which takes into consideration social and cultural factors where people, as subjects, explore how they work with others in a process of transformation for themselves and the group (Lee. 2005; Wilson, 2004). Spillane et al. (2004), agree that distribution of cognition and action is both social and situational occurring through interaction with other people in collaborative efforts to complete a task or reach an objective. Within socio-cultural activity theory the subject and object are aspects of one whole entity. Both are influenced through social and cognitive participation and action (Engestrom & Kerosuo, 2007; Lee, 2005). The notion of leadership learning through collaborative inquiry points to an interest in the value of SCAT.

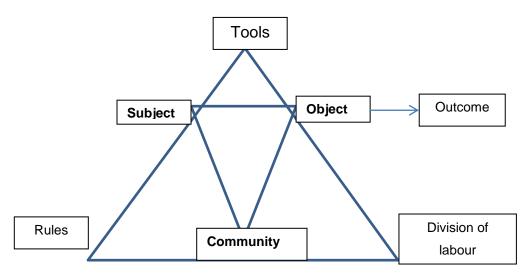


Figure 2.1 Socio—Cultural Activity Systems (Engestrom, 1999)

The Engestrom activity triangle (1999) is a framework for considering Professional Learning Leaders (PLLs) as the 'subject' and the problem space or 'object' is PLLs as coaches. The ultimate aim is to transform the object into an outcome which, in this system, is leadership capacity for a school-wide culture of inquiry for professional learning and teaching. Activity is mediated by cultural tools such as language, behaviour, and social interaction (reflection and dialogue) to raise human consciousness of practice and beliefs. Engestrom (1999) suggests that effectiveness of these tools is governed by the tool, our mental representation and skill in using it. The outer triangle brings into play the importance of organisational structures, rules and staffing resources that support the activity.

2.1.2 Middle Leadership

It is generally agreed that middle leaders who are responsible for leading teacher professional development have a positional status in the middle of the school hierarchy (Blackman, 2010; Cardno, 2005; Stoll, Fink, & Earl, 2003). According to Day (2001) and Robertson (2009), building and distributing leadership provides opportunity for middle leaders to expand their individual and collective capacity and engage in leadership practice.

Titles for leaders in these positions include *middle leaders* (Fitzgerald & Gunter, 2006), co-ordinators (Frost & Harris, 2003), and senior leaders (Cardno, 2005). (Cardno, 2005) differentiates between senior leaders as deputy and assistant principals whose role is to build middle leadership capacity while middle leaders are responsible for improving teaching and student achievement. Because of their positional status they are also referred to as formal leaders. Positional leaders differ from teacher leaders (Frost & Harris, 2003) who are regarded as informal leaders (Stoll et al., 2003). Teacher leaders informally assume leadership responsibilities regardless of their position or status, often facilitating pedagogical action toward whole school success (Hatcher, 2005; Robertson, 2009). Their dreams of making a difference have been kept alive by working in a professional culture (Lambert, 2003). Since the devolution of management to schools in New Zealand and the United Kingdom, significant responsibility for teacher professional learning and school transformation has been handed to middle leaders (Cardno, 2005; Datnow & Castellano, 2001; Simkins, Coldwell, Caillau, Finlayson, & Morgan, 2003). Little is known about how this leadership of learning is

implemented and how teachers might develop in this role (Fitzgerald & Gunter, 2006).

It is generally agreed that development of middle leadership capacity entails linking theory and practice across contexts, encompassing many elements including a combination of skills, knowledge, personal qualities and understanding (Cardno, 2005; ; Kasl & Yorks, 2010; Knuth & Banks, 2006; Mason, 2002). Exploring complementary perspectives in processes of human growth and school leadership (Ackerman & Maslin-Ostrowski, 2004), having practical insight and knowledge of underpinning theory builds deep understanding and ability to adapt practices across contexts (Robinson et al., 2009). This "knack of leadership" is the "heart of knowing how" and "knowing the excellence of what it is doing". The knack of leadership influences autonomous sublime action (Kasl & Yorks, 2010, p.323) in a similar way to Mason's discipline of noticing (2002), meaning to be awake to possibilities, sensitive to the situation, and responsive in appropriate ways.

Structures and mechanisms must support leadership learning in action as well as encompassing ethos (Fullan, 2009; Gurr et al., 2006). A sense of self-esteem is crucial for leaders to feel confident and successful in distributed leadership (Fitzgerald & Gunter, 2006; Frost & Harris, 2003; MacBeath, 2005). Leadership learning and practice hinges on relationships of high trust and respect with colleagues where leaders can discuss their emotional experiences, vulnerabilities and fears beyond a conversational focus on leadership tasks (Ackerman & Maslin-Ostrowski, 2004). Within this safety net of support they learn how to deal with challenges of their developing emotional geographies (Hargreaves, 1998) configuring their emotions based on experiences about themselves and others. It is agreed that middle leaders rely on support and trust in learning their role (Ackerman & Maslin-Ostrowski, 2004; Fitzgerald & Gunter, 2006; Hargreaves, 2005; MacBeath, 2005). It is widely acknowledged that structured time and space for meetings and reflection is crucial for the success of developing leadership capacity (Frost & Harris, 2003; Garmston, 2007; Kasl & Yorks, 2010; Lambert, 2003; Sly, 2006), and yet many professional development providers have not had these

opportunities (Timperley, Wilson, Barrar, & Fung, 2007). In particular the literature implies middle leaders with professional learning responsibilities.

Distributed leadership is informed by both organisational and community views of leadership. Understanding distributed leadership requires research into how it is enacted so that appropriate structures and learning opportunities can be provided to continuously develop leadership practice.

2.3 Coaching

This section draws on literature relevant to several coaching models and roles, with a focus on coaching to promote reflection and action. Common elements of coaching practice are explored and the place of collaboration in coaching considered where conversations occur within small groups of teachers, facilitated by a coach. Aspects of facilitating reflective dialogue including questioning, listening and assumption checking are common key features of coaching practice that have been identified in this literature. Considering a collaborative approach to coaching is presented as a way to deepen understanding of beneficial learning opportunities for school leaders where they can understand and improve coaching practice for the development of themselves, their peers and the school they work in.

2.3.1 Coaching Roles

It is generally agreed that coaching with a predetermined purpose will contribute to enhanced teaching, improved student learning and building schools as learning communities (Bailey, Curtis, & Nunan, 2001; Dozier, 2006; Robertson, 2005; Swafford, 1998). However there is a variety of coaching roles and situations in which educational leaders support the growth and development of their colleagues, and just as many titles for these roles e.g. coach, mentor, guide, peer-learner, critical friend, supervisor, facilitator, supporter, process facilitator, learning facilitator, exemplar/demonstrator, tutor and consultant (Costa, 1993; Laird, 2008; Mraz, Kissel, Algozzine, Babb, & Foxworth, 2011; Robertson, 2005; Thomas, 2004). The terms coaching and mentoring are broadly and often jointly used in literature. Thomas (2004) differentiates between coaching

as being coach-driven with a short-term focus on improvement in a particular aspect whereas mentoring is long term work in which a mentee gains personal insights which are applied to practice. Thomas (2004) acknowledges that sometimes a coach will mentor and a mentor will coach. Within coaching practice a coach will also often switch roles, based on the situation and immediate feedback.

Mraz et al (2011) classify four broad roles of a coach: content expert, professional development facilitator, promoter of reflective instruction and builder of a school-wide learning community. A content expert acts as a resource and support for teachers in preparing, monitoring, implementing and adjusting teaching strategies. Similarly a content coach (Feldman, 1999; Guiney, 2001) guided by an external change coach, supports teachers to improve their teaching practice.

Laird (2008) focuses on the role of coaching for professional development with two dimensions of action, namely control/freedom and direction/reflection. This role is more diverse than coach as a professional development facilitator who provides large-group professional development on theories of content area processes (Mraz et al., 2011). According to Laird (2008) the professional development coaching role is situational and a coach may act as a supervisor, guide, peer learner, mentor, coach or critical friend depending on the action of the coachee. Each role differs based on the degree of control that is either given to or assumed by the coachee and to what extent the coachee is directed, or engaged in reflection during the process e.g. the role of the critical friend is one of eliciting critical reflection in a pre-determined focus area, whereas a supervisor will be more directive.

As a promoter of reflective instruction a coach supports teachers to meet student needs through reflecting on and changing their practice (Mraz et al., 2011). They gather data and conference with teachers, asking questions rather than making statements. Similarly in Robertson's GROW model (2005) reflective interviewing supports reflection on practice through Goal setting, Reality checking, Option exploration and Wrapping up. A critical friend (Costa, 1993) is a trusted person who asks provocative questions, provides data to be examined through another lens and offers

critique of another person's work as a friend. Although these three coaching models have similar roles, the critical friend is the only one that alludes to a coach as an evaluator who offers critique. Showers and Joyce (1996) claim that coaching models where feedback is given to teachers based on observation of their practice has a negative impact on practice and sense of self. They believe that this may be attributed to past negative experiences of evaluative feedback. When teachers try to give each other feedback, collaboration is destroyed and coaches find themselves slipping into a supervisory evaluative role. In the models of Mraz et al (2011) and Robertson (2005) the coach is purely a collaborator where the coach and teacher ask a series of questions and collaboratively look for answers. The relationship is collegial because it centres on reflective practice (Mraz et al., 2011). As Laird (2008) suggests in her model a coach may switch between roles according to the situation. However it is crucial that the coach has situational understanding of their intention, actions, and the impact on the people they are working with (Mraz et al., 2011).

The coach as a builder of a school-wide learning community could be a senior leader in a school, whose responsibility is, according to Cardno (2005) to build leadership capacity. Likewise they could be an external facilitator, or change coach. As suggested by Timperley et al. (2007) and Cordingley (2005) the facilitator must have inside knowledge of the context and be able to coach with situational understanding.

In a collaborative coaching approach, small groups of teachers work together in an inquiry mode. They are supported by a coach who has some expertise and understanding of their role. The coach's role is to create a safe place for learning and a culture of inquiry where everyone becomes skilled at reflection and dialogue that impacts on improved teaching and learning. Wiliam (2007) uses the term facilitator in his work with teacher learning communities and suggests that their role is not to be a guru or expert who instructs the group, but rather to create an environment where groups of teachers can learn together. The strength of collaborative coaching is the potential to develop a culture of reflection and professional learning where teachers thinking and practice is impacted on

for positive outcomes (Neufeld & Roper, 2002). Robertson and Murrihy (2006) found one case where a New Zealand school principal acknowledged that coaching teachers in small groups of four resulted in increased discussion and changes to thinking. Teacher growth in professional dialogue, teacher reflection and greater teaching collegiality are recognised outcomes of collaborative coaching (Knuth & Banks, 2006; Neufeld & Roper, 2002).

The roles of a coach are broad and complex, requiring extensive skills and knowledge across purposes and situations. Developing as a coach requires approaches to professional learning that extend situational knowledge to robust enough to be transferred elsewhere (Billett, 2002). Effective leaders exhibit situational understanding when they respond to the changing needs of the context and adjust their practice (Durrant et al., 2004; Gronn, 2008; Knuth & Banks, 2006). The concept of situational leadership (Avery & Ryan, 2002), where the degree of support and direction is individualised in relation to the context and the coachee's level of development, can be applied to coaching practice. Situational coaching allows for a more inclusive and invitational professional development experience for everyone (Laird, 2008).

2.3.2 Coaching practice

Developing coaching practice requires leaders to try to figure out for themselves how to lead reflective dialogue or productive collegial conversations (Nelson, Deuel, Slavit, & Kennedy, 2010) where practice and beliefs are probed into deeply in an environment of trust. Common elements of coaching include active listening, coach's ability to generate powerful questions, self-regulation, self-awareness, trust and development of emotions (Earl & Timperley, 2009; Griffiths, 2005; Novak, Reilly, & Williams, 2010).

Dialogue is "the foundational process by which organisations learn" (Boreham & Morgan, 2004 p. 314). Known also as *honest talk* (Lieberman & Miller, 2008), *collective thinking* (Kennedy, Deuel, Nelson, & Slavit, 2011) and *learning talk* (Annan, Mei Kuin Lai, & Robinson, 2003), the key aim is to promote participant communication for action and change

(Cassidy et al., 2008; Robertson, 2005). Dialogue differs from discussion where the key aims are decision making and action planning (Nelson et al., 2010).

Dialogue provides opportunity for reflection as well as communication. In education literature, understandings of reflection mostly stem from Dewey's (1933) description of reflection as involving a state of doubt, or perplexity which causes thinking as an act of inquiring to settle the doubt. Mason's (2002) view of cognitive dissonance where beliefs are disrupted refers also to reflection as the act of considering a disruption and seeking to settle it. Reflection-in-action may occur through observation or as a result of consciousness being raised in dialogue with others. Reflection-on-action occurs retrospectively (Argyris & Schon, 1974), through structures or conditions such as metacognitive reflections, collaborative dialogue, journal writing and debriefing video-tapes of teaching situations and observations (Loughran, 1996; Mason, 2002; Reid, 2004). Reflection for action promotes action and change. The significance of dialogue for all types of reflection is evident in the literature.

Shared reflection is more likely to result in personal and organisational learning through collective meaning making, shared understanding and raised self-awareness of a teacher's ability to confront the challenges of teaching. With little or no support, teachers are often unable to implement ideas or make changes because they may be different to their beliefs or the way they currently work (Showers & Joyce, 1996; Timperley et al., 2007). However through dialogue each teacher's capacity to make informed decisions for improved student learning increases which ultimately contributes to changed beliefs and practice (Annan et al., 2003; Carrington, Deppeler, & Moos, 2010; Kennedy et al., 2011). Links between planning, action and theories of teaching and learning are clarified (Brown & Issacs, 1996; Kennedy et al., 2011; Laird, 2008) and learning is more likely to become institutionalised (Earl & Timperley, 2009).

Some strategies for facilitating reflective dialogue include using a set of guiding questions, questioning that is appropriate to the situation and group reflection on the process at the end of a meeting (Nelson et al., 2010). Teachers are empowered to think reflectively when questions

rather than statements are used by the coach (Mraz et al., 2011; Robertson, 2005). Nelson et al. (2010) agree that engaging all group members in asking and answering probing questions can break the habit of congenial conversations where members simply share ideas with each other, without examining of the value of those ideas. If teachers are to increase their self-knowledge and knowledge of their practice they need to make explicit their beliefs and practices and discover any inconsistencies between the two. In collegial conversations (Garmston & Wellman, 1998) the use of teaching practice evidence supports teachers to reflect on actual experience as the basis for conceptualizing the next step and trying new ideas (Earl & Katz, 2006; Earl & Timperley, 2009). Data of teacher practice coupled with dialogue supports reflection on espoused theories and theories-in-use (Argyris & Schon, 1974). Use of protocols such as structured activities involving professional readings to support reflective dialogue is viewed as having both value and limitations. Norman, Golian and Hooker (2005) claim that protocols create conditions for trust, safety and shared responsibility for everyone's learning. Limitations, however, include a focus on the protocol rather than the dialogue, superficial examination of evidence and dialogue that is too open where viewpoints are shared without deep exploration for clarity (Little & Curry, 2009).

Questioning to encourage critical reflection-on-practice and underlying beliefs and assumptions is a crucial coaching skill. In a critical and emancipatory view, reflection is taken beyond the technical level of achieving goals to one of questioning beliefs and assumptions linked to actions (Mason, 2002). Skilled questioning by all participants positions the coach as a collaborator rather than evaluator where answers are sought together (Laird, 2008). Responding with appropriate and timely questions requires the coach to stand back and take a *balcony view* (Garmston & Wellman, 1998). From an objective viewpoint a coach notices when to probe, press or question thus facilitating skilful dialogue (Cassidy et al., 2008; Garmston & Wellman, 1998).

Checking assumptions requires a coach to listen carefully and pause before responding and paraphrasing. Mason (2002) suggests that reactions of classifying and stereotyping based on our beliefs occur more frequently than sensitive responses i.e. making an informed choice with fresh, appropriate actions. The *ladder of inference* (Argyris, 1990) is a tool that enables participants to inquire into disagreements and clarify underlying beliefs (Ministry of Education, 2008). It is an important skill to be able to check and correct assumptions (Robinson et al., 2009). In true dialogue, phrases such as *an assumption I have is...* are used, to support group members to inquire into their own and others beliefs so they better understand their world. Asking questions such as *what led you to believe that* is another strategy for checking assumptions and revealing flawed reasoning (Garmston & Wellman, 1998; Haigh, 2000; Robertson, 2005).

Expertise in facilitating dialogue requires a coach to listen, question and check their assumptions so that the learning purpose of dialogue is maximised for all participants.

2.3.3 Creating an environment of trust

Coaching in a group is more effective where loyalty, trust, communication, mutual respect and emotional commitments are built (Day, 2003; Showers & Joyce, 1996). Trust is built as colleagues participate and act together as agents for change and improvement (Bray, Lee, Smith, & Yorks, 2000; Earl & Katz, 2006; Kasl & Yorks, 2010; Lee, 2005; Nelson et al., 2010; Tinsley & Lebak, 2009; Wang, Kretschmer, & Hartman, 2010). The role that a coach assumes and their actions are significant factors in creating an environment of trust (Garmston & Wellman, 1998; Showers & Joyce, 1996).

Facilitating dialogue can be risky and teachers will resort to congenial conversations unless the environment is one of trust and respect (Garmston & Wellman, 1998). Openly sharing and questioning beliefs and actions in direct, honest, productive conversations is difficult for teachers and presents tensions for a coach. Coaches need to promote challenging learning when working on real problems, rather than avoiding such opportunities (Earl, 2009; Robinson et al., 2009). However probing and surfacing beliefs can cause personal conflict which often results in congenial conversations in order to avoid the differences (Nelson et al., 2010). A safe environment can be confused with one of comfort and

conviviality where dialogue is weakened and learning compromised (Garmston & Wellman, 1998). Discovering and addressing incongruences between theories-in-use and espoused theories (Argyris & Schon, 1974) can only happen in intimate and reciprocal relationships where openness develops (Earl, 2009; Habegger & Hodanbosi, 2011; Robertson, 2005). Openness is understood as probing into viewpoints which is more than broad participation that does not result in defensiveness or hiding behind a façade of practice (Robertson, 2009). In broad or equal participation viewpoints are shared and not probed into. The challenge of probing into beliefs is acknowledged however research shows that challenging viewpoints and unearthing the reasoning that informs them creates respect for colleagues' capacity to learn (Earl & Timperley, 2009).

The skill of listening closely to understand, promotes facilitation of reflective dialogue. In contrast when a coach listens for errors to make a point, combat is created and some participants will withdraw from dialogue and dominant voices take over (Garmston & Wellman, 1998).

Coaching as a collaborator rather than an evaluator promotes reflective dialogue (Mraz et al., 2011; Showers & Joyce, 1996). Coaches often believe that giving advice is a positive aspect of their role, however this has been found to be viewed by teachers as evaluation (Mraz et al., 2011). The skill of reflective questioning is a very important aspect of coaching (Thomas, 2004) as it leaves ownership of reflection and any judgement in the hands of the person being questioned. The role of a coach is not to judge or give advice but to facilitate understanding of practice with emotional maturity creating an environment of mutual respect and trust (Mraz et al., 2011; Showers & Joyce, 1996; Tinsley & Lebak, 2009).

Working collaboratively is a skill that requires teachers to be comfortable in sharing their successes and failures and recognising those of their colleagues offering empathy and support for their troubles (Jackson & Street, 2005; Tinsley & Lebak, 2009). Building relationships with the approach that we are all learners together develops a risk taking culture where vulnerability is reduced or tolerated for the purpose of learning and enacting change (Kennedy et al., 2011; Robinson et al., 2009). Learning

for co-creation of knowledge opens practice up to be vulnerable as people engage emotionally with the learning process (Costa & Kallick, 2000). Unless there is a feeling of trust in the learning relationship, people will not reveal vulnerabilities or areas in need of greatest growth (Robertson, 2009). Ackerman and Maslin-Ostrowski (2004) suggest that leaders often appear to be vulnerable as they try to stay open and in this sense vulnerability is viewed as a strength rather than a weakness to be reduced. "Relational trust involves a willingness to be vulnerable to another party" (Robinson, 2007, p. 20). Coaches can model vulnerability and build trust through explicit checking of their assumptions and suspending their beliefs for everyone to examine (Garmston & Wellman, 1998).

The literature on coaching practice has emphasised the challenges for coaches in understanding and developing expertise in facilitating dialogue and reflection in an environment of trust. Developing coaching practice requires careful consideration of actions and situational understanding of the coaching role.

2.4 Collaborative Inquiry

It is generally agreed that the most effective form of professional learning for all educators is collaborative, authentic and participatory (Driver, 2006; Kirkham, 2005; Robertson, 2005; Timperley et al., 2007). Professional learning is most likely to occur and be sustained when teachers have a say in the process, collaborate with peers, have opportunities to study and experiment, and it is focused on student outcomes in their teaching contexts (King & Newmann, 2001). In cyclical collaborative inquiry, knowledge is continuously created through a transformation of experience and making changes (Argyris & Schon, 1974; Kasl & Yorks, 2010; Reid, 2004; Timperley et al., 2007).

Collaborative inquiry sits firmly within personal experience allowing teachers to take an inquiry stance on issues that matter to them. Heron (1999) and Reason (1988) highlight this as epistemic participation where knowledge creation results from felt experience. This suggests that the

participants must have inquiry skills, knowledge and a belief in the process. Tinsley and LeBak (2009) found that when teachers reflected together they developed as reflective practitioner researchers even though they undertook separate action research projects. This type of learning recognises that self-regulated learning has greater potential for changed practice and beliefs. Known as 'strategic learning' (Mason, 2002) and 'generative learning' (Senge, 1990) the outcome is changing the organisation through people making sense of the environment. The potential of personal learning through collaborative inquiry is organisational learning and change.

There is a growing body of literature claiming that evidence-based practice is problematic because it limits the use of a professional's knowledge and judgement which is of situational significance (Biesta, 2007; Cochran-Smith, 2009; Earl & Timperley, 2009). CI brings together the notion of evidence-based with inquiry practice in a community approach (Cochran-Smith, 2009). Professional learning is sustained when teachers use evidence from authentic situations to inquire into the teaching-learning relationship and consider underpinning beliefs and theories with colleagues (Driver, 2006; Kasl & Yorks, 2010; King & Newmann, 2001; Piggot-Irvine, 2010;). Timperley et al. (2007) argue that if any of these components, including organsational support, are missing, the impact of professional learning will be diminished.

CI is based on the premise that inquiry is not *on* or *about* people but *with* people (Bray et al., 2000). Participants organise themselves into groups to research a common question of importance to them through sharing resources, clarifying research questions and distributing findings (Bray et al., 2000; Coleman, 2007; Jaworski, 2004; Kasl & Yorks, 2010). It is a democratic system based in collaborative relationships, not hierarchies of control (Shannon, 1993, cited in Kasl & Yorks, 2010). This is a key difference between first-order organisational change driven from the top and second-order organisational change that occurs through the personal learning and change of all practitioners in the organisation. Collaborative inquiry fits within the principles of shared followership emphasising collective purpose and action together with reciprocal accountability for

learning (Andrews & Crowther, 2002; Bray et al., 2000; Coleman, 2007; Day, 2003; Houston et al., 2008). In the fields of social science and education, community theory is the foundation for the social process of thinking and professional learning (Brown & Issacs, 1996).

2.4.1 Insider/Outsider Expert

It is widely acknowledged that a coach or facilitator can make a positive difference for professional learning, with some varying views on sustainability of the learning and expertise of the coach (Robertson, 2009; Stone, 2004).

Lambert (cited in Williams, 2009) claims that changes made with an external expert are not sustained as reliance on that person to make decisions, changes and improvements, develops. To a degree Guiney (2001) and Feldman (1999) agree that learning and work may not be sustained when an outsider in the role of a change coach moves away. Change coaches are employed for a period of time, determined by the situation. As expertise for coaching in the school builds, change coaches may be phased out, however there is always the conundrum that "the work of reform gets more complex as implementation proceeds" (Guiney, 2001, p. 740). Whether the change coach is phased out or not, the work of the coaches within the school must be on-going and support for them readily accessible.

Timperley et al. (2007) qualify the engagement of an expert, claiming that it will only be effective when the expert has "provider pedagogical content knowledge" (p. xxix) i.e. knowledge of the content of changes in teaching practice as well as how to make this content meaningful and manageable for teachers. Cassidy et al. (2008) and Cordingley (2005) agree that a facilitator must orient knowledge from research in relation to the local conditions and purpose of the group so that they can support the agency and collective activity of the group. Griffiths (2005) also claims that effectiveness is reliant on the facilitator's ability to generate powerful questions and provide feedback, self-regulation, self-awareness, accountability and responsibility, support for action and practice and development of problem-solving strategies, resistance and emotions.

Involving an outsider in coaching for leadership learning is essential for sustained dialogue around learning and development (Robertson, 2009; Stone, 2004). Roberts and Henderson (2005) consider the role of a coach to be three-fold. Firstly, to provide learner coaches with the opportunity to reflect on the coaching process and questions used. Secondly to reflect on how they enact it and thirdly to create a climate for useful dialogue around the goal focus. This implies the importance of an outside facilitator to guide the coaches in learning these skills. In a true coaching relationship the role of coach is complex and difficult supporting the argument that involvement of an outside person is paramount (Robertson, 2005).

Although there is some variation in views about expert support there is general agreement in the literature that involving expert support will contribute to professional learning. Challenges lie in establishing the pedagogical and situational expertise of the external expert and support for sustainability of the learning.

Collaborative inquiry has been reviewed as a professional development approach that promotes deep understanding of practice and theory, through a focus on personal learning. Cognition and action are shared, new knowledge is created, inquiry skills developed and all members of the community are active participants. There is a dearth of research into the potential of collaborative inquiry for leadership professional learning in coaching and its impacts on teaching and learning. Collaborative inquiry as an approach to building leadership capacity within schools professional learning culture is discussed in chapter five.

2.4.2 Teaching practice inquiry as professional learning

Historically, skills-based approaches to professional development have focused on improving individual teacher performance, predominantly in workshop situations (King & Newmann, 2001; Robertson & Murrihy, 2006; Robinson, 2003). Change does not occur because in disseminating expert knowledge, teacher's beliefs are not interrogated or changed, so the status quo is perpetuated (Short & Burke, 1996; West-Burnham &

Coates, 2005). More recent shifts to evidence-driven approaches for school-wide learning and change still tended to emphasise technical aspects of teaching. Single-loop learning (Argyris & Schon, 1974) results in surface changes to practice and the more complex aspects of teachers' work including the socio-cultural factors of a teaching-learning environment are ignored (Biesta, 2007; Cochran-Smith, 2009). Research shows that when learning is emphasised in a technical, rational way it does not engage teachers or cultivate in them a greater consciousness, self-awareness or integrity (Blackman, 2010; Intrator & Kuntzman, 2006; Korthagen & Vasalos, 2005; Palmer, 1997). Short & Burke (1993) acknowledge that single-loop learning where surface changes to practice are made, is significant as first steps towards change but they do not go far enough towards creating sustainable or deep transformation.

For the purpose of this study *teaching practice inquiry*, also broadly termed: teacher research, action inquiry or practitioner inquiry is understood as the intentional systematic study of teaching by the teacher for the improvement of teaching and learning. This understanding is supported by The Ministry of Education (2007) in a research based claim that "Teaching as Inquiry is one of the teaching approaches that consistently has a positive impact on student learning" (p.35). The New Zealand registered teacher criteria requires teachers to use critical inquiry, based on professional literature, with members of their learning community to refine their practice and raise student achievement (New Zealand Teachers Council, 2009). It is an educator's responsibility to use evidence, create knowledge and develop insights in relation to their context and situation (Earl & Katz, 2006). However external evaluations have shown that teachers need a great deal more assistance in developing the skills to collect, interpret and use evidence about the link between their teaching and the learning of their students (Education Review Office, 2009. Robinson, 2003). In some cases, depending on the situational nature of the inquiry, this evidence may come from the experiences of the group members (Brooks & Watkins, 1994; cited in Kasl & Yorks, 2010) which is gathered and analysed systematically with colleagues through open reflection. The real value of data comes from

careful collection, collation and use for learning through organising and thinking about what it might mean (Earl & Timperley, 2009).

It is generally agreed that the rationale for inquiry is:

- to continue learning as educators
- to explore the tensions felt about our teaching.
- to improve teaching and learning
- to cope with pedagogical challenges (Ellis & Castle, 2010; Haigh, 2000; Reid, 2004; Short & Burke, 1996).

Biesta (2007) suggests that people must engage in continuous inquiry where cognitive dissonance causes beliefs and practice to be changed. In double loop learning (Argyris & Schon, 1974) educators engage in deeper reflection about assumptions and beliefs that underpin their practice, ultimately changing the knowledge base of the organisation. Deep critical inquiry occurs when teachers examine their beliefs and practices and never assume that they will ever have the answer (Haigh, 2000; Jackson & Street, 2005; Reid, 2004; Short & Burke, 1996; Tinsley & Lebak, 2009).

According to the literature reviewed, the benefits of inquiry for professional learning are far reaching, including deepened knowledge of research and literature through reading, engaging in dialogue and teacher practice observations (Cochran-Smith, 2009; Haigh, 2000; Jackson & Street, 2005; Kasl & Yorks, 2010; Reid, 2004; Robinson, 2003; Tinsley & Lebak, 2009; Wang et al., 2010). Involving individuals in practitioner inquiry results in improved use of research, increased self-confidence and capacity in making professional judgements (Cohen et al., 2003; Cordingley, 2005; Reid, 2004; Robinson, 2003; Wang et al., 2010).

In summary, literature supports the belief that teaching practice inquiry improves teaching and learning. Teachers develop skills and deeper understanding of inquiry through being involved in teaching practice inquiry. They are valued as integral participants in this professional development approach.

2.5 Identity

Teacher identity is shaped not only by school culture and practice but also by their position in the school context (Carrington et al., 2010). The

literature on teacher identity is reviewed as having relevance to the role, position and identity of middle leaders who are responsible for leading professional learning. According to Day & Kingston (2008, cited in Carrington, 2010) there are three dimensions of teacher identity; personal identity, professional identity, and situated or socially located identity.

2.5.1 Personal identity

Personal identity is shaped in life outside school and is linked to family and social roles and influences from outside school which often cause conflict to one's sense of identity (Carrington, 2010). Being a whole person in leadership involves awareness of attitudes, acceptance of one's own feelings, and real relationships with others (Ackerman & Maslin-Ostrowski, 2004). The person cannot be separated from the professional in leadership learning which involves personal development in emotional, spiritual, social and situational understanding as well as professional expertise (Palmer, 1997; Robertson & Murrihy, 2006). Billett (2002) agrees that personal self is constituted by historical, cultural and situational factors together with an individual's history which has been socially constructed.

2.5.2 Professional identity

Professional identity is influenced and shaped by a leader's sense of self as well as their knowledge, beliefs, interests and disposition towards learning and change (Ackerman & Maslin-Ostrowski, 2004; Drake, Spillane, & Hufferd-Ackles, 2001; Geijsel & Meijers, 2005; Palmer, 1997).

Gronn (2003) suggests that a leader's sense of self and their role in leadership is constructed by themself and others. He refers to this as the "dynamic interplay of the role perceptions and expectations" (p. 35) of the group members. A leader may be viewed as the expert with the answers who will 'fix' problems as a way of caring for their colleagues. Carrington (2010) agrees that expectations of a good leader from others is a strong influence and is often tied up with concepts of professional development and roles and responsibilities of colleagues, resulting in conflict.

Leaders professional identity is affected by their own and others emotions. Those who are emotionally mature show deep understanding of how to deal with these (Robinson et al., 2009). Perhaps the most commonly referred to theory of emotion influencing thought is Festinger's (1957) cognitive dissonance model. Cognitive dissonance causes unpleasant psychological tension which the receiver strives to reduce. This can result in changed beliefs or avoidance of situations that cause the dissonance (Festinger, 1957). Mason (2002) refers to cognitive dissonance as a disturbance that shakes beliefs and habits, triggering new learning. A small disturbance can be encompassed while a big disturbance may be disruptive. He agrees with Festinger (1957) that the effect may be positive or negative. Palmer (2006) claims that dissonance or disruption affects the emotions which cannot be ignored if deep learning is to take place. He claims that taking people out of their comfort zone and creating anxiety heightens their ability to learn. Stoll et al. (2003) state that the role of "leadership is about getting ordinary people to do extraordinary things" (p.107). Earl (2009) agrees that this creates tensions and requires committed leaders. According to Hargreaves and Fullan (1998, p.29, cited in Intrator & Kunzman, 2006) leading teachers in "hard thinking and soul searching about the fundamental value and purpose of what they do as educators, involves purpose, passion and hope". Tensions lie in helping others to develop their practice where they can "keep their dreams whole while cultivating an awareness of the current reality around them" (Senge, 1990, p. 59). To create an environment of flow (Csikszentmihalyi, 2003) leaders need to be emotionally mature enough to promote challenging learning rather than avoiding such opportunities when working on real problems (Mraz et al., 2011; Robinson et al., 2009). In open-to-learning conversations (Robinson et al., 2009) leaders take a neutral stance focusing on theories and espoused practice rather than people at an emotional level. They can facilitate points of conflict as an intellectual challenge where deep inquiry and professional learning occurs without threats to professional identity (Nelson et al., 2010).

The professional identity of middle leaders is shaped by themselves and others through leadership activity. Emotional understanding is crucial for leadership activity that facilitates learning for others.

2.5.3 Socially located identity

Situated or socially located identity is linked to long term identity. It is influenced by the immediate context, including feedback form others, local conditions and support (Day & Kingston, cited in Carrington, 2010).

Leaders who are socially aware will focus on relationships and interactions rather than individuals (Blackman, 2010; Garmston & Wellmann, 1998). They recognise what is occurring in a group as the situation unfolds and respond appropriately with an understanding of possible influences and actions, maintaining an environment of mutual respect and trust (Ackerman & Maslin-Ostrowski, 2004; Blackman, 2010; Garmston & Wellman, 1998; Mason, 2002). They engage in genuine inquiry and searching for answers with others, without taking responsibility for their thoughts and feelings or other forces which are out of their control (Ackerman & Maslin-Ostrowski, 2004). This can be particularly challenging for leaders in a group situation where they need to notice the interactions and responses occurring in the groups in order to facilitate respectful and productive dialogue without falling prey to their own and others' emotions (Ackerman & Maslin-Ostrowski, 2004; Garmston & Wellman, 1998).

Leadership learning is implied as a continuous process where situational understanding develops. Understanding and developing practice is achieved through studying leadership in action, taking it beyond skills and strategies (Spillane et al., 2004). Kirkham (2005) and Robinson et al. (2009) agree that when leaders examine their own practice and explore theories while leading in authentic situations, learning for themselves and those they work with is impacted on. Watson and Scribner (2005, cited in Hartley, 2009) see a 'situation' as variables that emerge from the group such as characteristics of tasks, interpersonal relations within the group, characteristics of group members, and source of authority for group leaders. It focuses on the situational impacts. Gronn (2003) agrees that

effective leaders respond to the changing needs of their context. Indeed, in a very real sense the leader's behaviours are shaped by the school context and the situation. It is treated as something impacting on leadership practice from outside the practice. Spillane et al. (2004) take a distributed perspective where leadership practice is shared and created through interactions among community members, leaders and the situation-of-leadership activity.

2.5.4 Identity learning

It is generally agreed that identity learning takes time and occurs through social and cognitive activity in a strong learning environment where teachers and leaders individually and collaboratively examine their personal values and beliefs impacting on personal and organisational growth (Carrington et al., 2010; Geijsel & Meijers, 2005; Robertson, 2009; Tinsley & Lebak, 2009). More specifically, in collaborative inquiry, identity develops as people learn to value their capacity for knowledge creation rather than relying on an expert (Kasl & Yorks, 2010). Day and Kingston (2008, cited in Carrington, 2010) agree that self-reflection and facilitated dialogue can assist teachers to develop their identity. Identity learning in a collaborative environment can foster both individual and organisational change where short term professional development interventions have been found to be ineffective (Carrington et al., 2010; Geijsel & Meijers, 2005).

2.6 Summary

This literature review has focused on three dimensions of coaching teachers; middle leadership, coaching practice, collaborative inquiry. A small body of literature on the emerging theme of identity has been discussed. Literature on the context of teaching practice inquiry has also been reviewed. This literature supports the belief that collaborative inquiry is an effective approach for building leadership capacity and providing professional development in the 21st century. However challenges that may be faced are the depth of teachers' inquiry skills and knowledge and the disposition to working collaboratively. Developing leadership capacity

for coaching in collaborative inquiry is a possible way to meet these challenges. The literature illustrates the potential of collaborative inquiry to develop a culture of reflection and professional learning where the thinking and practice of a leader in a coaching role is impacted on for positive outcomes.

This research project seeks to understand how middle leaders explore and develop coaching practice and identity through a collaborative inquiry approach. Chapter three outlines the research design used for this action research project.

CHAPTER THREE: RESEARCH DESIGN AND PROCESS

3.1 Introduction

Research design is a broad term for the planning, action and analysis of the data gathering process and research findings. This chapter outlines the methodology, underpinning paradigms and theoretical framework that informed the research design. It explains the epistemological principles that underpin the design and process of the research. The section on data collection describes the meetings where semi-guided interviews took place and the design of teacher questionnaire. The process of data analysis and reporting of findings is expressed in phenomenological terms. Finally, the possible ethical issues in relation to this participatory action research are discussed.

3.2 Research Paradigm

Research paradigm is essentially a set of beliefs in how knowledge is acquired which guides a researcher in their research design while defining the theoretical frameworks and assumptions within which their work is grounded (Cohen, Manion & Morrison, 2003). In a physical science world, research sat firmly in the 'positivist' paradigm, however during the past century, different paradigms have developed in response to the growth in social science research. There are now mainly three paradigms that authenticate theories and assumptions, i.e. positivism, anti-positivism and critical theory.

Positivist research is grounded in the assumptions of objectivity, determinism, parsimony and generality (Cohen et al., 2003). According to the critics of the positivist paradigm, objectivity needed to be replaced by subjectivity in the process of scientific inquiry. This gave rise to antipositivism or naturalistic inquiry. Anti-positivist inquiry emphasizes that social reality is viewed and interpreted by the individual according to the ideological positions they possesses. It attempts to understand the subjective world of human experience (Cohen et al., 2003). It is concerned with understanding the current situation, whether it is

phenomenological or social, though the methods for acquiring this knowledge are underpinned by different philosophies.

Critical theory research methods however are traditionally 'ideology critique' and 'action research'. Grounded in critical theory, such research methods seek to understand and change situations and phenomena. Human inquiry through action research is contributing to a paradigm shift where new paradigms such as 'human inquiry' and 'living thesis paradigm' are emerging as reflective research approaches (Kasl & Yorks, 2010). While in their infancy, these paradigms are representing the beliefs that emancipation and change will only occur if people change and that such purposes are situated in a local discourse. Within this set of beliefs, my interest is in providing the participants with the opportunity to learn and grow through understanding and changing their beliefs and practices about coaching and middle leadership.

3.3 Research Methodology

Action research is a general term for a range of approaches that are rooted in a disparate set of research and intellectual traditions such as philosophy, social science, psychotherapy, critical theory, systems theory, spiritual practices, indigenous cultures, emancipation movements and education. Across all the disciplines there is one common purpose of aiming to achieve social, economic or organisational change (Biesta, 2007; Cardno, 2005; Piggot-Irvine, 2010; Sun & Scott, 2005). Action research in education embraces varied strategies such as action inquiry, action science, participatory action research and developmental action research. In the practical world of schools it is a deliberate attempt to build teachers as researchers rather than consumers of research where theory and action are linked (Stoll et al., 2003; Timperley & Alton-Lee, 2008). Within an interpretive epistemology this linking of action and research is where ideas are developed as a means of knowledge creation. One of the aims of action research is to bring about change. In keeping with critical educational research the purpose is to change as well as understand situations (Biesta, 2007; Cardno, 2005; Piggot-Irvine, 2010; Sun & Scott, 2005). In more recent exploration of Action Research, the

learning and knowledge creation orientation of the process is acknowledged as participants take an "attitude of inquiry" (Marshall, 2011). This has been influenced by the work of Friedman (2001), in action science, where self-knowledge is seen as a key element alongside other practices.

3.3.1 Participatory action research

Action research offers the opportunity for human inquiry at a local level where the participants and researcher work collaboratively to understand through a process of change. Stemming from Lewin's (1984) desire to develop science for human needs and interests, research is proposed as an intervention rather than observation. New paradigm human inquiry embraces many action research strategies such as pragmatic action research, participatory action research and action inquiry (Kasl & Yorks, 2010). There is general agreement that action research is participatory by, or with insiders. It is reflective and systematic, for democratic purposes that involve effecting change for improved social justice or quality of life (Barton, Stephens, & Haslett, 2009; Wong & Choong, 2010).

This research project has been conducted using a participatory action research approach because its principles are shared with collaborative inquiry which occurred at different levels in this research context (Champion, 2007). It is of 'second person action research' nature where people came together to inquire for mutual interests and participate in decision making about the process (Sun & Scott, 2005). An initiating researcher supported the creation of this community of inquiry (Marshall, 2011; Sun & Scott, 2005). The term 'Participatory Action Research' attributed to Orlando Fals Borda (1995) and influenced by Paulo Freire, is regarded as the 'emancipatory practice' of action research. One of the strengths of this approach is the emphasis on research which liberates those who are researched. It is carried out by people directly concerned with the social situation that is being researched and is conceived as something done by the clients, not something done to the clients by a researcher.

3.4 Epistemology

Action Research approaches have different interpretations which are grounded in slightly different philosophical and psychological assumptions (John Barton et al., 2009). Checkland and Holwell (1998) warn that all action researchers should be clear about their epistemology and demonstrate a recoverable research process. This research project is underpinned by the following four epistemic principles:

- 1. The political frame of the initiators is emancipatory with an intention to improve the professional life of the focus group participants.
- The research approach aims to engage the participants in critical reflection and meaning making.
- 3. There is power sharing and collaborative contribution to how the research content is continuously shaped.
- 4. The new knowledge will be used for personal application as well as contributing to the organisation and research (Kasl & Yorks, 2010).

Action research is politically framed in emancipation for improvement. A precondition of action research is that the practitioner researchers, in this case school middle leaders, have 'a felt need ... to initiate change' and learn about a research method which has relevance for them (Elliott, 1991, p. 53, cited in Somekh, 1995). Through rigorous, systematic examination of the participant's beliefs and practices and influencing others the social conditions and existence were improved. This project sought to examine and understand leadership and coaching beliefs and practices to support teachers in becoming skilled critical inquirers. Individuals were influenced as well as the school. It is underpinned by a belief that people change through collaboration with others and become change agents within the school (Fullan, 1993).

The aim of the action research approach to generate knowledge for practical interest was concerned with understanding the meaning of the situation, as well as an emancipating interest concerned with the opportunity for growth and advancement. This research was positioned in a transformative-emancipatory framework which focused on empowering school leaders and teachers as creators of knowledge. It assumed that knowledge is not neutral, but is influenced by human interests (Mutch, 2007). It provided opportunity for in-depth meaning making. Serving to

empower people as individuals and as a group within their school context this research approach is underpinned by my belief that organisational change is the outcome of personal learning provided by the organisation.

Action research is concerned with exploring the multiple determinants of actions, interactions and interpersonal relationships in unique contexts. Its aim is to deepen practitioners' understanding of the complex situations in which they live and work, so that their actions are better informed. Rather than specific 'findings' or 'outcomes', action research generates what Elliott (1991) calls 'practical wisdom' and Dreyfus (1981) and Elliott (1993a) call 'situational understanding' (Somekh, 1995 p. 341).

Equity of power in participatory action research is not easily achieved. Participatory action research provides us with patterns for new kinds of relationships based upon principles of sharing and equity (Somekh, 1995). It can be enacted through three dimensions: knowing, valuing and consciousness (Marshall, 2011). To equalise power a researcher must be mindful of their practice and place 'propositional' knowledge e.g. "I read that..." or "have you thought about...?" alongside experiential and practical knowledge i.e. "what do you think' and "what do you want to try" rather than privileging it (Marshall, 2011). Dialogue as a way of power sharing between researchers and participants was emphasised throughout the whole process of planning, acting and reviewing. Commitment of participants was important in order to be collaborative and the importance of trust, mutual respect, equality and autonomy in order for participants to be genuinely empowered. Democracy is a state where people participate meaningfully and involves negotiation as equals (Short and Burke, 1996). This was emphasised through dialogue.

New knowledge was created in a collaborative inquiry structure which is a liberating type of action research useful for both adult learning and formal research (Kasl & Yorks, 2010). It recognised the belief that teacher professional learning and development is more effective in sustaining improved changes in teaching and learning when teachers are involved and have agency. Organisational change agents tend to focus on changing systems through their interventions rather than focusing on

individual learning (Andrews & Crowther, 2002; Houston et al., 2008). Within this project, participants came together to inquire into a school-wide issue, "How do we know our children are learning through the inquiry approach?" This second person action research occurred with the first person research of the lead researcher to help build a community of inquiry through improving middle leadership coaching practice.

Because this research was aimed at the improvement of school leadership and teacher practice, it contributes to the world of educational research in the field of professional learning where knowledge continues to be advanced with each research project acting as another instrument of theory. Theories and laws of a different nature to the theories and laws of natural science can be formulated.

3.5 The Research Process

A naturalistic, exploratory, participatory approach was taken in this research project. The research team worked together in their school context, through four short term cycles of planning, acting and reviewing towards the long cycle focus (Dick, 1993) of the project. The team consisted of three school middle leaders, known as Professional Learning Leaders (PLLs), and myself. In my role as participant researcher I coached them in five group interviews with questions that were designed using a three level guide to critical reflection. Access to the participants was gained from the Principal and Board of Trustees (see appendix A) in a written letter including an outline of the project and the conditions and guarantees under which the research would be conducted. The three professional learning leaders were personally invited with a letter and the participant information sheet. The teachers were subsequently invited to participate and signed informed consent was gained prior to any research activities and data collection (see appendices A, B, C, D). All participants had the right to withdraw at any stage of the research on the understanding that data gathered up to that point would be used in the research (Cohen at al, 2003)

Roles and expectations of participants were clarified at the first meeting.

The role of the researcher in action research is different from traditional social science research. The researcher became one participant in a collaborative project and the research participants had full control or shared input. This epistemological difference recognised the local and tacit knowledge of the participants rather than the belief of 'researcher-as-expert'. The researcher had specialist knowledge, and I suggest that without it the process would be less rigorous and benefits would be minimal. I was an 'insider' as participant researcher and an 'outsider' as I was not a full-time participant in the social situation but had a short-term role, as a facilitator or 'resource person' (Champion, 2007; Kasl & Yorks, 2010; Somekh, 1995; Wong & Choong, 2010).

The role of participant researcher was important in creating local knowledge and contributing to public knowledge. My role as a participant researcher was twofold: (1) to gather data at group interviews about what PLLs did and discovered at their TIG meetings, (2) to act as a coach for them to improve their coaching practice using facilitation skills of active listening, paraphrasing, questioning and suspending my views. For the purpose of this research I saw myself as an outsider with insider knowledge as I had worked with the participants before. While I wa the lead researcher, I considered myself to not be the initiator of the research focus as it was informed by the professional development and learning focus of the school. I simply formalised the research question and process protocols. This formalisation was necessary to limit potential harm to participants which was deemed to be a concern in action research (Schumacher). This type of participatory, collaborative research has been termed by Bartunek and Louis (1996) as "Insider/Outsider Team Research". In my position as insider/outsider I worked with an academic outsider to guide my research.

Agreed expectations of the practitioner researchers were to facilitate the teacher group sessions, audio-tape these, record notes as 'aide-memoirs' and participate in the PLL group meetings. These were the essential expectations for this research—they were complemented by professional reading, reflecting and writing of the PLLs for their professional learning. The leaders were responsible for coaching three teachers as a group to be

skilled critical inquirers of their classroom practice. The PLLs saw themselves as facilitators and not experts with the answers. They expected to improve their practice and in turn, facilitate a process where teachers could grow and construct their own answers.

I don't have the answers and I don't want people to think that I am facilitating because I have the answers. It's not about that, and I think it's changing the mindset by doing such a good job that people realize that they don't have to please the teacher, it's not about getting the answer right or wrong, it's about the process that grow the result. (Kim)

The PLL meetings were held five times at fortnightly intervals. Each meeting was ninety minutes long with a dual purpose of promoting participants thinking as well as collecting data. The content of the first meeting was planned by myself to guide the initiation of coaching in their groups. At the first meeting the research process, aims and conditions were clarified.

Meeting One:

- 1. Purpose/s of meeting;
- Clarify the research project and roles and expectations of particiapnts'
- 3. Clarify the research and data collection process for this project.
- 4. Explain the templates to be used:
 - i. PLL aide-memoirs
 - ii. Action plan
- 5. What questions/concerns/thoughts do you have about this?
- 6. How can school leaders coach teachers to be skilled critical inquirers? Discuss how and why this research topic is of interest to them.
- 7. Consider some models and views from literature and discuss
- 8. Consider some strategies from literature.
- 9. Plan first teacher meeting ---use Action plan template.

The other four meetings were conducted as group convergent interviews (see appendix E). In this method the process was structured and the content emergent (Dick, 2007). The content surfaced throughout the iterations as responses to issues and questions raised throughout the research process.

The introduction for each meeting involved recalling the goal that was established at the previous meeting. Secondly, the group interview guide was used so each group member could share what actions they had taken at their TIG meetings and the observed impacts. They were also asked to talk about the knowledge and skills they felt they needed for their meeting. This opened up dialogue about the challenges they were encountering and some problem solving. The focus on new learning occurred as a result of the emergent challenges. In preparation for this, I studied the transcripts between meetings and reviewed relevant literature. At the meetings I shared ideas from literature and gave the PLLs readings with summaries to increase their involvement in the action research (Somekh, 1995). Before bringing together their ideas to plan their next actions, the transcripts from the previous meeting were shared with the PLLs for verification.

These meetings were taped, transcribed and verified by group participants. All audio-taped data from the PLL meetings and teacher group sessions were safely stored electronically by myself and used to cross check data across the sources.

Through collaborative inquiry teachers took separate journeys together (Tinsley & Lebak, 2009). The PLLs facilitated four sessions of ninety minutes each with their Teaching practice Inquiry Groups (TIGs) on alternate weeks from their meeting with me. At these meetings they practised planned coaching strategies. They made notes as 'aidememoirs' (Cohen et al., 2003) for the PLL group meeting on a predetermined schedule (see appendix F.) These sessions were audio-taped for the purpose of gathering data that was be used to confirm trends and ideas that emerged from other data sources within the project. Because gathering data through observation at such meetings can be problematic as teachers need to be able to engage in open dialogue without bystanders, audio-taping the sessions rather than observing them myself was designed to reduce conflict of interest.

The leaders commented that listening to the tapes after the meeting was useful for reflection and they were surprised at what they extracted from the tapes that they did not notice during the meeting. The taped data was

safely stored by myself and used for cross checking leader's accounts and interpretations of the meetings. This data was also useful for excerpts of evidence, being mindful not to use specific pieces of information out of context of the discussion.

3.6 Data collection methods

Multiple information sources were used to increase the accuracy of the information. Mixed methodology is underpinned by the theoretical framework of pragmatism and is often considered to be an 'American world view' (Yanchar & Williams, cited in Mutch, 2007). It is characteristic of the transformative-emancipatory ontology which holds that to understand different viewpoints, beliefs and values is a valid purpose of research such as action research. Data collection methods for this research were based in the interpretive paradigm and included qualitative methods of group interviewing, use of participants' accounts and audiotaping. These methods were most appropriate for gathering data as a basis for interpretation and understanding. A questionnaire for quantitative analysis was used at the end of the action research cycles to gather summative data from teachers as an opportunity for everyone's voice to be heard and a basis for cross referencing interpretations that had been made throughout the process.

3.6.1 Convergent group interviews.

Convergent group interviews are a method of constant comparison of two sets of data through structured discussion (Dick, 2007). In this project, data sets from each interview were constantly compared with theory and research literature. This hermeneutic process allowed backwards and forwards movement between practice and theories of interpretations which was most appropriate in this research for both learning and action research. Agreements and disagreements found between the two data sets were used to generate agreements at a deeper level e.g. "some say that.....others say—help me to understand how this difference arises. This led us deeper into the situation being researched and provided me with the opportunity to constantly check my emerging interpretations and

refine my method questions. Each interview became a turn of the research spiral, where the purpose was to learn from experience, and apply that learning to bring about change. Learning occurred through the participants either recalling what was already understood, confirming previous learning or deciding from an experience that previous learning was inadequate (Tere, 2006).

The 'Interview guide approach' was used to offer access to people's ideas. This approach ensured more focus than the conversational approach, and allowed a degree of freedom and adaptability in gathering the information (Reinharz, 1992). Unexpected answers and ideas surfaced so the data was richer (Cohen et al., 2003). As well as a means of collecting data the interview questions were designed to encourage participants to examine their experiences (Cohen et al., 2003), as opposed to a more structured interview format that might have constrained responses. The semi-guided interview provided a structure and process for these meetings which was aligned to the format of the 'aide-memoir' template (see appendix F) used by the PLLs. Through a deliberate and intentional process I could maximise the learning for all participants and maintain participant confidentiality. This part of the research process was also an opportunity to take strategic action by means of coaching to move PLLs thinking forward (Somekh, 1995).

The atmosphere in the interview was important in terms of gathering authentic data. The PLLs professional connection with one another and myself, allowed me to capitalise on a history of mutual trust and respect.

We could be doing this in a different situation and different school, however we have got us and we have got each other and we have gone through that development together last year, we have that trust, it's quite special. (Pat)

Denzin & Lincoln (1994, cited in Cohen et al, 2003) recognise the importance of this close rapport with participants in creating possibilities for more informed research. There was a high level of trust, which meant the interactions during this group interview appeared to be comfortable and honest.

3.6.2 Teacher Questionnaire

Each teacher in the TIGs completed a structured questionnaire (see appendix G) at the end of the action phase. In this questionnaire a four point Likert scale was used, requiring teachers to rate the extent to which they thought the practice of the PLLs had impacted on them as skilled critical inquirers. This rating scale combined the opportunity for flexibility and subtlety of response without being time consuming. The questionnaire also included four open-ended questions. Although more time consuming, these questions allowed for openness of response and an opportunity for participants to discuss their experiences (Cohen et al., 2003; Opie, 2003; cited in Piggot-Irvine).

The questionnaire was constructed using the Survey Monkey internet programme (http://www.surveymonkey.com/) and accessed and submitted electronically by the teacher participants.

3.7 Data Analysis

Interview data was analysed using the following procedures informed by Hyener (1985, cited in Cohen et al, 2003) because they are suited to phenomenological analysis of interview data:

- The interview data was transcribed for me.
- I listened to the interview tapes and made summary notes, in relation to literature topics, which were a starting point and a supplement to formal analytic techniques. Throughout the multiple small cycles I had the opportunity to check these interpretations. Transcript data were checked with the PLLs. The convergent nature of the process allowed me to reflect upon the emerging themes.
- Reading the transcripts, my summaries and listening to the tapes several times allowed me to get a sense of the whole interview and the emerging themes.
- Units of meaning were listed in relation to the interview questions. I
 used a content analysis method to work systematically through
 each transcript. Assigning codes to specific characteristics within
 the text was necessary because of the nature of semi guided, group
 interviews where the responses to interview questions were

- sometimes spread throughout the interview. Responses to the open questions in the teacher survey were analysed similarly.
- Clustering units of meaning occurred as categories emerged from the data. To guide this clustering I used the question 'what does this mostly sound like?' and 'where does this best fit?"
- Determining themes from the clusters of meaning. In this inductive type of analysis, themes emerged from transcript data, action plan summaries (see appendix J) and literature. Data collection and analysis took place simultaneously with reading of literature throughout, which helped to identify and explain emerging themes. Constantly moving backwards and forwards between transcripts, notes and the research literature was a key feature of this process.
- Structural and textural descriptions were written according to themes and sub-themes.
- Graphic analysis of the teacher questionnaire data from short answers was completed using quantitative methods within survey monkey and on spreadsheets.

3.8 Ethics and Action Research

Action research was chosen for this project because it fits the school context where improvement and understanding of practice was the intention. It was concerned with reflective knowledge in action (Reason & Bradbury, 2008), which required responsiveness, flexibility and action on the part of all participants. This can be more difficult and riskier than traditional approaches to research. Such risks and ethical issues were considered so that they could be eliminated entirely or managed to minimise any risk of harm to the participants (Bell, 2000). Reducing these risks was addressed through careful planning including justification and consideration of the ethical issues that may arise. Informing the participants of the planned process and responding to their queries before expecting consent to participate was crucial especially for the PLLs as the practitioner researchers in this project (Schumacher, n.d.).

3.8.1 Anonymity and Confidentiality

By the nature of this participatory action research participants were known to each other and therefore anonymity could not be guaranteed. However, a condition of the research was that participants kept group meeting information confidential. It was important to protect participants from any social or psychological harm that could be caused by comments from others in the group.

3.8.2 Conflict of interest:--Power and status

Conflict of interest was a concern and required clear clarification of the roles of each participant from the outset. All participants were given the opportunity to discuss any perceived conflict of interests before consenting to participate. At the first PLL meeting this opportunity was offered again and the PLLs expressed that they could not foresee any conflict of interest. To prevent any conflict of interests in my position, I observed closely the protocols of data collection and analysis for this project. The advantages of insider knowledge are considerable, but it was also important to specify a set of ethical principles in the research conditions. Knowing each other as professionals was viewed by the PLLs as more of a benefit than a risk. However, as a Master of Education student and lead researcher, I had different kinds of experience and knowledge that I brought to the project because I was grounded in different institutional expectations. To avoid perceptions of differential power and status being an issue, the conditions of research were agreed upon and roles and expectations were clarified at the first PLL meeting. Given the inevitable differences of status and the different kinds of expertise which each partner brings to the research, it could have been difficult to get the balance right, but mutual respect, self-awareness and honesty made good starting points (Somekh, 1995). I needed to be mindful in the group interviews that all PLLs participated so that a degree of mutual understanding and accommodation of multiple perspectives could be developed. In each cycle of the research the PLLs had the deciding voice in how the actions proceeded. Their data from the TIG meetings was used to determine the next cycle.

One of the most important reasons for taking the participatory action research approach was because it yields simultaneous action and research outcomes producing practical knowledge, that is relevant to everyday life (Reason & Bradbury, 2008). This action research started from practical questions arising from concerns in everyday work. I initiated the inquiry through formalising the research focus based on my insider knowledge of the school professional learning culture and focus.

3.8.3 Time and workload

Action research is highly pragmatic and can be demanding of participant's time and create workload. In my role as lead researcher, I recognised that there is a trade-off between the benefits of professional learning and giving practitioners the central role in research i.e. the power and ability to bring about change in the field of action and the resulting limitations in terms of the time they can devote to research and their lack of certain kinds of specialist knowledge e.g. skills of data analysis. There is a difference between giving practitioners control and burdening them with work that someone else could do more easily on their behalf. Therefore data collection and interpretation was managed by myself and shared with PLLs to check for accuracy. I deliberately provided summaries of meeting discussions and professional readings as a way of valuing their time and work as participants in this research project. In the role as coach I believed it was important to make accessible any relevant information that would contribute to their growth and learning. The aim was to work within the constraints of the workplace. Time for research is always limited, since the primary responsibilities of the action researcher are those of a working practitioner (Somekh, 1995). The meetings were seen as opportunities for group members to practice and promote strategic action for change within the school and were built into the professional learning schedule and focus for the term. On one occasion, the school principal provided teacher release time for a PLL meeting to take place during hours of instruction. This was viewed as extremely supportive and valuing of the benefits of action research for professional learning and building school capacity.

3.8.4 Data quality

Ethical principles provided necessary safeguards to all concerned and more importantly, they were essential in order to ensure the quality of the data and depth of analysis which was possible in the research (Somekh. 1995). The validity of action research was tested by evaluating the impact of action steps in a continuous process of data collection, reflection and analysis, interpretation, action and evaluation (Cohen et al., 2003). To safeguard against researcher interpretation of PLL group data and maintain adequate rigour I adhered to a systematic process of keeping records which were continually member checked. Written descriptions of meetings with the transcript data were verified the PLLs. The individual and group interpretations were tested in a convergent nature where earlier interpretations were revisited in the group interviews and exceptions to agreements were raised for deeper understanding. I triangulated data from the three sources of PLL group interviews, TIG meeting notes and audiotapes and teacher questionnaires to ensure validity of interpretations. Validity was strengthened with knowledge created through descriptions that made possible an understanding of the meanings of the experience (Cohen et al, 2003). Permission was granted to use direct quotes.

3.9 Summary

This chapter described the research design and methodology within a framework of critical theory. It explained the processes used to gather, analyse and report the findings. Possible ethical issues were identified and discussed. The following chapter is a report of the research findings, into the research question...

What did three middle leaders do to coach a group of teachers in the context of teaching practice inquiry and what do they learn about themselves as coaches through collaborative inquiry?

4 CHAPTER FOUR: FINDINGS

4.1 Introduction

These findings are a collation of self-reported experiences and discoveries of three Professional Learning Leaders (PLLs) in one school as they explored collaboratively their coaching practice with teachers. Included are findings from the teacher questionnaire data which sought to find out the extent to which teachers had developed skills, knowledge and dispositions of a critical inquirer through this activity. The purpose for coaching a small group of teachers was twofold; to support them to understand the process of inquiry and to inquire into an individual focus of their teaching practice. Situated firmly in personal experience the outcome is marked by changes in practice as expressed through personal learning. Pseudonyms for the PLLs are used in this report.

The PLLs' objective was to improve their coaching practice, because they believed it is difficult to challenge and unearth beliefs while retaining an environment of trust, comfort and safety. Their moral purpose of leadership was expressed as; "to make a difference for others by being the best they can be".

Data was gathered to answer four sub-questions;

- 1. What actions did the professional learning leaders take and what impacts did they notice when coaching a group of teachers in the context of teaching practice inquiry?
- 2. To what extent did the teachers' skills, knowledge and dispositions of an inquiring teacher develop?
- 3. What did they learn about being a coach?
- 4. How did collaborative inquiry support the PLLs learning?

The findings are reported under three main headings:

 Coaching practice: Aspects of coaching practice and observed impacts that were explored. Data from the PLL group interviews and the teacher questionnaire informed these findings.

- Identity learning: Self-reported effects of the coaching experience on the PLLs personal learning and development.
- 3. Collaborative inquiry as a professional learning approach.

4.2 Coaching Practice

Elements of coaching practice that were explored include; (a) facilitating reflective dialogue, (b) creating an environment of trust and (c) supporting inquiry into teaching practice.

4.2.1 Facilitating reflective dialogue

Facilitation of reflective dialogue was explored with others through investigating coaching strategies of questioning, listening and clarifying assumptions. The PLLs used a range of resources, including group protocols, professional readings and case studies to promote reflective dialogue.

4.2.1.1 Questioning

Improved questioning and deep probing into what was said to challenge thinking "with questions that didn't sound like an attack and sounded natural" (Pat) was a focus. There was a significant shift by the PLLs from the use of open questions to direct questions, often repeating the question, to support dialogue that remained focused. Written questions in their meeting plans helped. The development of the skill of using direct questions was acknowledged in the last group interview with comments such as...

If I had had that understanding at the beginning that I have now I would have said; What about what do you do? And your deliberate acts—what do you do? (Pat)

I am able to question to clarify to keep individuals focused. (Lee)

I had questions written down, which just refocused everybody on the case studies at hand. (Kim) It was noticed that teachers were asking more probing questions of each other. The teacher questionnaire data supported this, as the majority of teachers reported that they had developed skills of asking critical questions that cause reflection. This suggests that appropriate questioning by the coach is an effective modeling strategy for others' learning.

Probing with questions to support teachers to interrogate their beliefs and assumptions was a coaching practice focus. There was acknowledgement that opportunities to probe into some surfaced beliefs and assumptions were untouched and it was agreed that more practice and opportunity would be advantageous.

[I] got distracted from this by another teacher talking and didn't get back to it. I need to go back and probe when a point is made and quickly moved on from. (Kim)

Understanding the importance of surfacing beliefs and assumptions for reflective dialogue to occur developed.

otherwise I am frightened we will have another meeting and hear the same stuff again. (Lee)

I want them to act now to see that. I want them to see that these meetings are important for their change, their inquiry, they go hand in hand. (Kim)

There was some variation between the teacher questionnaire data and the perception data from the PLLs regarding the interrogation of assumptions and beliefs. Most teachers said that they had developed skills of interrogating assumptions and beliefs that their practice is based on. However while beliefs and assumptions were being noticed by the PLLs they also felt that their skills of facilitating deeper probing could be improved. This data suggested that interrogation of one's beliefs and assumptions was occurring in teachers' personal reflection. It may also suggest that there are different understandings about what interrogating beliefs really look like.

To summarise the PLLs discovered that direct, focused questions resulted in more powerful focused dialogue. Teacher's beliefs were being surfaced

in the dialogue and both teachers and PLLs were beginning to develop the questioning skills to probe into these.

4.2.1.2 Listening

The PLLs believed they needed to listen and pause before questioning.

Timing of questions and prompts changed through actively observing and listening before making conscious and deliberate use of strategies.

Awareness of the timing of interruptions based on what was occurring improved. There was recognition of conscious mental decision-making about when to probe and more awareness of the actions they were taking.

I was aware of it. I mean I was using *the balcony* (Garmston & Wellman, 1998). I was very aware of that and doing things to bring the discussion back. (Lee)

Need to be conscious of appropriate strategies and use of them. (Pat)

The skill of recognising beliefs and assumptions of others developed with the capability to listen and observe from a more objective position at the Teaching practice inquiry Group (TIG) meetings. Initially these were mostly noticed on listening to the audiotapes after the meeting.

while you might notice it happening, for me obviously I didn't, listening to those tapes and then really acting on it next time, you know – rather than that is the end of that meeting, and the next meeting is a whole new meeting, carry it on, really dig deep in to those sorts of comments. (Kim)

One of the participants openly shared that she listens more objectively now and isn't always putting her view forward as the dominant one.

But I think the biggest shift for me was actually listening not to hear the errors or logic – and that's what I was doing I would jump in to make a point. (Lee)

Listening for the purpose of facilitating reflective dialogue developed as the skills of timely interruptions and contributions were practiced. This strengthened together with a deepened understanding of the objective position of a coach.

4.2.1.3 Checking assumptions

Through reading professional literature, reflection and dialogue the PLLs noticed that they were making assumptions and inferences during coaching practice. Checking their assumptions and suspending them in the TIG meetings with phrases such as "I hear you saying..." and "so I understood it as this..." helped to check that their interpretation in relation to the intention of the speaker, and to promote clarity of the speaker's thinking.

I had to check my assumptions and I need to clarify, instead of making assumptions and keeping them inside and carrying on the meeting with those assumptions, I used conversation to actually clarify. (Pat)

When I did put my assumptions in it was to clarify a little bit more, to dig a little bit deeper into what they were saying so it was a positive sort of thing. (Pat)

As a result dialogue was more focused.

We had dialogue between the three of us that was really powerful. I just had little fireworks going off inside going "yay!"(Pat).

Practicing these skills was acknowledged as important because it is difficult to focus on everything at once. Developing skills are still not automatic.

I was focusing on assumptions and I may not have been listening as deeply as well or questioning effectively because my whole focus was on checking my assumptions. (Pat)

Awareness of the relationship between their practice and the nature of the dialogue was discovered.

I think before I would have just gone through the process, the agenda, and not really reflected on the outcomes as having any direct relationship to what I was doing. Whereas now I know it is what I am doing and facilitating that makes all the difference to the direction that the discussion takes. (Lee)

In summary the PLLs had become more conscious of and strategic in the use of coaching strategies of questioning, listening and checking assumptions. They felt they were probing deeper into what was said to challenge thinking, with more direct coaching questions. However they acknowledged that in a group situation it is difficult at times to probe into everything. They believed they were listening more objectively and pausing before questioning, probing or offering their point of view. All but one teacher stated that thoughtful, relevant questions and further probing by the PLLs promoted and encouraged sharing of expertise and knowledge. They felt that the questioning and dialogue supported them to probe deeper into their own assumptions and one teacher also noted that it caused them to question their own beliefs.

The reflective dialogue skills that the teachers believe they developed to some or *great* extent included...

- Supporting and reassuring your colleagues
- Sharing readings and literature
- Suspending bias
- Drawing on your own experiences
- Self-evaluating and making links between new ideas into your own practices by using available resources
- Helping colleagues to refine their inquiry focus and action plan.

This teacher questionnaire data are in keeping with PLLs reported evidence from the TIG meetings.

4.2.2 Creating relationships of trust and respect

The PLLs believed that it is difficult to create a collaborative inquiry environment where assumptions about teaching can be challenged while sustaining relationships of high trust and safety. Checking assumptions, strategic questioning, using case studies, group protocols and recognising group dynamics were explored as elements of creating a safe collaborative inquiry environment.

Concerns about offending people initially made it difficult to facilitate reflective dialogue. The PLLs were aware that they were agreeing with

everything that was said to make the teachers in their group feel comfortable. Asking questions for clarification was explored as a way to change this practice. This was easier than believed and it did not appear to offend anyone.

I have gone from not asking the questions that needed to be asked because I don't want people to take it personally and I have found that they don't. (Pat)

Case studies were used rather than primary evidence of participant teacher practice to create a safe environment for dialogue.

But it actually made them feel safe because they didn't have to put themselves on the spot but could still reflect on their own practice while talking about these other two teachers they didn't know. (Lee)

Exploring case studies with the teachers promoted general dialogue about practice in some cases and self-reflection in other cases. A third of the teacher responses indicated an improvement to some extent in skills of drawing guidance and assistance from a range of sources including talking with colleagues, readings and observations of teacher practice. The skill of sharing video evidence of one's own teaching practice with colleagues and discussing it openly was claimed to have developed to a *slight* or no *extent* by most teachers. This had not occurred, however the use of video examples of teacher practice from other sources may have contributed to one teacher questionnaire response that this skill had been developed to a *slight extent*.

Examining case studies together was acknowledged as creating more equal participation in the dialogue. Balancing facilitation of focused dialogue with equal participation was initially acknowledged to be difficult.

Sharing those different little strategies to ensure that everybody has an equal voice, although some people don't realise they are doing it, they may dominate conversations or they may direct the conversation in a direction based on either a lack of understanding or lack of willingness to address those deeper issues that force us to reflect on our practices. (Pat).

[I] noticed that one teacher was quiet and I didn't know what to do. (Lee)

so it is getting that balance between getting people back and focusing on what we are here for and letting them say what they want to say. (Lee)

Providing the teachers with coaching questions so everyone could participate as a listener, speaker and thinker resulted in more equal participation from everyone.

Maybe that questioning thing might be a good thing to try, because to try and get [T8] asking some questions too. Rather than doing all of the talking, get [T8] to do some of the listening (Lee).

Facilitating this equal participation was also managed through asking another question, or explicitly redirecting or interrupting at times where the focus question was repeated *e.g.* what was your deliberate teaching practice? It was reported that there was still some hesitation to interrupt for fear of appearing to be rude even in the belief that this is important for the management of equal participation.

Group protocols were tried in some instances to ensure equal participation. In one of these instances it created dialogue where all group members interacted as listeners, questioners and speakers. However in another instance the use of structured activities as protocols was questioned as a limitation to the development of an inquiry culture.

[It] may have restricted dialogue with too much structure. (Kim) It was agreed that knowledge of the people in your group should influence decisions about using protocols. In one instance a decision was made during the meeting to refrain from using planned protocols based on what was happening.

The PLLs agreed that it is important to recognise different personalities and their learning styles. They adapted co-constructed planning and shared resources to suit their groups.

my group is different from your group – we really need different stuff, but it didn't matter, we did something different with it, that is when you bring your different style to it. (Pat)

Knowing their teachers and recognising what was occurring in their individual TIG meetings impacted on how they would use facilitation strategies.

those facilitation strategies should work; it is how we use them with the different people—and which ones are going to work.

(Pat)

Having two teachers instead of three in a group was also considered as a possible factor that restricted dialogue. In an unavoidable instance one PLL only had one teacher at the meeting. She felt that you need different perspectives from more than two people for dialogue.

... definitely found it easier with the group than with just the two of us. (Lee)

Vulnerability on the part of the PLLs where they were open in sharing their successes, challenges and experiences was seen by teachers as a positive influence on open dialogue and trust within their groups.

Teacher collegiality increased.

oh gosh, I didn't think I would enjoy this but I really enjoyed getting to know those other two teachers as well (T9).

A safe environment of trust was created through examining case studies of anonymous teachers, balancing facilitation of focused dialogue with equal participation, which was better with at least three people in the group, open sharing of successes and failures by the PLLs and catering for differences in personalities and learning styles. Teachers commented on how much they enjoyed the openness of the professional dialogue. They felt they had *freedom of thought* (teacher quote) and they *could talk freely about their successes, problems and dreams* (teacher quote) in a comfortable forum. Teachers acknowledged a benefit of collaborative inquiry is the opportunity to bounce ideas of one another and that critical questioning helped to keep them focused. Having a culture where

everyone felt safe to try things out and share the findings, without being judged or compared was recognised by all the teachers. Creating a collaborative inquiry environment of trust and openness was important to the PLLs and the data suggest that this has mostly occurred.

having that openness, the trust, having the opportunities to discuss, to have that dialogue it is really really important, not all schools have that, that has come up in our discussions in our groups, how lucky we are to have these opportunities. It just makes you feel lucky really to be part of that team or be involved in that sort of professional environment. (Lee)

4.2.3 Supporting inquiry into teaching practice

The PLLs facilitated dialogue about the rationale and process of inquiring into teaching practice. They also facilitated the TIG meetings so that teachers could inquire into their individual practice inquiry in a collaborative environment.

The PLLs believe that teacher practice inquiry is a professional learning approach for self-regulated action and change.

That is why teacher action inquiry needs to become such an integral part of your practice because the teaching-learning cycle has changed so much and we need to be adapting because everything is changing so quickly now. Who knows where we will be in ten years' time, I don't know. (Lee)

The belief that all teachers need pedagogical knowledge and a willingness to learn and adapt was expressed by the PLLs. Their belief in inquiry for action and change and their strong moral purpose strengthened their capacity and willingness to support others in the process of professional leaning and inquiry.

Two different approaches were used to explore teachers understanding of the process and rationale of inquiring into teaching practice. *Letting the discussion go* (Lee), resulted in unequal participation of group members. However some insight into beliefs about teaching practice inquiry was gained. This was in contrast to structured group activities which were

considered as possibly restricting opportunities for the development of being an inquirer.

during meetings my role is to challenge assumptions about effective teaching and develop teacher's capacity to inquire into the impact of their teaching, if I have got a tight little structure, I am not going to really develop that. (Kim)

The PLLs discovered that teacher beliefs about inquiring into teaching practice initially ranged from the view that teaching practice inquiry is valuable for professional learning and student outcomes to the view that participation in teaching as inquiry is a requirement of the New Zealand curriculum and registered teacher criteria.

to me it is just working towards that shift of taking responsibility for you own professional development—that is what I am working towards. (Kim)

The belief in teaching as inquiry as an effective approach to professional development seemed to strengthen and there was less variance in the teachers' views. It was expressed that further growth in teachers taking responsibility for the teaching and learning in their classrooms and a positive change for the school could occur through continued collaborative inquiry and shared leadership for learning.

The PLLs believe that teachers should have some choice in their inquiry focus as long as it is an identified area for improvement and that it fits within the organisation focus for learning, action and change.

I don't think it does matter what area [teachers choose], unless the school is going to do a huge focus on one particular area. (Lee)

So if there is choice it would need to be a bit of a balance. Because if it is the process we are focusing on with their growth, that will still be achievable. (Pat)

The PLLs believed that their role was to support teachers in their individual inquiries.

[our role is] keeping them focused on their teacher action

inquiry and guiding that process for them. (Lee)

Strategies that were discovered to be effective for supporting inquiry into teaching practice were goal setting, exploring case studies of teacher practice and sharing literature that was specific to this purpose. The use and success of structured group activities varied between the groups. Discussing different inquiry models surfaced teacher's beliefs, challenges, knowledge and understanding.

Teachers valued short-cycle goal setting as a sharp focus and reminder. Some teachers bought evidence to meetings of their try-outs.

Everyone really enjoyed having that little sharp focus. ...they really all talked about how they needed that focus, for T1 (teacher 1) she said you know I needed to be reminded what I was going to do anyway. But for T2 and T3 they set a new little focus and acted on it and had examples to share. (Kim)

In the teacher questionnaire, teachers who had used short-cycle goals reported that they had developed skills of trying out and assessing different strategies to a great extent.

Readings and case studies were found to be valuable tools for creating dialogue about teacher practice inquiry.

But that reading, talking about what you deliberately did, what worked, the inquiry process there was no other direction to take it in, because the reading was so specific to the purpose. That, I found the most powerful thing that I have used so far. (Pat)

Exploring case studies helped teachers to identify specific teaching practices and to make connections to their own practice.

They were noticing spin-offs in other areas, while they were targeting one learning area; [T2] acknowledged that there were spin-offs in other learning areas. [T1] acknowledged that there was no set way of doing it for a set class, it is that cycle, you have to be always changing, always enquiring, because there is no set way for them. (Kim)

One quarter of the teachers felt that their base of expert knowledge about models and process of inquiry and pedagogy had developed to a great extent, half to some extent and the other quarter to a slight extent. This suggests that use of readings and exploring models of inquiry supported a deepened understanding of inquiry for most teachers.

Knowledge about the focus of individual inquiries developed to a similar extent. Teachers sharing and dialogue about their inquiry focus through classroom visits at a TIG meeting may have contributed to this.

... it did seem to motivate them again that they knew where they were up to with their inquiry and with what they would do next, but it didn't create any dialogue on effective practice.

(Kim)

Teachers asked each other questions to clarify meaning of teaching actions and impacts that were shared.

Teachers realised as they talked that they were making a difference by sharing their practice. (Kim)

It was noticed that reflection was occurring.

As teachers talk about their practice they have "ah ha' moments. (Kim)

Teachers made suggestions to each other and teacher questionnaire data showed that hearing suggestions from others was useful.

Over half of the teachers believed that they had improved extensively in the use of evidence for inquiry, and the others to some extent. This included planning from data, trying and assessing new strategies and interpreting evidence about the links between teaching and students learning. All teachers acknowledged that classroom observation data, especially student voice data, is valuable for inquiring into teaching practice and evaluating their own practice. This was affirming for one of the PLLs who had been questioned about the timing of classroom observations to gather data. The data they referred to in the TIG meetings had been gathered prior to this research project.

To summarise this section on coaching practice and the findings in relation to research questions one and two.

- 1. What actions did the professional learning leaders take and what impacts did they notice when coaching a group of teachers in the context of teaching practice inquiry?
- 2. What impact did the coaching have on the teachers' skills, knowledge and dispositions of an inquiring teacher?

Reflective dialogue, building an environment of trust and supporting teaching practice inquiry was developed through examination of readings and case studies where teachers understanding of and beliefs about the inquiry process were shared. Coaching strategies supported teachers to be more focused in sharing their inquiry foci, try-outs and the assessed impacts. Setting goals was also of practical use in supporting teachers to stay focused on their classroom inquiry. Reflection on the inquiry process was promoted and the practical difference it was making was acknowledged. The potential for teachers to become skilled critical inquirers was evident in the teacher questionnaire data which showed 77% of the teachers considered they had developed the dispositions of a skilled critical inquirer to a great extent and 20% to some extent. These dispositions included being; a learner, critical thinker, trustworthy, supportive, deliberate, focused and a self-regulating learner who is deeply committed to the discovery and analysis of positive and negative information.

4.3 Identity Learning

Identity learning for the coaches occurred through exploration of their role and position as coaches and the impact of their emotions on practice.

4.3.1 Coaching role

The PLLs were clear from the beginning that their role was to facilitate a professional learning process and environment where shared meaning and new insights into teaching practice inquiry could be developed.

They expressed their role in terms of promoting reflection.

The facilitator isn't the person with the answers, nor is it the individual group members giving the answers to anyone else. It's that creating the environment and the scaffolding for people to be able to talk and share and ask questions. (Pat)

It's not about me and you – it's just about me and questioning. (Pat)

I need to be coaching for thinking and discomfort. (Kim)

Focused questioning was found to promote dialogue and reflection more effectively than telling teachers their ideas.

I think you know another good strategy is actually to always be the questioner rather than the teller – which keeps you in control too. (Kim)

Control in this quote refers to control of the purpose of reflection.

Enacting the coaching role proved to be challenging for the PLLs and was a significant focus in this research project.

I just thought oh I am no good at this. I felt useless. This is a challenge and I want to persevere. (Lee)

Role conflict was a concern for the PLLs who were also class teachers inquiring into their teaching practice. At the TIG meetings they tried to be both coach and participant in the teaching practice inquiry. It was found that facilitating dialogue requires conscious effort and attempts to participate as a classroom practitioner would shift their practice focus away from coaching.

I want to share my experiences. I need to focus on being a coach only. (Lee)

...[in] the last couple of meetings I did slip off from what I was doing and just became a coach, ...I really didn't share what I was doing, so it did become easier. (Kim)

They have agreed to keep these two roles separate in future coaching situations and focus on inquiring into their classroom practice within their leaders group.

I want to be just a coach—to set one specific goal. I know what I want to practice. (Lee)

It was expressed that because of their positional status their reaction to teacher's ideas could make or break teachers' motivation to engage in collaborative inquiry.

> Being the leaders of learning - we are the people they bounce that information off and our reaction I think makes or breaks how they cope with the process. (Pat)

There was concern that their body language and facial expressions may communicate their thoughts and feelings, consequently influencing teachers' actions and thinking.

I also wonder about our communication-that it isn't just oral? (Pat)

Confidence increased as the PLLs gained a deeper understanding of coaching practice and made conscious use of strategies.

I felt confident in my role because I had the tools. Instead of feeling "oh they know I am just one of them and I am doing this" You know there is going to be that judgment, I had the tools there, it was the tools and the process and it wasn't me. (Pat)

Strategies such as detailed planning were initially considered to be important for personal confidence.

I know there was an element of panic for me – I know that I can't think of those questions, I had it all laid out, and planned and I had more notes under that for my own copy. (Lee)

This was affirmed in another instance where a loosely structured meeting with open questions resulted in the feeling of being under-planned in the first meeting.

My scaffolding wasn't clear. My notes need to be more clearly laid out. (Pat)

I felt I needed some structured questioning, structure and process. (Pat)

Confidence to be more open in planning developed with raised consciousness of practice.

[I] can now recognize my deliberate acts of coaching and see what I could have done better. [I] don't feel the need to be so well planned.

The use of readings provided structure that maintained focus during TIG meetings.

I felt empowered at my last meeting, because it was so well structured with the reading that directed our attention to exactly what we were focusing on. (Pat)

A conclusion was drawn that coaching is a professional conversation *with* people not something you do *to* people.

[I] have gone from not asking the questions that need to be asked because I don't want people to take it personally and I have found they don't—because the question is not about them, it is a professional conversation. (Pat)

you aren't 'not' their friend but you aren't their friend either. (Kim)

Planning and structuring the TIG meetings changed as the coaches became more confident in their role and aware of the impacts of their practice. A sense of identity in their role developed through collaboratively examining their practice and the perceived impacts which in turn improved coaching practice.

4.3.2 Emotional understanding

Relationships and respect were regarded as extremely important and the PLLs were concerned about offending the teachers in their group.

Emotions and personal regard for their colleagues influenced their confidence and practice.

worrying about what others are feeling takes your mind off what you are doing. (Lee)

we are humans in a very human job so it's hard to put that aside. (Kim)

Initially emotions limited their ability to facilitate deep reflective dialogue. However they did not know what to do about this.

and for me my heart is just going—what do I do? How do I facilitate this? (Pat)

[I'm] scared to ask hard questions. (Lee)

A noticeable change occurred in recognising and dealing with emotions which were acknowledged as a *road block* (Pat) to coaching practice and facilitating professional learning for others. Promoting dialogue became easier when they shifted focus from their emotions to the conversations and interactions. The skill of recognising emotional responses and controlling them developed.

[I] have learnt to step back and observe without being worried about what people are going to say and how I will cope. It's hard—I am better at it now. (Pat)

It was discovered that focusing on their own coaching practice made it easier to manage emotions.

Focusing on my actions enabled me to manage myself, rather than worrying about how other people were managing themselves. (Pat)

The influence of their emotions was recognised through open sharing of vulnerabilities and anxieties in the PLL group. Observed impacts were examined through reflective dialogue and studying literature on coaching and learning conversations. The *ladder of inference* (Argyris, 1990) proved to be informative and made a significant difference to the PLLs understanding of the influence of their emotions on their confidence and practice. Feelings of concern about what others would say and subsequent uncertainty about what to do, fear of offending others and disappointment in their coaching practice shifted to feelings of confidence, increased knowledge of their practice and deeper understanding of emotional influences.

Identity learning was evident in the expressions of increased confidence, exploration of the coaching role and deepened emotional understanding. This occurred through open sharing and reflective dialogue at PLL meetings, use of research literature and exploring the impacts of their coaching practice. The relationship between coaching practice and identity leaning became evident as human and emotional challenges of developing coaching skills were encountered. This is discussed in chapter five in relation to literature.

4.4 Collaborative Inquiry and Learning Coaching

The collaborative inquiry approach provided the opportunity for cyclical learning with collegial support in a structured environment. The learning occurred through reflection, dialogue, practice, linking theory and prior experience to practice. It was evident that the PLLs consider continuous learning and practice to be important for them in their decision to continue as a collaborative group to inquire into their practice.

The PLLs reflected openly on their practice, recognising what was happening and acknowledging the importance of coming together to try and make meaning and create new insights. They expressed the importance of meetings for collaborative inquiry into their practice and emotions.

I find this session really good for teasing out and reflecting on what happened, and putting meaning to it. I don't know where to next though. (Lee)

They believe that they can only learn so much on their own.

we are actually putting a mirror up in front of ourselves really, when we do something by ourselves we go *that didn't work* but when we have actually got someone to talk about it with we can go deeper. (Pat)

4.4.1 Collegial support

Mutual support and encouragement within the group that helped to grow their confidence is evident in the following conversation.

> without someone to bounce it off and to reflect with and to have the dialogue we have had, it would still be a lonely place because we wouldn't quite be sure, you know we couldn't clarify our thinking. (Pat)

If we had just read and read and read in preparation, you wouldn't have those opportunities to look back on yourself. (Kim)

It would be all about facilitating the meetings and wouldn't be that reflective at all. (Lee)

It would be about finding the right answers – so which one is right, it wouldn't be about growing our skills in the industry.

(Pat)

4.4.2 Cyclical learning

Short-term and long-term cyclical learning transpired within the collaborative inquiry.

Learning from past professional development opportunities and professional reading supported the learning in this research project.

it's not new to us, as we had all that PD (professional development) last year. We had a play with leading action research groups, and this is consolidating that learning and building on from it. (Lee)

...and you keep going back, and it's a good thing to go back and reconnect with that learning and having the context to use it and to develop it. (Pat)

Their belief in on-going learning was affirmed through this research project.

I think seeing the potential in it too, knowing it and believing in it, because we have had that bit of experience, of exposure, we are getting the chance to go deeper with it, go further. (Pat)

And building on the PD that we have already had, we have kind of already started on the journey anyway, it is a great opportunity to continue that journey and have real benefit from what you are doing too. (Kim)

Having the opportunity to link theory and practice was valued.

A lot of theory last year - try this and try that and we have a little bit of experience now we know what did work and didn't work and how to go about it. (Kim)

the connections are happening, and our conversations and the things we do are actually helping those experiences to be connected and to grow on, because I didn't realise at the time how powerful they were ... but actually now having a deeper understanding of them. (Pat)

Short-term cycles of inquiry heightened expectations which were acknowledged as supporting specific learning.

And to me it is those deliberate acts of teaching and this is a deliberate act to become better in our learning and it is a deliberate act for us to become better in our facilitation skills. (Kim)

It was evident that the PLLs were reflecting on and adapting their practice in-action although the difficulty of acting on what they notice has been established as an area of future focus.

I think its rehearsing it in our minds, a case of if this happens what will I do? (Pat)

We need opportunities to practise those strategies. (Lee)

But it's not until you have the opportunities to put it into practice that you realise that you have got it. (Kim)

Audio-taping the TIG meetings supported reflection-on-practice and the potential to make better use of the taped data to focus on specific

identified aspects of their practice was acknowledged.

I want to listen to my tape one more time. I want to see what I really did, what I really said, that is the true information about what you do, that is the opportunity for inquiring into your own practice. (Kim)

Understanding the coaching role developed through extensive sharing of resources and readings at PLL meetings. Future meetings to continue sharing resources and developing research skills were planned.

I actually think I personally need to grow my skills on where to look and what to look for. (Pat)

Working and learning in an environment that supports and practices leadership capacity building was appreciated.

A collaborative professional learning environment is one where members openly reflect on their practice and beliefs and create new insights together, are supported and encouraged by their colleagues and get to know their colleagues better. Having a culture where everyone feels safe to try things out and share the findings, without being judged or compared was recognised by all the PLLs.

4.4.3 Insider/outsider expert

Having a researcher/coach alongside them was acknowledged by the PLLs as crucial for their own learning and inquiry along with supporting them to facilitate this with others.

Thank you for the opportunity really – I mean if you hadn't been doing your research, we wouldn't have done it this way would we. Because you wouldn't have needed that data, the tapes and things, but it has been really beneficial for us. (Lee) before this research project started we were just looking at readings and talking pretty widely in general about leadership. (Pat)

The PLLs awareness of their coaching practice grew and they recognised and shared the challenges at PLL meetings. They co-constructed goals

and plans at the meetings through dialogue and discussion of professional literature. This reflection-for-action was facilitated through reflective group interviews along with providing readings to inform construction of possible solutions to their challenges.

4.5 Summary

Through deliberate structured opportunities for action, collaboration, reflection and dialogue the PLLs were able to examine and explore their espoused theories and theories-in-use of coaching. They discovered that the support of their colleagues and a coach was crucial. The research showed that emotional understanding and awareness of the coaching role strengthened interdependently with improved facilitation skills of dialogue and reflection where an environment of trust was a prime concern and focus. Understanding that coaching is about inquiring into practice, not people, diminished fear and anxiety associated with challenging teacher colleagues to critically inquire into their beliefs and practice. Further authentic practice and learning was acknowledged to be essential. The benefits of collaboration, experience, and cyclical learning for the examination and exploration of coaching practice were discovered to be significant.

Inquiring into their practice and developing their knowledge, skills and dispositions contributed to the teachers' development as critical skilled inquirers. The development of the dispositions of a skilled critical inquirer was recognised by most teachers as having occurred to a greater extent than increased skills or knowledge. They also contributed to building an environment of trust, safety and comfort where everyone was open and reflective in dialogue.

5 CHAPTER FIVE: DISCUSSION

This chapter answers the research question in a discussion of the findings and literature that was reviewed in chapter two.

What did three middle leaders do to coach a group of teachers to inquire into their teaching practice and what did they learn about themselves as coaches through collaborative inquiry?

The coaching practice of three professional learning leaders (PLLs) in middle leadership positions at a primary school was investigated as they coached a group of teachers to inquire into their teaching practice. The participants' objective was to improve their coaching practice and the study revealed that improving coaching practice occurred interdependently with identity learning, through social and cognitive action with colleagues and a researcher/coach.

All participant teachers believed they had developed the dispositions of a critical inquirer to a great extent while the extent of perceived development of skills and knowledge of a critical inquirer varied.

The three main topics for the discussion are: leadership development, collaborative inquiry, coaching and identity learning. Links are made to the development of teachers' skills, knowledge and dispositions for teaching practice inquiry. A diagram is presented to illustrate the process of developing as a coach through exploration of one's practice and identity in collaborative inquiry.

Limitations of the study are discussed and considerations for educators who are committed to building shared leadership practice and collaborative professional learning are proposed. The context in which these proposals are based is teaching practice inquiry.

5.1 Leadership Development

Leadership is simply an arbitrary label. It is viewed and labelled according to its enactment. In this study the belief in school leadership practice is distribution to build leadership capacity. Work towards this objective and

the behaviour of all staff determined the nature and growth of leadership practice which reflected aspects of both community and organisational theory.

In organisational theory it is generally understood that organisations change because "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together" (Senge, 1990, p. 3). In this study it was evident that the PLLs primary focus was to improve their coaching practice. However they also acknowledged that it was their responsibility to improve so they *could to do justice to it* (coaching role), and I want to do justice with the teacher, and I can only do that if I can be the best I can be at it (Pat).

The PLLs believed that the collaborative inquiry approach to learning was valuable for themselves, the teachers and the school as a whole. It is important that we become skilled reflective enquirers because education is changing so quickly at such a fast pace that what I did last year might not work this year or next year (Lee). Day (2001) and Robertson (2009) agree that building and distributing leadership expands individual and collective capacity. This is similar to 'strategic learning' (Mason, 2002) and 'generative learning' (Senge, 1990) where the focus is on changing the organisation through making sense of the environment. The belief in collaborative inquiry as a way to build self-regulated learning with potential for changed practice and beliefs was expressed by Kim, it is just working towards that shift of taking responsibility for your own professional development. A focus on personal learning can change the organisation's normative structure through increasing the capacity of others in the school to produce first-order effects on learning (Lambert, 1998).

The idea that this can be initiated through collaborative inquiry cannot be ignored. Collaboration played a key role in the study as an approach to professional learning with the potential for change to teaching and leadership practice. Houston et al. (2008) state that in collaborative inquiry, the collective wisdom of everyone is harnessed, strengthening the workplace. In this research the participation for action and change in the

first and second order occurred through systematic, deliberate, collaborative activity.

From a community perspective leadership may be labelled as human conduct when people interact to try to achieve their common ends (Gronn, 2003). In this study Pat acknowledged that without someone to reflect with and have dialogue with it would still be a lonely place ...we couldn't clarify our thinking...it wouldn't be about growing our skills. A collaborative community and leadership capacity were being built in the belief that one-person leadership cannot be relied on if schools are to improve and sustain improvement (Lambert, 2003; Robertson, 2009; Storey, 2004). Sergiovanni (2007) supports this leadership practice of shared followership where a leader is most effective at building schools as learning communities, when the entire organisation works together for the greater good.

Houston et al (2008) claim that true leadership is carried out through others, however if distributed leadership is to be democratic I suggest that it should be carried out with others as in this study. Change was not imposed by the principal of the school, it was initiated through ensuring that professional development opportunities included everyone and were aligned to the school's need and vision. This resembles broad-based, skilful participation in the work of leadership where teacher leaders understand the shared vision of the school, the full scope of the work and are able to carry them out (Lambert, 2005). Literature supports the notion that teachers can develop leadership skills in collaborative inquiry groups and flourish as teacher leaders who positively impact on pedagogical change in the school (Frost & Harris, 2003; Stoll, Fink & Earl, 2003). Although it was not investigated there was some evidence in this study that teacher leadership was developing e.g. teachers realised as they talked that they were making a difference by sharing their practice (Kim). Therefore leadership may become apparent through interactions in collaborative inquiry. This is an area for future study.

This discussion argues for school leadership practice which builds a collaborative approach to professional learning and distributing leadership.

5.1.1 Building leadership capacity

A professional learning culture for leadership development encompasses ethos and is dependent on structure and mechanisms that support it in action (Fullan, 2009; Gurr et al., 2006).

In this school professional learning leader roles were created and people were appointed based on their knowledge, experience and aspirations to share responsibility for teacher professional development and build a teaching inquiry culture. The rationale for this structure supports the claim that when schools focus on organisational learning and change the leadership structure is based on knowledge (Frost & Harris, 2003).

From the findings it was evident that supportive structures and mechanisms impelled leadership learning in action. *I find this session really good for teasing out and reflecting on what happened and putting meaning to it* (Lee). In recognition of Routman (2002), who acknowledges that committing to weekly professional meetings is difficult the PLLs expressed the value of professional meetings, I argue that this barrier must be overcome if the focus is to improve teaching and learning as a thoughtful school-wide practice. Leading learning that makes a difference to teaching and learning is acknowledged widely as being challenging and requires leaders who are passionate and committed (Earl, 2009; Hargreaves, 2005; Stoll et al., 2003). This study argues for support of leadership learning specifically in coaching.

These findings found that a leadership coach, timetabled meetings within the school professional development schedule, audio-taped meetings, use of planning and reflection templates supported the leadership learning. The importance of this support in comparison to other experiences of minimal support, was noted by Pat; before this research project we were just looking at readings and talking pretty widely in general about leadership. I support the notion that opportunities and support for leadership learning needs to be a priority in the school professional development plan if shared leadership is to benefit teaching and learning across the whole school. The professional learning opportunities for

teachers to develop the skills, knowledge and dispositions of a skilled critical inquirer were provided in a collaborative, situated and participatory environment similar to the environment for the PLLs leadership learning.

5.2 Collaborative Inquiry

Collaborative inquiry (CI) is generally viewed as an evidence-based, collegial way of professional learning which is embedded in daily work (Driver, 2006; Kasl & Yorks, 2010; Piggot-Irvine, 2010; 2006; Robinson et al., 2009). This view is expanded upon by Earl & Timperley (2009) and Cochran-Smith (2009) who bring together the notions of inquiry and evidence-based practice in a community approach. Through collaborative inquiry the PLLs discovered that they needed to;

- learn collaboratively in a trusted environment, with the support of an insider/outsider expert,
- engage in cyclical and authentic learning where they could try out strategies and assess the effects based on situational data,
- consider their beliefs and knowledge about coaching practice and roles.

The PLLs participated in collegial conversations where they inquired into their practice, gaining new insights and adapting their practice within their leadership work. In their coaching role they also facilitated collaborative inquiry with a group of teachers. This professional learning structure together with the research study afforded all staff the opportunity to participate in collaborative inquiry into their practice whether it was teaching or coaching. Supported by Kasl & Yorks (2010), collaborative inquiry was viewed as a way of developing practical knowledge so that the participants would take more skilful action based on the new knowledge gained through inquiry. Without collaborative inquiry to challenge assumptions about effective teaching and develop teachers' capacity to inquire into the impact of their teaching (Kim), exploration of practice with others and taking action for change may not have occurred.

The impacts of collaborative inquiry that is cyclical, situated in everyday work and collegial are discussed in this section. The relationship between

socio-cultural activity theory and collaborative inquiry in this context are discussed.

5.2.1 Collegial learning

This research was the first opportunity for all the PLLs to examine their coaching practice and beliefs in collaboration with their colleagues alongside a coach. The PLLs reflected openly on their practice, recognizing what was happening and acknowledging the importance of coming together to try and make meaning and create new insights. Pat acknowledged the value of having opportunities to discuss, to have dialogue...it makes you feel lucky really to be part of that team or be involved in that sort of professional development for understanding their practice and emotions. In this study the importance of collegiality was also acknowledged by a teacher I really enjoyed getting to know those other two teachers as well. Within context this statement clearly referred to professional collegiality. Conversations of a collegial nature promoted reflection and cognitive dissonance at times. In cognitive theory people experience cognitive dissonance, gradually and incrementally changing their cognitive framework (Sun & Scott, 2005). The reflective and dialogic practice within the PLL group verified the social, non-hierarchical nature of their thinking and learning as underpinned by community theory (Brown & Issacs, 1996). They supported and challenged each other in ways that depict shared followership of collective purpose and action at both personal and organisational levels. The PLLs belief in the value of collaboration was expressed without someone to reflect with and to have the dialogue we have had, it would still be a lonely place because we wouldn't be quite sure (Pat). I attest that collegial support is vital for positive outcomes of cognitive disruptions which Mason (2002) and Festinger (1957) state can have positive or negative effects.

Without an environment of trust and respect the conversations would have more likely been of a congenial nature, however as Earl and Timperley (2009) suggest, respect for the capacity of others learning through challenging each other's beliefs and thinking developed throughout the study. If I had had that understanding at the beginning that I have now I would have said "what about you—what do you do?" (Pat). The PLLs felt

safe to put a mirror up in front of themselves and acknowledged that in having someone to talk about it with we can go deeper (Pat). This sharing of vulnerabilities, emotions and anxieties in their group meetings supports literature that claims middle leaders rely on support and trust in learning their role (Ackerman & Maslin-Ostrowski, 2004; Fitzgerald & Gunter, 2006; Frost & Harris, 2003; MacBeath, 2005).

The findings reinforce the view that it was essential to have a researcher/coach working alongside the PLLs as they explored their leadership practice in context. Professional authority of the coach including insider knowledge of the school context, established relationships with the participants and support of academic study and supervision was crucial in supporting the coaches learning in the first instance. If you hadn't been doing your research we wouldn't have done it this way would we. Because you wouldn't have needed the data, the tapes and things, but it has been really beneficial for us (Lee). In agreement with Robertson (2009), Stone (2004) and the New Zealand Education Review Office (2011) the effectiveness of expert support depends on the professional development environment and the knowledge and expertise of the facilitator. Expert support must focus on building teacher understanding of the learning context and process to build learning capacity, rather than relying on the facilitator as Lambert (2003) suggests. Stover, Kissel, Haag and Shoniker (2011) agree that a coach's role is to lead the teacher toward self-discovery and actualization as a practitioner so teachers engage in new practices without relying on a coach. This poses a challenge for schools in finding or creating outsider experts with insider knowledge of their school. Funded research, as in the case of this study is a possible avenue to meeting this challenge.

Although there are possible conflicts of interest when a coach works alongside participants for research purposes, there were no issues in this case. We have got us and we have got each other and we have gone through that development together last year, we have that trust, it's quite special (Kim). This may be attributed to a range of variables including an established relationship among the participants and with the researcher, the time and space available to myself as researcher on study leave to

focus fully on the project, academic support, knowledge of the school's professional development plan and philosophy along with the willingness and knowledge of the participants. If on-going improvement in teaching and learning is the priority and achieving it through building leadership capability is the belief then schools must find a way to provide the appropriate personnel support. It is my hope that professional learning for leadership with insider/outsider experts becomes a focus priority of the Ministry of Education.

A structured collegial environment has been argued for as vital for sustained leadership learning.

5.2.2 Cyclical learning

The cyclical and experiential nature of collaborative inquiry where knowledge is created through a transformation of experience, making adaptations and continuous creation (Argyris & Schon, 1974; Kasl & Yorks, 2010; Reid, 2004; Timperley et al., 2007) was evident in the PLLs inquiry. In accordance with Dewey's experiential learning model, Haigh (2000) and Reid (2004) claim that critical inquirers make sense of their own experiences and challenge previously held assumptions, while creating new knowledge. Expressed as *you keep going back, and it's a good thing to go back and reconnect with that learning and having the context to use it and develop it* (Pat), knowledge creation occurred within both long term and short term cycles.

Engaging in learning through cycles of inquiry where the PLLs could try out strategies and assess the effects based on situational data was found to be a key contributor to the development of their coaching practice. *I want to listen to my tape one more time, that is the true information about what you do, that is the opportunity for inquiring into your own practice* (Kim). Repeating cycles of inquiry occurred in collaboration with colleagues within a deliberate structure where there was *a definite height in expectations* (Lee). Experiences of and influences on coaching practice and sense of identity were explored through several cycles of inquiry and changes in practice and beliefs occurred through the collaborative inquiry approach. Plans were constructed, put into action and reflected on in

relation to the observed impacts. It was acknowledged that planning actions together did not necessarily mean that everyone enacted the plan similarly because *my group is different from your group, we did something different with it* (Pat). Literature verifies that in collaborative inquiry teachers can take separate journeys or undertake separate action research projects (Tinsley & Lebak, 2009).

Prior to this research the participants had been involved in a range of professional learning programmes in leadership practice. A lot of theory last year....It's not until you have the opportunities to put it into practice that you realise that you have got it (Kim). A deeper understanding of theory was developing through application in this context.

"This is the nature of longer term inquiry into the teaching–learning relationship which is a cyclical process that can go on momentarily, daily and over the longer term" (MOE 2007, p. 35).

It was expressed in a teacher questionnaire response that it is difficult to know if this research project had impacted on their beliefs and practice or if other influences from past experiences should also be considered. I suggest that acknowledging past experience and prior knowledge is a factor that has contributed to that teacher's maximizing the opportunity for learning and continuous change. The chance to capitalize on and consolidate past learning in this project was appreciated by the PLLs as building on the PD that we have already had and a great opportunity to continue that journey and have real benefit from what you [the researcher] are doing (Kim).

Blackman (2010) suggests that an effective education leadership development approach could be a cycle between group and individual work. In this study the individual work by the PLLs occurred as coaching practice in the teaching practice inquiry groups (TIGs) and the group work occurred in the PLL meetings where knowledge from other learning and contexts was considered together with knowledge gained through the coaching experience. This learning cannot be taught in lectures or workshops but occurs through practice and modelling (Robertson, 2009; Smith, 2001).

The cyclical exploration of coaching practice created the opportunity for experiential learning through the process of exploring past and recent experiences and establishment of reciprocal learning relationships which influenced the PLLs beliefs, leadership practice and sense of identity. This argument is concurrent with claims in literature that knowledge is created through collaborative inquiry because of its cyclical nature (Argyris & Schon, 1974; Kasl & Yorks, 2010; Timperley et al., 2007).

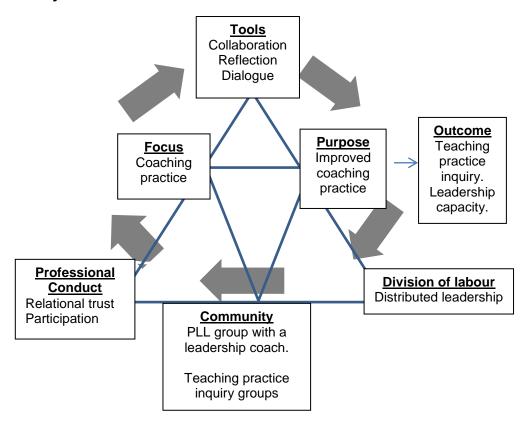
5.2.3 Authentic learning

The concept of authentic learning can be applied to leadership learning because one way of becoming a good leader is to have to lead something real (Kirkham, 2005). The coaches in this study learned to coach through coaching. In the context of leadership learning Spillane et al (2004) claim that understanding and developing practice is achieved through studying leadership in action, taking it beyond skills and strategies. It was evident in this study that opportunities to practise those strategies (Lee) supported the PLLs to develop their coaching practice and actually now have a deeper understanding of them (Pat). The learning was prompted by real challenges such as my role is to develop teachers' capacity to inquire....if I have got a tight little structure, I am not going to really develop that (Kim). Incongruences between espoused theories and their theories-in-use were noticed. These observations were supported by audio-taped evidence of practice. In social interactive processes such challenges are more fully realised than they ever can be in a workshop or reading. An authentic situation provided the opportunity for learning leadership.

5.2.4 Socio-cultural activity theory (SCAT) and collaborative inquiry

My findings confirm that collaborative inquiry is a social and cognitive activity where, according to Vygotsky (cited in Edwards, 2007) people can achieve what they never have before. The PLLs learned to coach in a way they had never experienced before as past professional learning had been of a theoretical, workshop nature. The SCAT framework provides a clear picture of how personal and organisational change can be deliberately supported through a focused professional learning approach such as collaborative inquiry.

Figure 5.1: Learning to coach through inquiry as a socio-cultural activity



In adapting this framework the subject is known as the focus for the activity and the object as the purpose. I have used these terms because they fit more within a discourse for professional learning. In this study the focus of the activity was the PLLs practice, with improved coaching practice as the purpose. The desired outcome was teacher understanding and practice of inquiry and leadership capacity. The action took place in fortnightly meetings as structured social situations for community learning supported by professional conduct of trust and participation. In this way collaborative inquiry and socio-cultural activity theory can be linked. However the cyclical nature of inquiry is not evident in the SCAT framework. I contend, based on the findings from this study, that when socio-cultural activity is cyclical, learning has greater potential for action and change. For that reason I have inserted a round of arrows as a representation of cycles of inquiry that occur within this social collaborative approach. The context for this study has also been embedded into the framework. However I suggest that this framework could be used in any professional learning context through collaborative inquiry.

In summary, it was evident throughout this action research that coaching practice improves through exploring both theory and practice of authentic activity in a collaborative, structured environment. The findings help to explain why traditional professional development programmes that view knowledge as transmittable information are inappropriate today for building leadership capacity and promoting personal change. Kirkham (2005) and Robinson et al. (2009) agree that when leaders examine their own practice and explore theories while leading in authentic situations, learning for themselves and those they work with, is impacted on. Although these claims are not located in collaborative inquiry literature, this study showed that in collaborative inquiry learning of the middle leaders and the teachers they worked with was impacted on. Links to socio-cultural activity theory, community theory and organisational theory have informed the discussion of the research findings to argue that collaborative inquiry is an effective professional learning approach, particularly for middle leadership development, because it provides opportunity for personal and organisational learning through social and cognitive activity.

5.3 Coaching and Identity Learning

This research revealed the complexity of identity and the holistic nature of identity learning. The relationship between coaching practice and personal identity learning became evident as human and emotional challenges of developing coaching skills were encountered. Identity learning encompassing personal identity, professional identity and socially located identity (Day & Kingston, 2008; cited in Carrington et al., 2010) in relation to improving coaching practice is discussed with reference to the research findings and literature in chapter two.

5.3.1 Identity learning

The importance of a collaborative learning space that provides opportunity for dialogue and reflection with others cannot be underestimated for improving coaching practice and identity learning. Identity learning occurred through social and cognitive activity in a strong learning

environment (Geijsel & Meijers, 2005) where the PLLs openly examined their personal values and beliefs in relation to their practice. Studying beliefs and values that underpin practice shifts the attention form technical factors of educational change, which is potentially demotivating (Bascia & Hargreaves, 2000). Attention to intellectual, socio-emotional and socio-political factors is more likely to have a sustainable effect on learning and change. While long term effects in this study are beyond the realms of this research, a consciousness of factors beyond technical facilitation of meetings was expressed as *that wouldn't be that reflective at all* (Lee). Sustainable learning does not occur when leaders simply talk about what they do (Ackerman & Maslin-Ostrowski, 2004). Developing as a coach for professional learning leadership proved to be challenging and rewarding in this study. It was evident that regular meetings with colleagues to share dilemmas and professional literature were crucial because their sense of identity was continuously being affected.

5.3.2 Personal identity

Personal identity is shaped in life outside school and can cause conflicts to one's sense of identity (Carrington et al., 2010). Palmer (1997) claims that it is difficult to separate self from the professional person, however the significance of outside personal influences on identity did not surface in this research. Personal identity is not to be confused with personal learning, it is merely that in this research the personal learning by the PLLs was mostly influenced by professional and socially located experiences and sense of identity.

5.3.3 Professional identity

Professional identity is shaped by a person's sense of self in their role and position and in the school context (Carrington et al, 2010). Others claim that it is influenced by professional authority i.e. peoples' knowledge, beliefs, interests and disposition towards learning and change (Ackerman & Maslin-Ostrowski, 2004; Drake et al., 2001; Geijsel & Meijers, 2005; Palmer, 1997). This research has highlighted that understanding the coaching role in context, emotional understanding and beliefs about learning and change are strong influences on professional identity.

5.3.3.1 Coaching role and position

Professional identity was shaped as PLLs conflicts about their position and role were experienced and examined. The research of Laird (2008), Mraz et al. (2011) and Robertson (2005) highlight the range of purposes for coaching and the importance of understanding the situation or context. Literature and findings are discussed in relation to the coaching roles of; content coach (Feldman, 1999; Guiney, 2001), promoter of reflective instruction and collaborator (Mraz et al., 2011).

A content coach acts as a resource and support for teachers in preparing, monitoring, implementing and adjusting teaching strategies. Similarly a content coach, often guided by an external change coach, supports teachers to improve their teaching practice, in this study keeping them [the teachers] focused on their teacher action inquiry and guiding that process for them (Lee). This was supported through provision of resources to promote dialogue about teaching practice inquiry as a topic and a practice. Establishing an understanding of the rationale for inquiry was necessary (Skipton & Marquardt, 2010) and in approaching this, the PLLs initially discovered that teacher beliefs about teaching practice inquiry varied from a valuing it as professional learning for improved student outcomes to a rationale of participation because it is a requirement of the NZC and registered teacher criteria. This discovery impacted on the practice and professional identity of the PLLs to act as content coaches, seeking ways to support growth towards a professional belief in the benefits of teaching inquiry.

Mraz et al (2011) describe the promoter of reflective instruction as the coach who supports teachers to meet their student's needs through reflecting on and changing their practice. Promoting inquiry into teaching practice was regarded as one purpose for coaching in this context. The PLLs were aware of the potential to influence teachers from their position and focused on using strategies that they believed would promote reflection and self-regulated change by the teachers. Through the leaders' discussions/goal setting sheets and regular meetings, it has helped me be more focused and be self-regulating (teacher quote). This was evident in their commitment to promote reflective dialogue where they acknowledged

that another good strategy is actually to always be the questioner rather than the teller (Kim). They avoided giving feedback or critique which would have positioned them as an evaluator (Mraz, 2011) or critical friend (Costa, 1993). The focus on coaching as a professional practice **with** people, rather than a practice **on** people shaped the professional identity of the PLLs as a collaborator rather than an evaluator.

The PLLs sense of position in this context was affected by their perception that they were regarded by the teachers as both a colleague teacher and an expert with the answers. Being in the middle of the school hierarchy, with leadership responsibilities proved to be a challenging position. Within the TIG meetings teachers asked how's your inquiry going? and the PLLs said they wanted to share their experiences (Lee) as classroom teachers as well as being the coach. The PLLs explored this conflict with the shared realisation that I did slip off what I was doing and just became a coach...l really didn't share what I was doing, so it became much easier (Kim). Conflict was felt by the PLLs between their positions of teacher colleague oh I know I am just one of them (Pat), and a leader who is "doing this [coaching]" (Pat). This is a conflict of two types of interpersonal trust; cognition-based and affect-based (McAllister, 1995, cited in Moye, Henkin, & Egley, 2005). Cognition-based trust centres on peer reliability while affect-based is tied to the interpersonal concern for others. Without this experience that shaped their professional identity and understanding of the different roles the PLLs would not have re-constructed their participation solely as a coach. I contend that these issues in relation to sense of position and role are specific to middle leadership and are a compelling reason to ensure that these people are well supported in these positions and roles.

5.3.3.2 Emotional understanding

To create an environment of flow (Csikszentmihalyi, 2003) leaders to be emotionally mature enough to promote challenging learning rather than avoiding such opportunities when working on real problems (Blackman, 2010; Garmston & Wellman, 1998; 2011; Robinson et al., 2009). The difficulty of putting this into practice was discovered to be a challenge by

Lee, otherwise I am frightened we will have another meeting and hear the same stuff again".

One of the key findings and foci for learning by the PLLs was an increased awareness of the impact of their emotional responses on facilitation practice.

When a coach listen for errors to jump in and make a point, combat is created and some participants will withdraw from dialogue and dominant voices take over (Garmston & Wellman, 1998). The biggest shift for me was actually listening not to hear the errors or logic, and that's what I was doing, I would jump in to make a point (Lee). Without this discovery of actually listening not to hear the errors or logic, emotional responses would have continued to influence practice creating a dichotomy of views rather than dialogue. So they could facilitate dialogue that was focused on teaching practice and not fall prey to their emotions they listened closely to understand, and asked appropriate questions that would promote reflection.

Using straight talk about practice from a neutral stance is challenging for leaders as they try to take care of relationships and address staff performance (Robinson et al., 2009). Staff performance was not the focus, however a similar dilemma was exposed as the PLLs expressed concern about offending their teaching colleagues as we are humans in a very human job so it's hard to put that aside (Kim). As Ackerman and Maslin-Ostrowski (2004) and Garmston (1998) suggest challenging colleagues to be aware of the incongruences between their theories-inaction and espoused theories is difficult. However the PLLs said they had learnt to step back and observe, focusing on the practice that teachers were examining openly in order to facilitate respectful and productive dialogue without falling prey to their emotions. Although Garmston & Wellman (1998) propose the balcony view as a skill set for facilitating discussion rather than dialogue the PLLs deliberately practised this skill set to detach themselves and observe from a neutral stance. In accordance with Robinson et al. (2009) the PLLs found that when they took a neutral stance and focused on practice rather than their emotional

responses to others viewpoints, open-to-learning conversations were of greater benefit for themselves and others.

Although the neutral stance of open-to-learning conversations is most commonly used in one-to-one conversations it was found to reduce the risk of possible interpersonal conflict in this context of coaching in a group. This is somewhat explained by Higgins, Young, Weiner and Wlodarczy (2009) who claim that focusing on practice provides opportunity for everyone's skills and talents to be valued and used, reducing the risk of interpersonal conflict. It was confirmed by the PLLs and teacher survey data that teachers in the groups began to question and probe each other in their groups. This may be attributed to the deliberate use of strategies to promote reflective dialogue that was modelled by the PLLs rather than creating discussion fuelled by emotional responses.

Bass & Steidlmeier (1999) and Houston et al (2008) claim that authentic leaders must trust themselves and others and not be influenced by emotional responses. It seems that challenging others to probe into their espoused theories and theories in-use is tied up with their sense of identity as leaders among their teaching colleagues. This study has led me to concur with Hackman and Wageman (cited in Robinson et al., 2009) that emotional maturity and understanding is developed through real experiences. I propose that a supported collaborative environment is crucial for this learning process.

5.3.3.3 Disposition to learning

The PLLs sense of professional identity was mostly influenced by their positive disposition towards *teacher action inquiry to become such an integral part of practice…because everything is changing so quickly now* (Lee). They understood the present school situation, and progressively worked towards the desired outcome for themselves and the school which had evolved from past professional learning and foci within the school.

It is essential that professional learning is multi-faceted (Haigh, 2000; Jackson & Street, 2005; Reid, 2004; Tinsley & Lebak, 2009). For multi-faceted learning on pedagogy, the pedagogical content of the learning area in their classroom inquiries and the teaching as inquiry approach the

PLLs agreed that teachers should have some choice in their inquiry topic with a bit of a balance. Because if it is the process we are focussing on with their growth, that will still be achievable (Pat). The PLLs shared the belief that continuous inquiry as an approach to professional learning has the potential to promote change for all individuals and the organisation (Ellis & Castle, 2010; Houston et al., 2008). This sits firmly within the theory that first order change creates second order change or organisational change (Biesta, 2007; Houston et al., 2008; Kasl & Yorks, 2010; Short & Burke, 1996).

The PLLs probed into their beliefs together, which was crucial for maintaining their positive disposition towards learning and change especially when others viewpoints threatened the potential for learning and change. I suggest therefore that when professional identity and authority is being shaped through challenging experiences, support in a collaborative environment is fundamental.

5.2.4 Socially located identity

Long term identity is linked to socially located identity which is influenced by the immediate context including feedback from others, local conditions and support (Day & Kingston, 2008, cited in Carrington, 2010). Investigating long term identity is beyond the realms of this research, however the findings reveal that the PLLs sense of socially located identity was influenced by the observed impacts of their coaching practice in facilitating dialogue in an environment of trust.

5.2.4.1 Trust and facilitating dialogue

This research reinforced the view that facilitating reflective dialogue is difficult and risky (Brown & Issacs, 1996; Cassidy et al., 2008; Nelson et al., 2010; Robinson et al., 2009). Much more complex than theoretical knowledge of questions and strategies, it was clearly a dynamic on-going learning process which shaped a strong sense of socially located identity. The importance of recognising the risks and overcoming the difficulties was crucial for dialogue to be foundational process for learning.

Creating an environment where assumptions about teaching and learning could be challenged while maintaining relationships of high trust and safety was acknowledged as a challenge by the PLLs. Kennedy (2011), Robertson (2008) and Robinson et al. (2009) agree that dialogue allows teachers to share and confront the challenges of teaching and learning and it is the responsibility of the leaders to provide that opportunity. The PLLs agreed that these [TIG] meetings were important for their [teachers] change, their inquiry (Kim), however tensions were real in helping others to "keep their dreams whole while cultivating an awareness of the current reality around them" (Senge, 1990; p. 59).

Sustained learning and change comes from collegial conversations which are skilfully expedited (Garmston & Wellmann, 1998). Contrary to initial beliefs, the PLLs changed their practice from *not asking the questions that need to be asked because I don't want people to take it personally, and I have found they don't, because the question is not about them, it is a professional conversation (Pat).* Teacher survey data supported the value of focused questioning for open dialogue. Earl and Timperley (2009) and Robinson et al. (2009) verify that respect for perspectives is shown through questioning that promotes reflection and clarity of viewpoints. I contend that deep dialogue occurred in these groups because of the diversity of perspectives coupled with a developed sense of socially located identity of the coaches.

Challenging other viewpoints was found to be difficult in this research. Earl and Timperley (2009) assert that respect for learning is shown through challenging rather than assimilating viewpoints. Deep collaborative inquiry occurs in dialogue where perspectives and beliefs of everyone can be shared and questioned. Cassidy et al. (2008) suggest that trustworthiness is established where individual perspectives are respected. It was discovered in this study that dialogue of this nature occurs when the coach can refrain from looking for the opportunity to correct people's perspectives based on their own opinions or intended outcome. Facilitating respectful dialogue is underpinned by a belief that everyone can learn through conversations where assumptions and viewpoints are challenged.

Initially the PLLs deliberately used case studies that *made them* [teachers] feel safe ...they could still reflect on their own practice while talking about other teachers they didn't know (Lee). However safety can be confused with comfort (Garmston & Wellman, 1998; Earl & Timperley, 2009). In a comfortable environment cognitive dissonance is not created, compromising new learning because beliefs are not shaken (Mason, 2002). Mason (2002) and Festinger (1957) both acknowledge that cognitive disturbances can have either a positive or negative effect. The PLLs noticed that at times, they were deliberately agreeing with everyone's contributions because of their conceived possibility of a negative effect. They began to wonder if people were being taken out of their comfort zone or not, which Palmer (2006) claims can heighten the ability to learn. All the teachers felt they were in a climate of safety and encouragement where we could talk freely about our successes, problems and dreams and develop realistic expectations (teacher quote). I suggest that a question has been raised as to whether the dialogue was one of sharing or challenge. I contend that a safe environment is different to an environment of trust, where beliefs are interrogated and incongruences in theories and practice explored.

Learning for co-creation of knowledge opens practice up to be vulnerable as people engage emotionally with the learning process. A teacher survey quote revealed that open sharing of their successes and challenges and questioning for clarity and understanding by the PLLs within the teacher groups was a key factor in creating an environment where everyone could be vulnerable in their learning and practice. This confirms the view that vulnerability is positive and purposeful for learning rather than a weakness of character or practice (Ackerman & Maslin-Ostrowski, 2004; Kennedy et al., 2011; Robinson et al., 2009). Building relationships with the approach that everyone is learning together develops a risk taking culture and is crucial if all participants are going to open up in collaborative inquiry. Consideration needs to be given to how vulnerability might be conceived. In communities of low relational trust this could be viewed as incompetence and the leaders may then not be viewed as trustworthy.

Relational trust within these groups was acknowledged by the teachers which they attributed to the facilitation of the meetings by the PLLs. This suggests that the leaders were considered to be trustworthy and competent in their role supporting the idea that teachers will rely on and trust the leader's competence (Robinson et al., 2009) when they accept the potential of their role (Knuth & Banks, 2006). In another view building trust is promoted as a joint responsibility. Trust is built as colleagues participate and act together as agents for change and improvement (Champion, 2007; Earl & Katz, 2006; Houston et al., 2008; Nelson et al., 2010; Smith, 2001; Tinsley & Lebak, 2009;). I suggest that this was occurring in the TIG meetings based on the teacher data claim that they *enjoyed the openness of the dialogue* (teacher quote).

Within the TIG meetings, evidence of teacher's own practice was shared by some teachers in the meetings. Other examples of teacher practice in wonderful handouts and power points/video clips that were directly targeted at teacher action inquiry (teacher quote), were used to promote reflective dialogue. Earl and Timperley (2009), state that the process of interpreting evidence is the basis of a learning conversation. In learning conversations the notions of evidence-based practice and inquiry practice are brought together in a community approach (Cochran-Smith, 2009). In the process of examining evidence, different perspectives surface, possible flaws are located and the gradual changes to cognitive frameworks are supported. This was confirmed in the use of audio-taped evidence of practice in the PLLs group and teacher practice observation data which was very powerful as straight away there were things that stood out to me, that I needed to work on (teacher quote). Without examples of practice the PLLs said it was difficult to promote dialogue for reflection. However the question still remains as to what the potential of action from dialogue is when using evidence of one's own practice or examples from professional resources.

The PLLs deliberately used strategies to facilitate equal participation in dialogue. Terehoff (2002) suggests that in heterogeneous groups input from all teachers is required. The PLLs believed that it was important for each member to interact as a listener and speaker and saw it as their

responsibility to *try and get teachers to ask some questions too and do some listening* (Lee). This implies a belief in shared followership where people can influence each other. Timperley and Earl (2009) stress that participation should not focus on equal airtime but on challenging viewpoints and unearthing the reasoning that informs them. The discovery that dialogue did not occur in one instance when only two people were present suggests that common practice and underpinning belief was equal sharing. In considering this literature and research findings it can be concluded that participation by everyone as skilled questioners and listeners is crucial, especially for the purpose of developing a culture of inquiry. Improved critical questioning for reflection was acknowledged by the teachers which suggests that facilitation of participation in dialogue and probing questioning by the PLLs had supported this skill development.

Structured activities were used as protocols to involve everyone in the dialogue. According to Norman, Golian & Hooker (2005) the use of protocols such as structured activities can create the conditions needed for trust, safety and shared responsibility for everyone's learning. However Little and Curry (2009) suggest that limitations include a focus on the protocol rather than the dialogue. It is important for leaders to combine the idea of leading activities and recognising that developmental change is promoted through having people with different kinds of knowledge and ability engaging jointly. The findings in this research support the notions that protocols "may have restricted dialogue with too much structure".

This discussion highlights the claim that facilitating dialogue is difficult. A sense of socially located identity was developed through exploring coaching practice in a social environment. Creating an environment of trust involves being vulnerable in practice and learning. It means respecting different perspectives by opening them up for examination. Recognising what is occurring in a group as the situation unfolds and responding appropriately requires an understanding of possible influences and actions in an environment of mutual respect and trust. Knowledge of coaching theories and strategies which were explored in context was crucial for facilitation of reflective dialogue and contributed to a greater

sense of socially located identity. Socio-cultural activity theory reinforces the belief that learning and development occurs through authentic practice and experience with others, implicating the importance of one's sense of socially located identity. As Sly (2006) states mutual respect, trust and influence are key factors that support the development of middle leadership and this research has shown that in such an environment the PLLs with the support of a researcher/coach, improved their coaching practice and developed their sense of identity

5.4 Limitations of this Study

The short time frame for this action research study as a three paper thesis naturally led to some time limitations. The end of the exploration stage was determined by time rather than by completion of activity. However it was acknowledged that inquiry is an on-going activity that continuously opens up learning opportunities and questions. Further opportunity to develop new learning from this research is desired. The PLLs agreed that it is their responsibility to continue with learning and application of new learning. They believed they would be supported at school.

Confidence to challenge others beliefs, as a coach in the role of promoting reflective practice, was just beginning to develop. With more time this confidence would have built. It was evident that it takes time and deliberate inquiry to build awareness of one's practice and the influencing factors before change can take place.

There was limited use in the TIG meetings of teacher practice evidence for inquiry. Without this evidence it is difficult to promote exploration of the differences between theories-in-action and espoused theories. This was confirmed by the PLLs acknowledgement that the audio-taped data they collected was valuable for reflecting on their practice and exploring these differences.

The links between building leadership capacity, in particular coaching to promote teaching practice inquiry, and student outcomes has not been investigated in this research project. The research was conducted in the

belief that professional learning that improves teaching practice will have positive outcomes for students.

5.5 Recommendations for Further Study

In this study it was acknowledged that vulnerability on the part of the PLLs as group leaders opened up dialogue in the teacher group meetings. It would be interesting to explore what experiences and situational factors influence the view that vulnerability is positive for learning?

In collaborative inquiry all participants must be able to act in the role of promoter of reflective practice. Understanding this role to support and challenge colleagues may be developed in professional learning groups where teacher leadership emerges. There was some scope and incidental evidence in this study that teacher leadership practice in coaching was emerging. The question raised for further study is how does collaborative inquiry build teacher leadership practice?

According to Robinson et al. (2009) the leadership dimension that makes the greatest difference to student outcomes is participation in and promotion of teacher learning by school leaders. This report has presented the argument that the potential of collaborative inquiry for building leadership capacity and teacher professional learning is significant. Lambert (2003) suggests that a school principal's authority is used to facilitate building leadership capacity and middle leaders' authority is used to facilitate professional learning. The role of a school principal in relation to teacher collaborative inquiry facilitated by middle leaders, from the perspective of school principals, is an area for further study.

Coaching teachers in teaching practice inquiry was the context for this study. However the development of teaching inquiry practice through collaborative inquiry was not investigated in this study. This is an area for further study in the interest of understanding and enacting professional learning that is sustainable and makes a difference to student outcomes.

5.6 Conclusion

The research aim to study the development of coaching practice of three professional learning leaders through collaborative was achieved. Reflection and systematic inquiry into coaching practice for action and change was stimulated and guided in a group with colleagues and researcher/coach. The study occurred within the context of supporting teachers to inquire into their teaching practice and showed some shifts in teachers' knowledge, skills and dispositions for inquiry. The research question has been answered from a position that leadership development and learning coaching in a professional learning environment of collaborative inquiry has positive impacts for everyone involved.

A model (Figure 3) has been developed to illustrate the process of deliberate, structured opportunities for collaboration, challenge and support where cyclical, authentic learning occurred in an environment of trust.

Collaboration Challenge Identity

Coaching practice

Authentic

Figure 5.2: Development of coaching practice and identity through collaborative inquiry

The PLLs examined and explored their espoused theories and theories-inuse of coaching practice. Their sense of professional and socially located identity was shaken and shaped. They discovered that the support of their

Support

Cvclical

colleagues and a researcher/coach was crucial. In an environment of trust they could explore their anxieties about providing both a supportive and challenging learning opportunity for the teachers in their groups. This was found to be difficult because they are caring people on a mission to provide the best learning opportunities and outcomes for teachers and students. The research shows that personal learning in aspects of emotional understanding and identity strengthened interdependently with improved facilitation skills of dialogue in an environment of trust. Sense of identity strengthened with a deepened understanding that coaching and leadership is guided by a focus on practice from a neutral stance. This diminished the fear and anxiety associated with challenging their teacher colleagues to critically inquire into their beliefs and practice. Inquiring into and improving their coaching practice contributed to the teachers' development in teaching practice inquiry. The development of the dispositions of a skilled critical inquirer was recognized by most teachers as occurring to a greater extent than increased skills or knowledge.

The benefits of collaborative inquiry for the examination and exploration of coaching practice by school middle leaders in an authentic situation were discovered to be significant. The PLLs experienced cognitive dissonance and identity learning in this context which resulted in changes to their beliefs and practice. These changes have the potential and rigour to promote further growth in leadership practice and teacher professional learning through collaborative inquiry.

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APPENDICES¹

<u>Permission from Principal and Board of Trustees</u> Sue Bewley Appendix A

To the Principal and Board of Trustees (Name of School) Rotorua

I am writing for permission to invite leaders in your school to participate in a Master of Education research project.

My name is Sue Bewley and I am currently on study leave to complete a Master of Education degree through the University of Waikato. My proposal to conduct a research thesis has been accepted by the University of Waikato and my application has been approved by the University's Ethics Committee. My research focus is on how school leaders can coach classroom teachers to be skilled, critical inquirers. Teachers are required to use critical inquiry, based on professional literature, with members of their learning community to refine their practice and raise student achievement (see Ministry of Education, 2007; NZTC, 2010). External evaluations have shown that teachers need a great deal more assistance in developing the skills to collect, interpret and use evidence about the link between their teaching and the learning of their students (Education Review Office, 2009. Robinson, 2003). In the past I have worked with teachers and professional learning leaders in the inquiry process and have facilitated some professional learning for leaders in coaching methods. This research is an opportunity for me, with school leaders, to closely explore leadership practices that influence teachers to be skilled critical inquirers.

I would appreciate it if I could work with one/two/three leaders in your school over a period of ten school weeks from May until August (see attached timeline). This will mean five group meetings with me. They will also facilitate four collaborative inquiry sessions with a group of three teachers each. Workload considerations and accommodations can be key factors influencing decisions to participate. I believe that this research will have a positive impact on the professional practice of the participants and so would appreciate the opportunity to negotiate with you how this research could be scheduled into your professional learning and development programme. The potential participants are more likely to agree to participate time constraints are not too great. All the teachers will be involved in completing a questionnaire at the end of all other data collection and research action in the school.

Enclosed is a copy of the timeline and the participant information sheet for this project. After reading this information, if you wish to grant me permission to invite leaders at your school, please contact me either by email or phone. If you have any questions please contact me or my research supervisor Bill Ussher by email or phone (contact details below).

Sue Bewley Ph 07 3484104

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supervisor - Bill Ussher, Senior Lecturer, faculty of education, University of

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Appendices have been re-formatted to use less space in this publication.

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Participant Information Sheet—Principals, School leaders, Teachers

Master of Education Research: Exploring how school leaders can coach teachers to be skilled, critical inquirers.

I am planning to conduct an Action Research project into how school leaders can coach teachers as skilled critical inquirers. In this research I propose to work with three middle school leaders who will be known as Professional Learning Leaders (PLLs) who will coach three teachers in a group to be skilled critical inquirers.

For the PLLs this would mean five fortnightly group meetings with me to plan and review the actions and impacts of their practice in coaching skilled, critical inquiry. They will facilitate four collaborative inquiry group sessions with a group of three teachers each and audio-tape these sessions. They will be provided with a template to make notes from the teacher sessions (appendix F). These meetings will be part of the structure and expectations of the professional learning at school and so would not add too much to your workload.

Teachers will participate in four teaching practice inquiry group (TIG) meetings at fortnightly intervals. These meetings will be audio-taped and stored electronically. At the end of the research, in August, the teachers will complete a structured questionnaire. This questionnaire will be accessed and submitted electronically.

The proposed research project would be carried out under the following conditions and guarantees.

All information will be treated with the strictest confidentiality. All data analysis, transcriptions and audio-tapes will be retained as research data and stored in a secure manner.

Participants will keep information from group discussions confidential. Participants will have the opportunity to verify transcribed data throughout the research process.

To maintain trust and integrity the professional learning leaders will be part of the planning and review of the actions for research along the way. Participants will have the opportunity to discuss any perceived conflicts of interest.

No harm will be done to any participant during group sessions and they will be conducted in an open and respectful manner.

All participants have the right to withdraw at any stage of the research on the understanding that data gathered up to that point will be used in the research.

I will make a brief presentation to the staff and Board of Trustees at the completion of the project.

The research will be owned by the University of Waikato only and protected by the Copyright Act 1994. An electronic copy of the thesis will become widely available, as the University of Waikato requires that a digital copy of a Master of Education thesis will be lodged permanently in the University's digital repository: Research Commons.

Timeline for participant involvement

Term 2: Weeks 1-2	Engage participants and gain informed consent
Term 2: Week 3 or 4	First Professional learning leaders meeting and then
	four more fortnightly meetings
	(dates and times to be negotiated)
	(dates and times to be negotiated)
Term 2 Week 4 or 5	First Teaching practice inquiry Group meeting and
	then three fortnightly meetings
	(dates and times to be negotiated)
End of meeting phase	Teacher questionnaire
(end of term 2 or	
beginning term 3)	
Term four	Presentation to participants
(date to be negotiated)	

To the school leader

My name is Sue Bewley and I am currently on study leave to complete a Master of Education degree through the University of Waikato. My proposal to conduct a research thesis has been accepted by the University of Waikato and my application has been approved by the University's Ethics Committee. I am writing to invite you as a school leader to participate in a Master of Education research project. I have been granted permission by your Principal and Board of Trustees to invite you as a participant in this research. My research focus is on how school leaders can coach classroom teachers to be skilled, critical inquirers. Teachers are required to use critical inquiry, based on professional literature, with members of their learning community to refine their practice and raise student achievement (see Ministry of Education, 2007; NZTC, 2010). External evaluations have shown that teachers need a great deal more assistance in developing the skills to collect, interpret and use evidence about the link between their teaching and the learning of their students (Education Review Office, 2009; Robinson, 2003). In the past I have worked with teachers and professional learning leaders in the inquiry process and have facilitated some professional learning for leaders in coaching methods. This research is an opportunity for you as a participant researcher to explore leadership practices that influence teachers to be skilled critical inquirers in an Action Research project with me as the lead researcher. I believe that this research could have a positive impact on your professional learning.

In order to conduct this research I would appreciate the opportunity to work with you as a group member of three leaders, from May till August. See the attached timeline and participant information sheet.

After reading this information, if you wish to accept this invitation please sign and return the consent form to me. If you have any questions please contact me or my research supervisor Bill Ussher by email or phone (contact details below). Sue Bewley

Ph 07 3484104 Mobile: 0277751194

Email: bewley.sue@gmail.com

supervisor - Bill Ussher, Senior Lecturer, faculty of education, University of Waikato, ph 07 8384534 mob 0274869169 email bussher@waikato.ac.nz

School Leaders Informed Consent Form

Masters Research on how school leaders can coach teachers to be skilled, critical inquirers.

I have read and understand the information provided on this research.

I am willing/not willing (delete one) to participate.

I consent to the leader group and teacher group sessions being audio-taped:

Yes / No (delete one

Please return to: Sue Bewley

res / No (delete one		
Date:		
Professional learning leader name:	 	
Signature:		
Lead researcher name:	_	
Signature:	-	

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Sue Bewley

To the Teachers

My name is Sue Bewley and I am currently on study leave to complete a Master of Education degree through the University of Waikato. My proposal to conduct a research thesis has been accepted by the University of Waikato and my application has been approved by the University's Ethics Committee.

I have received informed consent from the Principal and Board of Trustees to conduct an Action Research project in this school. The focus group will be professional learning leaders who will coach teachers in groups of three. I would appreciate your consent to be involved in this research. See the attached timeline and participant information sheet. The research will follow an Action Research methodology and because all teachers in the school are being invited to participate I believe there will be professional learning and development benefits for all involved. Enclosed is a copy of a consent form, the timeline and the participant information sheet for this research. After reading this information, if you wish to accept this invitation please sign and return the consent form to me. If you have any questions please contact me or my research supervisor Bill Ussher by email or phone (contact details below). Thank you for considering this invitation

Sue Bewley Ph 07 3484104 Mobile: 0277751194

Sue Bewley

Email: bewley.sue@gmail.com

Supervisor - Bill Ussher, Senior Lecturer, faculty of education, University of Waikato, ph 07 8384534 mob 0274869169 email bussher@waikato.ac.n

Teacher informed consent form

Masters Research focusing on school leaders coaching teachers in collaborative inquiry.

I have read and understand the information provided on this research. I am willing / not willing (delete one)to participate.

I consent to the teacher group sessions being audio taped: Yes / No (delete one)

I agree to complete a questionnaire at the end of the research in term three: Yes / No (delete one)

Thanks `	,
Date:	
Teacher name:	
Signature:	
_ead researcher name:	
Signature:	

Group interview with Professional Learning Leaders.

Appendix E

Guiding questions	(Main categories)	Prompts
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The planned outcome for the last teaching practice inquiry group session was to_____. What did you deliberately do to achieve this? Can you give an example/s?

What did you notice happening? (Evidence of leaders' actions and impacts)

What did you need to know and do in your role for this session? (Leaders Skills and knowledge)

What evidence is there in this session of teachers being skilled critical inquirers? (Indicators of skilled critical inquiry)

Do you think you could have facilitated this session differently? Tell me about this. (Leaders Skills, knowledge and dispositions)

Possible verbal prompts. Possible non-verbal prompts

Tell me more Raised eyebrow

Can you think of an example Wait time for response

Does that happen all the time?

Really!

I don't understand

Session (please circle) 1 2 3 4 Date: Leaders name:

Session goal:			
What did you	Why did you	What did you	Refection for
deliberately do?	do that?	notice?	Action

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To the teachers

Thanks for agreeing to complete this questionnaire for my research. This data will be used alongside other data that I have collected in this research. Your responses will help to enrich the interpretations of all the data and enable me to therefore produce a more descriptive final report of what has occurred in this Action Research project. No participant will be named or identifiable in the use of this data or in the final thesis.

There are only four open questions in the survey that require you to write an answer. I really appreciate the time you put into answering these as it is sometimes difficult to really find out what people would like to say in short answer questions. Your honesty is much appreciated and I do ask that you answer all questions in relation to your experience in this particular research project. All the other questions are short answer and require you to make a choice that is closest to what you think.

Thanks again. Your participation in this questionnaire and the entire research project is valued by me and I hope that it has been of some benefit to you. Sue Bewley

- Teachers who are skilled critical inquirers need a solid base of expert skills. To what extent, do you think, you have developed these skills through your group leaders' strategies and actions? Great extent. Some extent. Slight extent. Not at all
- Planning the focus for your inquiry based on analysed and interpreted data.
- Gathering and using student learning and achievement data.
- Focusing on diverse needs of students
- Drawing guidance and assistance from a range of sources. This might include talking with colleagues, readings, observations of teacher practice.
- Developing and trying out different teaching strategies.
- Assessing the extent to which your strategies or actions have made a difference.
- Interpreting evidence about the links between your teaching and the students learning.
- Keeping notes.
- Interrogating assumptions and beliefs about learning that practice is based on.
- Recognising colleagues triumphs and offering empathy and support for their troubles.
- Being comfortable sharing your successes and failures.
- Delaying action and probing further
- Asking critical questions that cause reflection.
- Considering different explanations as a resource for learning better ways
 of thinking about it and resolving a problem.
- The focus for this research project has been on exploring how leaders can coach teachers to be skilled critical inquirers. Please comment on how you think your group leaders practice has impacted on your critical inquiry skills, as in question one. You might comment on:

What they did?

What happened in your group that was facilitated by them?

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² This questionnaire was created and accessed in an electronic format

- 3. Collaborative reflective dialogue is a crucial component of being a skilled, critical inquirer. To what extent do you think you have developed these skills of collaborative, reflective dialogue through your leaders coaching actions?
 - Great extent. Some extent. Slight extent. Not at all
- Supporting and reassuring your colleagues:
- Sharing readings and literature.
- Suspending bias
- Drawing on your own experiences.
- Talking about theoretical frameworks learned from previous study.
- Self-evaluating and making links between new ideas into your own practices by using available resources.
- Sharing video evidence of your teaching practice with colleagues and discussing them openly.
- Helping colleagues to refine their inquiry focus and action plan.
- 4. Please comment on what you think your group leader did to coach you in the skills of collaborative, reflective dialogue and the impacts it had on you
- Teachers who are skilled critical inquirers have a sound base of expert knowledge. To what extent have you developed your expert knowledge through your group leaders' strategies and actions.
 Great extent. Some extent. Slight extent. Not at all
- The art of "Teaching as Inquiry"
- Models and process of inquiry
- The contradictions between your personal beliefs and dominant and wider beliefs
- Research and literature in the focus of your inquiry.
- Pedagogy—the art and science of learning.
- The pedagogical content of the learning area which is the focus for your inquiry. e.g. oral language and how children learn this
- Theory learned from previous study which you draw on
- 6. How do you think the leaders practice has impacted on your areas of knowledge as identified in the previous question?
- 7. Teachers who are skilled, critical inquirers develop and demonstrate certain dispositions. To what extent have you developed the following dispositions?

Great extent. Some extent. Slight extent. Not at all

- A learner
- A Critical thinker
- Trustworthy
- Supportive
- Deliberate and focused
- Self-regulating i.e. ask and answer Where am I going? How am I going?
 Where to next?
- Deeply committed to the discovery and analysis of positive and negative information
- Adaptive
- Agentic i.e. taking control of your own learning and improvement
- 8. How do you think the leaders practice has impacted on the development of above mentioned dispositions for you?

Appendix H

Action Plan (PLL): On-going analysis of content and emerging themes.

PLANNING			REVIEW
Date	Goal	Planned	Observed actual outcome
	What do we	strategies	and evidence?
	want to achieve		(supported by verified,
	between now	How will we	audiotaped teacher groups
	and next	achieve that?	sessions)
	meeting?		Did we achieve/not achieve
			our goal?
			How did we achieve it?
			How do we know? What did
			we notice?

PLL Meetings Summary Form—Analysis of transcripts

Appendix I

Date	Content	Categories	Emerging themes
Time/Duration Place	Details/Units of information	Leadership Coaching Skilled critical inquiry	

Action Plan Summary Form—Analysis of emerging themes Appendix J

Date	Content	Categories	Emerging themes
Time/Duration Place	Details/Units of information	Leadership Coaching Skilled critical inquiry	