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TRANSFORMATIVE PRACTICE IN TEACHING

**How experienced teachers explain
the profound transformative influences
on their teaching practice.**

A thesis
submitted in partial fulfillment
of the requirements for the degree
of

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ABSTRACT

The social transformation represented by a shift from the industrial economy to the knowledge economy presents a challenge to the education sector. That challenge is to provide high-quality teaching that results in improved outcomes for students who are developing the habit of continuous learning. A challenge such as this may be met by teachers transforming their teaching practice.

This small-scale qualitative research project seeks an understanding of and insight into those factors which influence transformative practice for experienced teachers. It uses semi-structured interviews to gather the perspectives of seven experienced teachers and explores the themes derived from their stories of transformative practice in relation to themes derived from the literature. The literature reveals four significant dimensions of influence on transformative practice: professional development, individual factors, school factors, and an emerging theme of communities of practice.

The research findings confirm that experienced teachers' perceptions of the profound transformative influences on their teaching practice are consistent with some of the literature. These congruencies include teachers working individually or collaboratively on problems of practice using a process of trial and error experimentation, and where workplace conditions support risk-taking and promote ownership of learning. The findings confirm that transformative practice is driven by powerful emotions that connect teachers to the learning needs of their students, and is sustained by intrinsic rewards.

The research findings reveal two significant areas of divergence. The literature identifies the need for depth and breadth of content knowledge and assessment knowledge, and for critical reflection on the effectiveness of transformative teaching practices on student outcomes, neither of which were identified by participants as factors which influenced transformative practice. This indicated that teachers were unlikely to be developing local knowledge-of-practice, a

necessary prerequisite for linking the purpose of transformative practice with its goal – to improve outcomes for students.

Drawing on the understandings of, and insights into, transformative practice, this research presents a diagrammatic representation of a framework to illustrate the transformative influences on teaching practice. It also presents a knowledge-building learning cycle as a diagrammatic representation of the process required to generate knowledge-of-practice.

This research project includes recommendations suggesting that teachers develop a rich understanding of the concept of knowledge-of-practice and embed this practice in their daily work. It recommends that the knowledge-building learning cycle is facilitated by leaders of learning who have the skills to activate teacher learning, and that during the knowledge-building learning cycle, teachers develop depth and breadth of content knowledge and assessment knowledge. It recommends that leaders of learning guard against transformative practice becoming an end in itself, and suggests that utilizing the knowledge-building learning cycle could lead to a new form of professionalism that is continuous and sustainable. This study proposes that by acting on these recommendations, leaders of learning may enhance their ability to influence transformative teaching practice where students receive high-quality teaching which simultaneously achieves improved outcomes for students.

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1 CHAPTER ONE INTRODUCTION

1.1 Background

As the 20th century drew to a close, the age of social transformation was in its infancy (Drucker, 1994). This transformation represents a shift from an industrial economy to a knowledge economy, marked by the emergence of a new group of workers performing a new kind of work. ‘Knowledge workers’ were replacing the formerly dominant group of ‘manufacturing workers’ and the new work they were doing required a new form of preparation. Knowledge workers require “a good deal of formal education and the ability to acquire and to apply theoretical and analytical knowledge. They require a different approach to work and a different mindset. Above all, they require a habit of continuous learning” (Drucker, 1994, p. 62). A social transformation on the scale described, demands a different mindset and presents education with a major challenge – the challenge to adequately prepare 21st century students for participation in a more complex society (Hargreaves, 2003b).

New Zealand has responded in part to this challenge by producing a national curriculum that has “as its starting point a vision of our young people as lifelong learners who are confident and creative, connected, and actively involved” (Ministry of Education, 2008a, p. 4). This identifies a broad goal of education compatible with the expectations of a worker prepared for the workforce of a knowledge economy. In achieving this goal, Karen Sewell, Secretary for Education, signals that “the challenge now is to build on this framework, offering our young people the most effective and engaging teaching possible and supporting them to achieve to the highest of standards” (Ministry of Education, 2008a, p. 4). For many experienced teachers currently in the workforce, this expectation has profound implications. With 62% of primary teachers aged 40 years or older (Ministry of Education, 2008b), the majority of teachers in classrooms today are likely to be workers raised in the industrial economy who have only ever themselves experienced learning from a style of teaching suited to the industrial economy – the transmission model of teaching, with a focus on

developing production-line skills based on technical accuracy. Their “apprenticeship-of-observation” (Lortie, 1975, p. 65) will have prepared them for a traditional style of teaching.

In an age of social transformation, with change its constant companion, a static one-size-fits-all education born of the industrial economy with a focus on technical accuracy is unlikely to be appropriate for a knowledge economy with its hallmarks of diversity, complexity, uncertainty and innovation. “A knowledge economy runs not on machine power but on brain power – the power to think, learn and innovate” (Hargreaves, 2003a, p. 181). Education must reflect these demands by producing knowledge workers who are able to continuously create and innovatively apply new knowledge. If life-long learning and ingenuity is the currency of the knowledge economy, teachers will need to transform their teaching practice from that designed for the linear certainty of the industrial economy to a style more suited to the “non-linear chaotic world” (Collarbone, 2003, p. 378) associated with the knowledge economy.

1.2 Transforming Teaching Practice

In teaching, professional development is a critical vehicle for change and perhaps the most likely agent for transforming practice. The ultimate goal of professional development is high-quality teaching accompanied by high-quality outcomes for students. This goal resonates with Karen Sewell’s challenge. Changing teachers’ practice is a complex and demanding endeavour as evident in the themes conveyed by the breadth of literature on teacher professional development and change, and the diversity of views this literature represents. There is some literature to suggest that teachers have historically been resistant to change (McLaughlin, 1987; Putman & Borko, 2000; Richardson, 1990; Sarason, 1990) and that professional development has failed to make a meaningful difference to teachers’ work (Fullan, 2007b; Goldenberg, 1991; Hartle & Hobby, 2003; Hawley & Valli, 1999; Sykes, 1999). There is some literature to suggest that although teachers continuously change their practice, the changes they make are superficial, ineffective and are neither enduring nor sustainable (Ball & Cohen, 1999; Elmore,

2000; Guskey, 1991; Showers, Joyce, & Bennett, 1987). There is also a body of literature that suggests a great deal is known about what constitutes the high-quality professional development that transforms teaching practice and impacts positively on student learning (Darling-Hammond, 1998; Darling-Hammond & McLaughlin, 1995; Darling-Hammond & Richardson, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Goldenberg, 1991; Guskey, 1986, 1994, 2003, 2005, 2006; Guskey & Sparks, 1996; Hawley & Valli, 1999; Holloway, 2006; Knapp, 2003; Lieberman, 1995; Loucks-Horsley & Matsumoto, 1999; Loucks-Horsley, Styles, & Hewson, 1996; McLaughlin, 1991; Mundry, 2005b; Mundry & Loucks-Horsley, 1999; Timperley, Wilson, Barrar, & Fung, 2007). While much is known about the characteristics of effective professional development, authors claiming this are not necessarily in agreement with each other (Guskey & Sparks, 1996). This broad and sometimes divergent literary landscape makes transformative practice for teachers a complex area of pursuit.

1.3 Researcher Orientation

I am an experienced teacher and the principal of a primary school. I have worked in education for nearly three decades and am myself a product of an education steeped in the one-size-fits-all system befitting of the industrial model. I was enormously grateful to one of my primary teachers who saw fit to allow me movement outside the boundaries of a linear system and to stretch beyond the confines of an educational strait-jacket. This teacher was comfortable with the uncertainty this approach encouraged, and welcomed the chaos resulting from the messiness of student-centred learning. This innovative teacher ignited my interest in teaching as a profession, and my passion for learning has fueled it ever since.

This early learning experience confirmed my own aspirations in education that every child experiences the pleasure of learning from the rich opportunities that emerge from creative and innovative learning environments. I was keen for the students in my own class to be stimulated by boundless learning opportunities that would expand their thinking in creative and innovative ways, and to achieve highly. As a principal, the goal has not changed. It has simply moved from one of

direct influence on student learning to one of indirect influence (Southworth, 2005). I aspire to the practice of learning-centred leadership (Collarbone, 2003; Fullan, 2003; Southworth, 1998; Stoll & Bolam, 2005; Stoll, Fink, & Earl, 2003), and to indirectly influencing the learning of students in my school by directly influencing teaching practice. This raises a question about those influences that are effective in transforming experienced teachers' practice, and provides the stimulus for this research.

Anecdotal evidence, gleaned from the breadth of my own experience in schools, confirms my hunch that while teachers enjoy professional development opportunities and return from them refreshed and inspired, little in the classroom changes as a consequence. While this view is consistent with some of the literature, it contrasts with other areas of the literature and serves to increase my curiosity about factors which have a profound transformative influence on teaching practice. In view of the age of social transformation and in light of the demographics of the teaching population, this investigation seems timely. I am hopeful that completion of this research project will greatly inform my own contribution to developing a school in which students develop 'brain power' as a consequence of high-quality teaching that produces improved outcomes for diverse students.

The question this research inquiry asks is "How do experienced teachers explain the profound transformative influences on their teaching practice?" It is hoped that the findings of this research inquiry, together with the recommendations that emerge, will inform the future practice of leaders of learning in all schools.

2 CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the literature around change in teaching practice. Multiple factors influence teachers' classroom practice to engender transformative change, therefore a review of the literature will be divided into four sections. The first section examines the literature on professional development and its relationship to change in teaching practice. The second section takes a humanistic perspective and examines the literature suggesting that factors associated with the individual teacher and their personal development influence teacher change. The third section examines school factors linked to the context within which teachers work as being influential in teacher change. In the final section, emerging themes of communities of practice will be explored as factors that influence change. These are relevant in today's educational climate that expects change in teaching practice to achieve improved student outcomes.

2.2 Professional Development as a Factor Influencing Change

The goal of professional development is to promote teacher learning that will lead to improved teacher practice, and the ultimate goal of improved teacher practice is to improve student outcomes. Guskey (2005) argues that "powerful professional development consists of highly effective professional learning experiences that accomplish their specified purpose: to significantly improve the capacity of educators to help all students learn at high levels" (p. 38).

A review of the literature suggests three approaches to examining highly effective professional development learning experiences. One approach is to examine the different types or models of professional development. A second approach is to consider the principles that are associated with effective professional development. A third approach is to examine the three characteristics of high-

quality professional development – content characteristics, process variables, and context characteristics.

2.3 Models of Professional Development

Staff development, according to Sparks and Loucks-Horsley (1996), is a process for improving the job-related knowledge, skills and attitudes of teachers with the purpose of improving student learning through enhanced teacher performance. They argue it can be acquired in different ways according to five different models. The *Individually Guided Model* describes a process of teachers learning on their own, both formally and informally, through professional reading, by engaging in discussions with colleagues, or by experimenting with their teaching practice. A key feature of this model is that teachers design their own learning by determining a goal and selecting appropriate activities to achieve that goal. The *Observation/Assessment Model* is dependent upon teachers being observed in class and receiving feedback about their performance. One form of this model is peer coaching. The *Development/Improvement Process Model* fosters teacher learning when teachers adapt programmes or curriculum designs and engage in school improvement processes. A key feature of this model is that the learning process typically originates from a work-specific problem and, through the solution-seeking process, opportunities for learning, sometimes through trial and error, are experienced. The *Training Model*, possibly the most familiar to teachers, is characterised by an expert presenter who provides training according to a specific set of outcomes which may be knowledge or skill based. This model is most effective, according to Joyce and Showers (1988), when it follows a format of exploration of theory, demonstration or modeling of the skill, practice of the skill under simulated conditions, feedback about the performance, and follow up coaching in the workplace. The *Inquiry Model* is based on the belief that teachers have the ability to formulate valid research questions, gather and analyse data in pursuit of objective answers to their questions, and utilise their findings to improve their classroom practice (Sparks & Loucks-Horsley, 1996).

An alternative set of models has been put forward by Sprinthall, Reiman and Thies-Sprinthall (1996) who identify three models. The *Craft Model* recognises the accumulated wisdom garnered from the dailiness of teachers' classroom experience as pedagogical knowledge, while acknowledging that it "stands or falls on the concept of learning how to extract new meaning from the 'rich' lode of experience" (Sprinthall et al., 1996, p. 678). They caution that unless teachers are able to learn from their experiences through the process of reflection, there is no guarantee that new learning will occur. The *Expert Model* is based on the assumption that a core of information and skills developed by experts and professional teacher educators will be delivered in short or long-term workshops. While the time frame is variable, the knowledge base forms the framework for the programme. The *Interactive Models* embrace a range of forms of professional development each focused on developing complex cognition through active participation in the learning process by the teacher. Examples of the interactive model include the teacher as a reflective practitioner, teacher as peer coach, and teacher as action researcher (Sprinthall et al., 1996).

While each of these models offers a structure for the delivery of professional development, Hawley and Valli (1999) contend that the quality of learning can vary markedly within them. They argue that many professional development programmes do not give sufficient attention to an important outcome of teacher learning – "consistent and appropriate use of newly acquired knowledge" (p. 136), as it is only by using this knowledge that improved student outcomes can be achieved. Hawley and Valli (1999) postulate eight design principles that are the key to effective professional development claiming that "professional development is more likely to result in substantive and lasting changes in the knowledge, skills, and behaviours of educators that strengthen student learning when it includes these characteristics" (p. 137).

2.4 Design Principles of Effective Professional Development

The design principles associated with effective professional development, identified by Hawley and Valli (1999), are based on their synthesis of proposals

made in reports issued at national level and from the conclusions of research reviews. They include the following eight elements:

- *Goals and Student Performance:* Professional development should be student-centered and driven by an analysis of the gap between the goals and standards of student learning and actual student performance.
- *Teacher Involvement:* Professional development should be learner-centred and promote active participation by the teacher-learner in the learning process by involving them in identifying their learning needs, planning their learning experiences, and designing the process to be used.
- *School Based:* Professional development should be school based and an integral part of the school's strategic development to promote learning that is meaningful and relevant to the immediate context of the teacher-learner, and form part of a cohesive plan of school improvement.
- *Collaborative Problem-Solving:* Professional development should provide learning opportunities that address individual needs while at the same time are based on collaborative problem solving methods that allow teachers to work together to identify causes and solutions to common problems of practice.
- *Continuous and Supported:* Professional development should be continuous and on-going, and supported by both internal and external experts to ensure further learning.
- *Information Rich:* Professional development should incorporate evaluation of multiple sources of information, including information about student outcomes as well as information about the implementation process of new teacher-learning. This should be conducted by teachers as well as external evaluators.
- *Theoretical Understanding:* Professional development should provide theoretical understandings of the practical knowledge and skills to be learned and used.
- *Part of a Comprehensive Change Process:* Professional development should be integral to a comprehensive change process that is cognizant of the accelerators and barriers to implementation of new practices that facilitate student learning (Hawley & Valli, 1999).

Based on these design principles, Hawley and Valli (1999) claimed a “new consensus” (p. 127) about the content, design and context of effective professional development. Concurring with the notion of a developing consensus on what constitutes effective professional development, Knapp (2003) and Supovitz and Turner (2000) identify six key elements that contribute to high-quality professional development. They contend that powerful professional learning experiences must: emphasise high learning standards and assist teachers to link student performance to the standards; be focused on subject-matter knowledge and deepen teachers’ pedagogical content skills; immerse participants in inquiry, questioning, and experimentation, thereby modelling inquiry forms of teaching; engage teachers in concrete teaching tasks based on teachers’ experiences with students that are school-based and directly related to their classroom work; be intensive, sustained over a longer period of time and connected to a coherent plan; and be connected to other aspects of school change as part of school improvement.

This developing consensus of effective professional development based on design principles is viewed from an alternative perspective by Guskey and Sparks (1996) who provide a framework for examining professional development. It is also utilized by Timperley et al. (2007), and is based on the characteristics of high-quality professional development. High-quality professional development, claim Guskey and Sparks (1996) and Timperley et al. (2007), is that which is linked to improved student outcomes. The framework includes content characteristics, process variables, and context characteristics, and will be used to examine the literature that relates to each characteristic.

2.5 Characteristics of High-Quality Professional Development

2.5.1 Content Characteristics

Content covers *what* is learned and is central to professional development experiences. Without content, there can be no basis for developing deeper understanding of, and skill in teaching, and therefore no foundation for change

(Timperley et al., 2007). Content covers four broad dimensions – content knowledge, the subject-matter of a particular curriculum area; pedagogical knowledge, the broad range of theory and skills relating to teaching and learning; pedagogical content knowledge, the combination of subject-specific content knowledge and subject-specific teaching and learning skills; and student knowledge, how students learn. The *Best Evidence Synthesis* (BES) of teacher professional learning and development (Timperley et al., 2007) found that opportunities to engage in professional learning about knowledge, especially where no one particular kind of knowledge was addressed in isolation from other kinds, had a substantial impact on student learning.

Mundry (2005a) confirms the importance of professional development that is focused on both content knowledge and pedagogical content knowledge, stating that “research evidence suggests that professional development that is most closely linked to improved student learning deepens teachers’ understanding of the content and how to teach it” (p. 11). Kennedy (1999) concurs that professional development that focuses on depth of content knowledge in a particular subject and understanding how students learn it has the greatest impact on student learning. Loucks-Horsley, Styles and Hewson (1996) argue that one of the defining characteristics of effective professional development for teachers is providing “opportunities to develop knowledge and skills to broaden their teaching approaches so they can create better learning opportunities for students” (p. 3). This confirms the impact on student learning of professional development for teachers in which content knowledge across the knowledge domains is the focus of teacher learning.

A study of the Eisenhower Professional Development Program (the U.S. federal government’s largest investment to support high-quality professional development in mathematics and science) by Porter, Garet, Desimone and Birman (2003) found that professional development with a focus on content increases teacher knowledge and skill which, in turn, influences change in teaching practices. Their longitudinal study over three years, based on teacher self-reporting of classroom practice in the first year, professional development in the second year, and classroom practice in the third year, found that teachers who report enhanced

knowledge and skills are also likely to report changing their teaching practice, thus suggesting a strong relationship between professional development with a content focus and change to teacher practice.

Borko (2004) adopts a situative perspective to locate evidence that professional development can have a positive impact on teacher learning. This perspective conceptualises learning as changes in participation in the social activity of teaching, as well as changes in an individual's use of knowledge as a result of their social construction of that knowledge. For teacher-learners, this translates as a process of increasing a teacher's participation in the practice of teaching and, as a result of that participation, becoming more knowledgeable in and about teaching. focusing on the individual teacher as the unit of analysis, Borko (2004) sought to determine whether a relationship exists between professional development and teacher learning. To explore this relationship, the extent of individual teacher change was examined in relation to the degree of teacher learning that occurred in regard to subject-matter, student thinking and instructional practices. The findings confirmed that teacher awareness and depth of knowledge had increased in each of the three areas and Borko (2004) concluded that "intensive professional development programmes can help teachers to increase their knowledge and change their instructional practices" (p. 5).

Professional development, claim Hawley and Valli (1999), should be student-centred and driven by goals that are determined through an analysis of the gap between school goals for student achievement and actual student achievement. Knapp (2003) concurs that powerful professional development should focus on high learning standards and on evidence of students achieving those standards. This signals a need to develop teachers' pedagogical knowledge about assessment and, in particular, the ability to identify what the learner currently understands, and what needs to be taught next. Timperley et al. (2007) found that developing a deep understanding of assessment, together with the skills to analyse and use assessment data, helps teachers view student learning as a function of teaching and use assessment information to improve their classroom practice.

The teaching-learning relationship is also influenced by teacher expectations of learners. High-quality professional development that challenges teachers' attitudes and beliefs about achievement goals for certain groups of students, such as ethnic minorities, students from low socio-economic backgrounds, and those with disabilities, can influence classroom practice (Bishop, Berryman, Tiakiwai, & Richardson, 2003; Bishop & Glynn, 2003; Timperley et. al., 2007). Where professional development is sustained over a period of time and focused on challenging teacher beliefs, a reframing of teachers' social construction of students occurs, partnered by a rise in student achievement (Timperley et al., 2007). Increasing teachers' pedagogical knowledge of assessment can have a profound transformative effect on teaching practice.

Hawley and Valli (1999) argue that theoretical understandings need to be linked with the knowledge and skills of teaching practice as they relate to general pedagogical knowledge, content knowledge, and pedagogical content knowledge. They claim that teachers often cite lack of understanding and limited access to knowledge as the reason for not putting theory into practice. Timperley et.al. (2007) emphasize the importance of providing support for teachers in translating theoretical presentations of content knowledge into practice, without which there is limited impact on teaching practice and on student learning.

The above discussion draws on evidence from research to support the belief that high-quality professional development opportunities that help teachers increase their knowledge in the four domains of content knowledge facilitate changes in their teaching practice. Some elements of teachers' knowledge and practice are more easily changed than others, and the change process itself can be slow (Borko, 2004). The change process is influenced by the design of the learning, the *how* of teacher learning.

2.5.2 Process Variables

How teachers learn is influenced by the style or form of the learning experience and the learning activities they engage with.

Form

The literature refers to the form of professional development as being of either traditional or reform style. The traditional style refers to a “one-shot workshop” (Goldenberg, 1991, p. 69) where teachers passively receive information from experts, as compared with the reform style which is sustained over a longer period of time with greater active involvement by the participants. Research by Saxe, Gearhart and Nasir (2001), comparing traditional learning with two reform styles of professional development, found one of the reform styles to be particularly effective, possibly due to its longer duration. Birman, Desimone, Porter and Garet (2000) claim that reform style learning is more effective and has a greater influence in changing teacher practice because it is likely to actively involve participants and be of longer duration.

The traditional form of professional development needs radical rethinking (Ball, 1996; Lieberman, 1995; Sykes, 1996). In today’s educational world, in which teachers are expected to help students develop skills that are more complex and analytical using methods that actively engage them in experiencing, creating and solving real problems, a traditional form of professional development for teacher learning is fundamentally at odds with the new form of student learning.

Lieberman (1995) argues that teachers learn in much the same way as their students learn and that professional development programmes should be shaped accordingly. Teachers should, as an integral part of their school life, experience professional development through active involvement in opportunities to discuss, think about, develop, and try out new ideas with their students. This new form of professional development would ensure learning is responsive to the individual contexts and concerns of teachers, thus making their learning more meaningful. Lieberman (1995) concludes that effective professional development must move away from the traditional style and toward long-term, continuous learning in the context of the school and the classroom, aided by the support of colleagues.

Breaking away from the traditional form of learning and embracing a different conception of professional development is supported by Darling-Hammond and McLaughlin (1995) who argue that the new vision of learning for today’s students requires teachers to practice in ways that are consistent with this vision. This

means that teachers need to ‘unlearn’ many of the teaching beliefs and practices that have dominated their professional lives and begin teaching in ways they have neither used nor experienced before (Ball, 1996; Darling-Hammond & McLaughlin, 1995). Developing new ways of teaching demands a form of professional development that allows teachers to reflect critically on their practice in order to develop new knowledge and beliefs about content, pedagogy and learners. Effective professional development of this nature must engage teachers in the concrete tasks of teaching; be grounded in inquiry, reflection and experimentation that are participant-driven; be collaborative within a community of teacher-learners; be connected to and derived from teachers’ work with their students; be sustained, on-going, intensive and supported by modeling, coaching, and the collective solving of specific problems of practice; and be connected to other aspects of school change (Darling-Hammond, 1998; Darling-Hammond & McLaughlin, 1995).

This form of professional development is consistent with a vision of learning in which new knowledge is constructed by, and with, teachers for use in their own contexts. It requires alternative types of learning activities.

Activities

One activity that requires on-going active collegial involvement in the inquiry of specific problems of practice is peer coaching, as recommended by Joyce and Showers (1988). In their seminal work they describe it as a collaborative problem-solving process that is experimental in nature where ‘coach observers’ give non-evaluative feedback to the ‘teacher experimenter’ as part of the cycle of analysis, study, hypothesis-forming and testing. Peer coaching, as an activity, is focused on changing practice to improve student learning.

Loucks-Horsley and Matsumoto (1999) recommend the inclusion of activities such as immersing teachers in a specific field of inquiry by actually ‘doing’ science or mathematics, so that teachers learn about new curriculum materials by experiencing the material as a teacher-learner, while an expert teacher demonstrates its implementation. They recommend examining teaching practice using actual artefacts of practice such as student work, video clips of teaching,

narrative cases or achievement data. They suggest learning to develop craft wisdom through working collaboratively in networks of teachers within and across schools. While these activities may stand alone, Loucks-Horsley and Matsumoto (1999) recommend they are best used in combination or in sequence. An example of activities used in combination might include teachers learning how to implement new curriculum materials at a workshop, followed by regular coaching in their classrooms. An example of activities used in sequence might be learning how to use new curriculum units, followed by case discussions and action research focused on the units.

Klentschy (2005) recommends lesson study as an activity that transforms practice and describes it as a problem-solving process that “facilitates systematic examination of teaching-learning processes through initial planning, teaching, observation and reflection of teaching practices” (p. 4). This cyclic process provides a means for teachers to draw on shared knowledge in order to improve their practice. This type of knowledge, called practitioner knowledge, is especially useful because the knowledge created has its origins in a specific problem of practice that is grounded in the context of the teacher’s own work. Mundry (2005a) also recommends the use of lesson study and concurs with Loucks-Horsley and Matsumoto (1999) that activities used in combination can provide powerful professional development opportunities. She describes combining lesson study with a content-based institute as an example of a ‘practice-based’ approach to on-going, collective inquiry that deepens teachers’ content knowledge as well as knowing how best to teach this to improve student outcomes.

Timperley et al. (2007) give examples of a wide range of activities that actively involve teachers in learning. They include demonstrations and examples of teaching practice, observation and feedback, using assessment to refine teaching, discussing practice with colleagues, and describing/prescribing practice. Their research, however, concluded that no particular activity was more effective than another. What was important for teachers was the chance to “engage in multiple and aligned opportunities that supported them to learn and apply new understandings and skills” (p. xxxv). This suggests that teachers, like their students, need many opportunities to learn through a range of activities.

A variety of on-going, job-embedded activities that engage teachers in active learning, appear necessary to prompt change to teacher practice and improve student outcomes (Darling-Hammond, 1998; Darling-Hammond & McLaughlin, 1995; Hirsh, 2004; Holloway, 2006; Lieberman, 1995). The conditions that promote and support teacher learning are dependent upon the context characteristics of the learning environment.

2.5.3 Context Characteristics

Professional development is most effective when the context within which learning takes place exhibits certain characteristics. These include coherence and collective learning.

Coherence

Principals can enhance the effectiveness of professional development by developing a coherent plan of learning that links curriculum and assessment with professional development activities, as this reduces fragmentation and the disjointed delivery of learning (Ball & Cohen, 1999). Firestone, Mangin, Martinez and Polovsky (2005) confirm the importance of coherence. In a comparative study of three different approaches to professional development in three separate United States districts, a coherent, content-focused professional development programme had the greatest influence on teacher-reported change in practice. Birman, Desimone, Porter and Garet (2000) concur that coherence of professional development increases teacher learning and improves teaching practice. Guskey (1994) supports the view that new innovations should be part of a coherent framework that forms part of a comprehensive change process.

The change process should develop incrementally, beginning with small steps that are part of a larger picture, and where support removes barriers to change and pressure ensures its momentum (Guskey, 1994). New learning is not only hard work but takes time because teachers need multiple opportunities over an extended period in which to construct meaning and embed new learning in practice (Porter et. al., 2003; Supovitz & Turner, 2000; Timperley et. al., 2007). They also need follow-up support, from sources both within and outside the

school, so that learning is continuous and ongoing (Hawley & Valli, 1999; Supovitz & Turner, 2000; Timperley et al., 2007).

Timperley et al. (2007) claim that transformative practice, resulting in positive student outcomes, requires the engagement of an external expert to facilitate the substantive new learning and new ways of learning required to make these changes. As teachers work with new knowledge, implement ideas and review the impact they have on students, new learning needs are identified and these need to be met through supportive networks. If they are not met, motivation to continue learning diminishes (Hawley & Valli, 1999). Each of these processes requires that structural and organisational support is provided as part of a coherent process (Chappuis, Chappuis, & Stiggins, 2009; Hawley & Valli, 1999; Timperley et al., 2007).

Collective Learning

To alleviate the discomfort that often accompanies change in practice, Guskey (1994), Chappuis et al. (2009) and Sparks (2009) argue for teams of educators working together. Successful change occurs when regular opportunities are provided for “participants to share perspectives and seek solutions to common problems in an atmosphere of collegiality and professional respect” (Guskey, 1994, p. 45). Concurring with this view, Darling-Hammond and Richardson (2009) claim that when groups across grade levels, departments or schools combine, they create a critical mass for changed practice and provide support for each other.

2.6 Individual Factors Influencing Change

In the search to identify those factors that are associated with effective professional development, Timperley et al. (2007) illustrate the complex relationship between professional learning and student outcomes. Their model reveals a second “black box” (p. 7) situated between professional learning experiences for teachers and the impact they have on teachers’ practice. This black box mediates between what is experienced and what is implemented. To

focus solely on the professional development experience and the features associated with high-quality professional development may result in some important mediating factors in the change process being overlooked. Fullan and Hargreaves (1992) argue that an incomplete understanding of teacher development occurs unless consideration is given to the total teacher – the teacher’s purpose and the teacher as a person.

2.6.1 Teachers’ Purpose

Teaching, claim Fullan and Hargreaves (1992), is more than a technical craft of learned skills and behaviours that are executed with efficiency against a background of given rules. It is a moral craft, where teachers, as part of their daily work, are continuously making informed discretionary judgments based on professionalism and moral principles:

Because it is a moral craft, it has purpose for those who do it.

There are things that teachers value, that they want to achieve in their teaching. There are also things that they disvalue, things they fear will not work or will actually do harm to the children in their charge. Teachers’ purposes motivate what teachers do.

(Fullan & Hargreaves, 1992, p. 29)

Stoll, Fink and Earl (2003) suggest that teachers need a catalyst or sense of urgency before embracing change. They claim teachers are motivated by change which is practical, useful and relevant to their particular class of students, and where there is a good reason to change. Another dimension of change that can filter actions is teacher beliefs. Fullan and Hargreaves (1992) concur with Stoll et al. (2003) that unless an innovation is related to, or integrated with, the teachers’ beliefs, purpose or context, resistance is a likely outcome. Fullan and Hargreaves (1992) argue that teachers are motivated by ‘psychic rewards’ – the joy and satisfaction of working with children, and by an ‘ethic of care’ – teachers concern for care and nurturing of others and connectedness to others. An understanding of these motivating factors is necessary for a comprehensive understanding of factors which influence teachers’ transformative practice.

2.6.2 The Teacher as a Person

Teachers are people, not just vehicles for the delivery of knowledge and skills, therefore “age, stage of career, life experiences, and gender factors make up the total person. They affect people’s interest in and reaction to innovation and their motivation to seek improvement” (Fullan & Hargreaves, 1992, p. 39). Stoll et al. (2003) identify experience, motivation and beliefs, confidence, and individuality as factors influencing teacher learning.

Experience

Sikes (as cited in Fullan & Hargreaves, 1992) suggests that age as part of the “life cycle of the teacher” (p. 37) impacts on the amount of energy and enthusiasm a teacher has for their work. Teachers’ individual career cycles also influence their disposition towards professional learning and development. Huberman (1992) identifies five stages through which teachers’ career paths progress. The first stage is *survival and discovery* where teachers focus on getting through each day and enjoying new found successes. The second stage involves a period of *stabilization* during which teachers make a commitment to the profession and resolve notions of uncertainty. From this stage, one of two pathways may be followed. One pathway is that of *experimentation or activism* where teachers attempt to become more effective through experimentation and take action to overcome the sentiment of becoming stale. An alternative pathway is one of *taking stock or of self doubt* during which a gnawing sense of routine and a developing sense of limited possibilities outside of the profession takes hold. The fourth stage of *serenity*, is a phase of relaxed activity in the classroom, coupled with greater confidence and self-acceptance. The fifth and final stage can also take one of two pathways. One pathway is *conservatism*, bemoaning the new generations accompanied by a greater sense of nostalgia. The alternative is a pathway of *disengagement*, a gradual disengagement from work to other engagements (Huberman, 1992).

Self-efficacy

Stoll et al. (2003) suggest the level of confidence a teacher has in their belief that they can “make a difference” (p. 85) to student outcomes, influences their own learning. Research by Smylie (1988) states that “the direct relationship between personal teaching efficacy and change suggests that teachers are more likely to

change their behaviour in directions that may improve their classroom effectiveness if they believe that they themselves are instrumental to the learning of their students” (p. 23). While confidence increases the likelihood of change, professional development can enhance efficacy and also increase the chance of change in practice. Invargson, Meiers and Beavis (2005) found that professional development that focuses on subject-specific content knowledge helps teachers develop rich conceptual understandings that enhance their teaching skill, and increases their self-efficacy. Stein and Wang (1988) found that when teachers implemented an innovation successfully, their perception of self-efficacy increased. Cheeseman (2008) found that the impact of self-efficacy is highly motivating and this sustains a teacher’s willingness to maintain change in practice. It appears that self-efficacy influences teacher change.

2.7 School Factors Influencing Change

2.7.1 School Culture

The culture of a school determines whether it will be learning-enriched or learning-impoverished (Rozenholtz, as cited in Hopkins, Ainscow, & West, 1994). A learning-enriched school, in which the focus is specifically on learning, includes teacher learning as well as student learning. While teachers learn from a variety of sources, one powerful source of learning is from colleagues within their own workplace. This type of learning occurs within a collaborative culture. It is defined by Hopkins et al. (1994) as one of “mutual support, joint work and a broad agreement on educational values” (p. 93).

The characteristics of a collaborative culture (Little, as cited in Hopkins et. al., 1994) include a workplace environment in which teachers engage in precise talk about teaching practice, developing an understanding of the complexity of teaching and what distinguishes the virtue of one practice from another. It includes teachers observing each other teaching, and building up a common language of reference to talk about effective teaching practice. It is a place in which teachers plan, design, prepare and evaluate teaching materials together, and

develop a deeper understanding of teaching and learning. This type of ‘joint work’ facilitates professional learning and development in a process where educators “teach each other the practice of teaching” (Hopkins et. al., 1994, p. 95).

Collaborative cultures create rich and meaningful learning environments for teachers, but do not occur by chance. They need to be deliberately cultivated and this requires input from school leadership (Sparks, 2009). Principals are pivotal in creating a culture of trust where risk-taking and reflection is the norm, and where raising issues and resolving puzzles of practice are supported through joint work in a culture of collaborative inquiry (Bryk, Camburn, & Louis, 1999).

2.7.2 School Leadership

In addition to cultivating a collaborative culture, research by Robinson (2007) found that leaders who actively participate with their staff in professional learning as the leader, a learner, or both leader and learner, have a significant positive effect on student outcomes through their influence on teacher practice. DuFour and Marzano (2009) argue that schools need “learning leaders” (p. 63) who are deliberately focused on evidence of learning. By shifting the focus of their leadership towards working collaboratively with teams of teachers to examine evidence of student learning, principals would build leadership capacity amongst teachers and provide positive pressure to change their practice. Elmore (as cited in DuFour & Marzano, 2009) states:

teachers have to feel there is some compelling reason for them to practice differently, with the best direct evidence being that students learn better; and teachers need feedback from sources they trust about whether or not students are actually learning what they are taught. (p.68)

Building the capacity for teachers to collaborate in teams and become mutually accountable provides a powerful mechanism for teacher change and school improvement. Fullan (2007a) defines capacity building as “any strategy that increases the collective effectiveness of a group to raise the bar and close the gap of student learning” and suggests that “capacity building with a focus on results” (p. 33) is highly motivating for teachers, and provides positive pressure for

change. King and Newmann (2001) concur with this view of building school capacity. They argue that professional development programmes that stress three dimensions of capacity: the knowledge, skills and dispositions of individual teachers, professional community, and school programme coherence, are effective in fostering the individual and organisational learning needed to achieve improved student outcomes across the whole school.

2.8 Emerging Themes

2.8.1 A New Paradigm of Professional Development

The elements that together constitute high-quality professional development – content characteristics, process variables, and context characteristics – comprise what has been called the new paradigm of professional development (Darling-Hammond & Richardson, 2009). This form of professional development is consistent with a vision of learning in which new knowledge is constructed by and with teachers for use in their own contexts. It contrasts with a traditional ‘top-down’ model of professional development in which knowledge is delivered to consumers in bite-sized chunks ready for direct application or implementation. It is a shift away from the empirical-rational strategy, a linear process of change in which teachers “are told about the change topic, it is demonstrated to them, and, as rational human beings they are expected to implement it” (Richardson & Placier, 2001, p. 906), towards a normative-re-educative strategy where “change is enhanced through deep reflection on beliefs and practices. Because the change process entails understanding one’s beliefs and knowledge and determining whether or not to change them, dialogue has been used as a critical element of this process” (Richardson & Placier, 2001, p. 906). One approach that meets the criteria for the new paradigm is the professional learning community.

2.8.2 Professional Learning Communities

Professional learning communities can “change practice and transform student learning – when they have in place the processes and structures that make true joint work possible and desirable” (Darling-Hammond & Richardson, 2009, p.

52). Darling-Hammond and Richardson (2009) argue that the structures required for a professional community include supportive leadership, mutual respect, and a climate that invites risk-taking and innovation. The processes needed for effective professional community are an understanding of the way teachers talk and interact when seeking to improve teacher practice – the norms of interaction that accept silence and use difference and conflict productively.

Ball and Cohen (1999) argue that the complexity of teaching is such that no amount of training can fully prepare teachers for every eventuality in teaching, therefore much of what they need to learn must be learned in and from practice. They claim that teachers' everyday work could be the source of constructive professional development if teachers were able to learn about practice that is centred in practice. Using artefacts of practice, such as copies of student work, videotapes of lessons, teacher journals, and written case studies, as the focus of collaborative inquiries that interrogate and analyse teaching and learning, provides an opportunity for examining and interrupting teachers' taken-for-granted ways of seeing and knowing. Creating some disequilibrium is necessary to generate this type of learning and therefore communities of practice need to adopt new conventions for substantial professional discourse.

2.8.3 Discourse Communities

'Learning talk' is a form of discourse that supports professional learning in, and from, practice that engages teachers in talk at three levels – analytical, critical and challenging (Annan, Lai, & Robinson, 2003). "Learning talk is talk about teaching which analyses, evaluates, and/or challenges the impact of teaching practices on student learning outcomes, and/or creates more effective ones to replace ineffective ones" (Annan et al., 2003, p. 31). This collaborative inquiry engages teachers in a powerful form of discourse that acts as a mechanism for changing teacher thinking and practice. It is most effective when a skilful facilitator works with the inquiry group to assist them in moving their talk through the three different levels. Without facilitation, it can fail to reach its goal of influencing teacher practice. Both Hawley and Valli (1999) and Timperley et al. (2007) caution that collaborative team work can sometimes be detrimental to the

improvement of practice as, in some instances, particularly where it is not facilitated skillfully, collaboration has the potential to reinforce an ineffective status quo.

2.8.4 Learning Processes

Developing new understandings and skills that serve to generate more effective teaching practices rather than reinforce ineffective ones, depends on a series of learning processes. Timperley et al. (2007) describe three learning processes that can lead to substantive change to teaching practice. The first learning process involves cueing and retrieving prior knowledge for the purpose of either consolidating known information or examining it and reviewing its adequacy. Teacher engagement is activated when teacher-learners examine their taken-for-granted teaching practices that are routine and tacit, develop an understanding of the theories that underpin these practices and, from the perspective of viewing these now explicit practices, evaluate the adequacy of them to decide what should be changed (Timperley et al., 2007). This engagement is critical to change. Without it, teachers are likely to either reject the new information or believe that they 'already do this'.

During the second process in the learning cycle, teachers become aware of new information, whether superficial or more substantive, and integrate it into their existing values and beliefs system because they recognise it as being consistent with current values and beliefs. An example of this could be when teachers recognise the limitations of their curriculum knowledge in mathematics, or science, or any other curriculum area where they feel less confident and seek new knowledge (Timperley & Alton-Lee, 2008). While the outcome of this process may be change to teacher practice, it cannot be assumed that this will impact positively on student outcomes. Timperley et al. (2007) express concern that many of the studies in their meta-analysis showing change to teacher practice were linked to either neutral or negative outcomes for students. They recognise that constructed meaning from new information is either adopted or adapted by teachers to fit existing conceptual frameworks, whether or not these frameworks are problematic. In some instances, teachers' values and beliefs actually limit

student learning despite changed practices, and these limited conceptions need to be challenged and either discarded or reconstructed. To achieve this, a third process in the learning cycle is necessary.

During the third process of learning, dissonance is created when teachers find that new information is not consistent with existing values and beliefs. Dissonance “challenges tacit knowledge, creates philosophical tension, and requires current knowledge to be reconstructed” (Timperley et.al., 2007, p. 13). Teachers’ tacit knowledge is built up over a period of time and embraces all that they do intuitively in their practice, because they have come to believe that it works. This tacit knowledge needs to be made explicit so it can be discussed, examined and questioned. Teachers may respond to this process by rejecting new theories and practices, in which case there is no change to their teaching practice. Alternatively, teachers may resolve dissonance by reconstructing meaning, or repositioning their beliefs and values, resulting in change to their teaching practice.

These three processes are central to professional development learning experiences if change to teacher practice is to be effected. If, however, this process is to be on-going and sustained, a fourth process is necessary. The fourth learning process engages teachers in an on-going inquiry in which “teachers collectively and individually identify important issues, become drivers for acquiring the knowledge they need to solve them, monitor their impact, and adjust practice accordingly” (Timperley & Alton-Lee, 2008, p. 353). This process is called co-regulation and self-regulation. As teachers draw meaning from the analysis and interrogation of assessment information, and consider the implications for pedagogical content knowledge, they develop deep understanding of teaching practice (Timperley & Alton-Lee, 2008).

2.8.5 Inquiry as Stance

Professional development that arises from inquiry, as suggested by Ball and Cohen (1999), Annan et al. (2003), Timperley et al. (2007), and Timperley and Alton-Lee (2008), and outlined above, signals a paradigmatic move away from

prescription and transmission towards a paradigm based on constructivism. New visions of professional development, claim Cochran-Smith and Lytle (2001), may have many similarities on the surface, but significant underlying differences. Their vision of professional development is based on very different underlying assumptions and goals of professional development, and different conceptions of teacher knowledge and learning. They propose that a

legitimate and essential purpose of professional development is the development of an inquiry stance on teaching that is critical and transformative, a stance linked not only to high standards for the learning of all students but also to social change and social justice and to the individual and collective professional growth of teachers. (Cochran-Smith & Lytle, 2001, p. 46)

Inquiry as stance needs to be understood from the perspective of three types of knowledge which Cochran-Smith and Lytle (1999) call *knowledge-for-practice*, *knowledge-in-practice* and *knowledge-of-practice*. Each type of knowledge is generated using an inquiry approach in which the knowledge is constructed through social interactions. The first type of knowledge, *knowledge-for-practice*, can be thought of as formal knowledge and theory *for* teachers to use. It is the knowledge required for teaching and is centred on enhancing teachers' knowledge of subject matter, pedagogy and subject-specific pedagogy. The second type of knowledge, *knowledge-in-practice*, can be thought of as practical knowledge. It is knowledge which teachers use when they are *in* action in the classroom and is embedded in what expert teachers do intuitively as they fine-tune their craft. It encompasses the wisdom and artistry they have come to know as a result of their experience as a teacher. The third type of knowledge, *knowledge-of-practice*, cannot be thought of as either formal knowledge or practical knowledge that is already known from theory or from experts, but as knowledge that is generated by teachers, irrespective of whether the teacher is an expert or novice:

It is assumed that the knowledge teachers need to teach well is generated when teachers treat their own classrooms and schools as sites of intentional investigation at the same time that they treat the knowledge and theory produced by others as generative material for interrogation and interpretation. In this sense, teachers learn

when they generate local knowledge-of-practice by working within the contexts of inquiry communities to theorize and construct their work and to connect it to larger social, cultural, and political issues. (Cochran-Smith & Lytle, 1999, p. 250)

Local knowledge generated from inquiry as stance can have a significant impact on the lives of teachers and on the lives of students. It can have a profound transformative influence on teachers' practice and on student achievement. In the New Zealand context, this could mean influencing the lives of students by reducing the long tail of underachievement reflected in the achievement data of schools throughout the nation.

2.8.6 Learning Conversations

Earl and Timperley (2008) seek similar goals for professional development, aiming for genuine and continual improvement in schooling, especially for those students who have traditionally been underserved by our education system. They argue these goals can be achieved through the use of a powerful collaborative inquiry process called learning conversations. Learning conversations are distinguished by three critical characteristics: having an inquiry habit of mind, using relevant data, and embracing relationships of respect and challenge. An inquiry habit of mind requires one to accept a position of not knowing, yet be determined to seek clarity and understanding, to be open to ambiguity, and to reserve judgment until issues have been viewed from multiple perspectives. Using relevant data means seeking evidence that fits the purpose of the inquiry. It means using high-quality data that is neither inaccurate nor misleading. It means using statistical information knowledgeably and wisely so that interpretation of the data provides valid statements. Relationships of respect and challenge within an inquiry facilitate engagement in dialogue that probes rather than accepts the viewpoints of others. This enables greater understanding of others' interpretations of evidence and of their supporting reasoning. Holding productive evidence-informed conversations is neither straightforward nor simplistic. It is an "iterative process based on asking questions, examining evidence and thinking about what that evidence means in the particular context" (Earl & Timperley, 2008, p. 3). In

an example of the process in action, Lai and McNaughton (2008) describe how one group of participants held rigorous conversations that explored difficult issues around teachers practice that positively influenced the reading achievement of their students. By putting student achievement ahead of their own comfort, they were able to generate local knowledge-of-practice. This had a transformative influence on their teaching practice combined with improved outcomes for their students.

2.9 Summary

This literature review has focused on four dimensions of influence on transformative practice: professional development, individual factors, school factors, and the emerging theme of communities of practice. Each dimension reveals multiple layers of influence on teaching practice. Research exploring these multilayered dimensions highlights the positive outcomes for students associated with many of these factors.

This research project seeks to understand how experienced teachers explain the profound transformative influences on their teaching practice. The next chapter outlines the approach adopted for this research inquiry.

3 CHAPTER THREE METHODOLOGY

3.1 Introduction

Methodology describes, broadly speaking, the approach taken to a research inquiry and aims to provide an understanding of the theoretical framework that guides it (Burton, Brundrett, & Jones, 2008). This chapter outlines the underlying assumptions that shape the theoretical framework for this research inquiry and identifies the paradigm within which it is positioned. The section on research design provides justification for the research approach and the methods used for gathering data. It is followed by a section on the research process which details data collection procedures and outlines ethical considerations. The process used for analyzing and interpreting the data is articulated before outlining the approach used for representation of the findings. Finally, issues of quality are discussed.

3.2 Research Paradigm

Paradigms have been defined as a world view – “a way of thinking about and making sense of the complexities of the real world . . . Paradigms tell us what is important, legitimate and reasonable” (Patton, 2002, p. 69). They are a set of “logically related assumptions, concepts or propositions that orient thinking and research” (Bogdan & Biklen, 2007, p. 24). My perspective on educational research is oriented by the view that human behaviour can be complex, illusive and intangible, and can be influenced by personal choice, freedom and individuality (Cohen, Manion, & Morrison, 2007). This view is linked to ontological and epistemological assumptions about social reality and how things exist in the world. Believing that social reality is “not ‘out there’ as an amalgam of external phenomena waiting to be uncovered as ‘facts’, but as a construct in which people understand reality in different ways” (Morrison, 2002, p. 18), I position myself within interpretive social theory that focuses on the constructed world rather than the found world (Lather, 1992), and falls within the constructivist-interpretive paradigm (Denzin & Lincoln, 2003). “The

constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjective epistemology (knower and respondent co-create understandings), and a naturalistic (in the natural world) set of methodological procedures” (Denzin & Lincoln, 2003, p. 35). These ontological and epistemological assumptions influence the design of this research inquiry.

3.3 Research Design

Research design, comprising two elements - the strategy of inquiry and the methods for collecting data (Denzin & Lincoln, 2003), link the paradigm of the research with the empirical world. Research design is influenced by the notion of “fitness for purpose” (Cohen et. al., 2007, p. 78). I have a phenomenological orientation towards the constructivist-interpretive paradigm and am of the belief that to understand human behaviour the researcher must attempt to enter the conceptual world of the research participant and understand the meanings they attach to events in their daily lives from within their own frameworks of meaning (Bogdan & Biklen, 2007; Cohen et. al., 2007). Working from a phenomenological perspective, seeking to see things from the participant’s point of view (Morrison, 2002), I will adopt a qualitative approach to this research inquiry, using interviews as the method for gathering data. The goal of this research is to develop an understanding of and insight into how experienced teachers explain the profound transformative influences on their teaching practice, with the intention of utilizing this perspective to inform my practice and the practice of educators seeking to influence transformative teaching practice.

3.3.1 Qualitative Approach

A qualitative approach to research is based on “a recognition of the importance of the subjective, experiential ‘lifeworld’ of human beings” (Burns, 2000, p. 11). Asking the question “How do experienced teachers explain the profound transformative influences on their teaching practice?” seeks an understanding of how teachers interpret the complexity of their world and aims to develop insight into and understanding of factors that influence transformative practice from the

perspectives of teacher participants. It is the lifeworld of the participant teachers that is the focus of this research, making a qualitative approach ‘fit’ for the purpose (Cohen et. al., 2007).

The qualitative approach to this inquiry is characterized by five features. It is naturalistic, gathers descriptive data in the form of words rather than numbers, is concerned with the process rather than with outcomes, is inductive, and is primarily concerned with meanings (Bogdan & Biklen, 2007; Kervin, Vialle, Herrington, & Okely, 2006; Lichtman, 2006). This research inquiry is naturalistic because data gathering will be conducted in natural settings as selected by the teacher participant, most likely either their school or their home. The focus of the inquiry is on a naturally occurring phenomena - change in teaching practice, as opposed to an artificially created situation imposed upon the participants. It will gather descriptive data taken from interview transcripts and will focus on process. Patton (1990) describes focus on process as a discovery-oriented approach that is free of predetermined outcomes of the inquiry, and attempts to “understand the multiple interrelationships among dimensions that emerge from the data without making prior assumptions or specifying hypotheses about the linear correlative relationships among narrowly defined, operationalized variables” (p. 44). An inductive approach to an analysis of the data will be adopted to reveal findings grounded in the specific context of each teacher participant’s experience, with commonalities then located across the research group of participants to reveal findings grounded in real-world patterns (Glaser & Strauss, as cited in Patton, 1990). Meaning will be derived from this research by focusing on capturing the teacher participant’s way of interpreting change to their teaching practice as accurately as possible, in order to gain an understanding of change from the teachers’ perspectives (Bogdan & Biklen, 2007; Lichtman, 2006).

3.3.2 Interviews

An interview, put simply by Maykut and Morehouse (2001), is “a conversation with a purpose” (p. 79). Speaking metaphorically, Kvale (1996) suggests that the role of the qualitative interviewer is either as a miner or a traveler. An interviewer-miner seeks nuggets of essential meaning believing that knowledge is

waiting to be uncovered. An interviewer-traveler, in contrast, journeys across the landscape, “wanders along with the local inhabitants, asks questions that lead the subjects to tell their own stories of their lived world, and converses with them in the original Latin meaning of *conversation* as ‘wandering together with’ ” (Kvale, 1996, p. 4). Consistent with my phenomenological perspective and constructivist-interpretive theoretical framework, interviews for this research will be conducted by holding the type of conversation that becomes “a construction site for knowledge. An interview is literally an *inter view*, an inter change of views between two persons conversing about a theme of mutual interest” (Kvale, 1996, p. 14). Using this definition Kvale (1996) emphasizes the dual focus of interviews as being on the one hand about the personal interaction between the interview participants, and on the other about the knowledge constructed through that interaction.

Giving consideration to the dual focus of an ‘inter view,’ semi-structured interviews will be used in this research. Interviews range on a continuum from structured to unstructured interviews and somewhere in between lies the semi-structured interview (Cohen et. al., 2007; Freebody, 2003; Kvale, 1996) also called a guided or focused interview (Bell, 1999; Hopf, 2004). Bell (1999) claims the advantage of a focused interview is that it allows the respondent freedom to talk about what he or she sees as significant while ensuring the researcher is able to cover topics of crucial importance to the study. For this research, participants will take part in one audio-taped, semi-structured interview of not longer than 90 minutes. It will be focused on a specific topic and participants will be provided with a research prompt and guiding questions (Appendix 3) to assist their storytelling. It is anticipated that the story prompt and guiding questions will give respondents a degree of latitude within a given framework, and the freedom to move from one idea to the next without interruption, while providing me, as the researcher, the opportunity to probe salient aspects when required. Adopting a ‘human-as-instrument’ approach will enable me to exercise “flexibility and responsiveness to the expected emergence of unanticipated twists and turns in the content of the interview” (Maykut & Morehouse, 2001, p. 97).

As a novice researcher with no previous experience of research, and having little experience of using probes in an interview situation, I will draw on my limited experience of coaching and utilize Robertson's (2005) recommendation of questioning at three levels. I will use clarifying questions to gather detail, exploratory questions to clarify purpose, reasons and consequences, and linking questions to link ideas with the research intentions and goals. This approach to questioning is analogous with the three types of probes recommended by Patton (1990): detail-oriented probes, elaboration probes, and clarification probes. These are not written into the interview schedule as they cannot be planned for in advance, but are used spontaneously as and when appropriate.

The use of a semi-structured interview conducted in the spirit of an 'interviewer-traveler' provides participants with an opportunity to respond to the story prompt in a way that allows their voice to be heard in a situation where the participant shares equal status with the researcher (Burns, 2000). This approach also assists in minimizing researcher bias (Burns, 2000). The provision of a story prompt together with guiding questions is an attempt to use a technique called 'bracketing,' where my views about the influences on transformative practice are put aside or 'silenced' (Bogdan & Biklen, 2007; Lichtman, 2006), in order to gain an understanding of influences on transformative practice from the participants' perspective.

Greater richness of understanding and insight into participants' views may have been gained by holding focus group interviews that explored collective participant views of those influences that transform practice, and combining them into a participant representation or model of transformative influences. Time constraints, posed by the dual pressure of teachers having heavy workloads and limited time available to work with a researcher, together with the demands placed upon on my time traveling to a neighbouring city to reach the purposive sample group, were limitations that impacted on the decision not to include this element in the research.

3.4 Data Collection

Data collection for this research requires identifying potential participants and gaining access to them in accordance with ethical research practices.

3.4.1 Research Participants

This research inquiry was purposive in its sampling method, selecting participants based on their “possession of the particular characteristics being sought” (Cohen et. al., 2007, p. 115), combined with convenience sampling, participants working within reasonable proximity to the city in which the researcher resides.

A research inquiry investigating how experienced teachers explain the profound transformative influences on their teaching practice seeks two specific characteristics. Firstly, experienced teachers and secondly, those who have had a profound transformative experience. For this research, a teacher with eight years or more teaching experience was deemed to be an experienced teacher. To increase the chances of locating participant teachers who had experienced profound transformation in their teaching practice, participants were selected from schools that are in their second or third year of involvement in an Extending High Standards Across Schools (EHSAS) project. EHSAS is a Ministry of Education funded project aimed at raising student achievement through the establishment of professional learning networks that focus on sharing effective processes and practices that contribute to improved student outcomes (Ministry of Education). For this research, schools involved in EHSAS and having a focus on enhancing literacy teaching and learning were selected. It is accepted that while involvement in EHSAS professional learning experiences had the potential to transform teaching practice, this did not constitute a guarantee.

Access to potential sources of participants was gained initially through School Support Services providing a list of EHSAS participant schools and the focus of their EHSAS cluster. Schools with a focus on literacy were randomly selected from that list. The school Principal was approached via letter (Appendix 1) and a follow-up phone call to obtain the names of two or three potential participants.

From the names provided by those principals willing to cooperate, participants were randomly selected. Letters were sent out to potential participants (Appendix 2) together with a background information sheet (Appendix 3) and a consent form (Appendix 4) over a staggered time frame. Follow-up phone calls were made until at least six participant teachers were confirmed. In total, seven experienced teachers, two male and five female, from five schools participated in the research.

3.4.2 Research Ethics

Research participants must be treated ethically and respectfully and this means abiding by ethical principles and procedures to ensure participants' rights and values are protected. The bedrock of ethical procedure comprises two fundamental concepts: informed consent and costs/benefit ratio (Cohen et al., 2007).

Informed Consent

Educational research requires the cooperation of participants who are willing to assist the researcher with their investigation. Their agreement to become involved is confirmed once informed consent has been obtained, a procedure in which "individuals choose whether to participate in an investigation after being informed of the facts that would be most likely to affect their decision" (Cohen et al., 2007, p. 52). To ensure participant rights have been given appropriate consideration, four elements need to be attended to: competence, voluntarism, full information, and comprehension. This means that the participants have the competence to make a correct decision for themselves, become involved voluntarily because they are free to choose to take part or not take part, are fully informed of all aspects of the research, and that participants' comprehension is such that they fully understand the research project including what is required of them and the implications of their role. Inviting experienced teachers as participants in this research assumes consideration of competence and comprehension. To address the elements of full information and voluntarism, potential participants received a letter (Appendix 2) together with a background information sheet (Appendix 3) providing full details of the research project and the nature of their involvement. The voluntary nature of their involvement was made explicit together with

information making clear that participants were free to withdraw at any time up until two weeks after they had confirmed and returned their interview transcript.

Costs/benefit Ratio

Researchers need to be ethically sensitive in the conduct of their research to ensure the preservation of human dignity. Embracing the principles of non-maleficence, beneficence and human dignity, “greater consideration must be given to the risks to physical, psychological, humane, proprietary and cultural values than to the potential contribution of research to knowledge” (Cohen et al., 2007, p. 58). Should I be faced with tension arising from whether the end justifies the means, principled sensitivity to the rights of others will prevail and I will adopt the stance of Cavan (1977) who eloquently states ‘while truth is good, respect for human dignity is better, even if, in the extreme case, the respect of human nature leaves one ignorant of human nature’ (p. 810). While the positive nature of this research suggests that the chances of this tension arising will be minimal, should participants disclose sensitive material, the concept of non-maleficence (do not harm) will prevail.

The costs/benefits ratio is viewed by Frankfort-Nachmias (as cited in Cohen et al., 2007), as the “conflict between two rights: the right to conduct research in order to gain knowledge and the rights of participants to self-determination, privacy and dignity” (p. 63). Participant privacy in this research will be protected by offering participants the freedom to choose whether or not to participate in this inquiry and, should they choose to participate, the right to choose the time and place of the interview. To further protect privacy, confidentiality will be assured by protecting the identity of participants through the use of pseudonyms for participants and for any specific programmes that may reveal identities.

This research has the approval of the University of Waikato School of Education Ethics committee and adheres to the university’s *Ethical Conduct in Human Research and Related Activities Regulations 2008* (University of Waikato, 2008).

3.5 Data Analysis

The purpose of qualitative data analysis is to find meaning in data generated by participants' words and actions. It involves a three stage process of data reduction, data display showing significant patterns, and of communicating the essence of what the data reveals (Miles & Huberman, 1994; Patton, 2002). Before this process can begin, raw data must be transcribed and organized according to source.

3.5.1 Data Preparation

In order to make sense of the voluminous raw data collected through participant interviews, audio-tapes of the interviews were firstly transcribed. Participants gave their consent for transcription of the audio-tapes (Appendix 4), either by me or a transcriber who had signed a confidentiality agreement (Appendix 5). In fact, I transcribed each of the audio-tapes as this greatly assisted with my becoming deeply immersed in and familiar with the data. Upon completion of each transcription, I recorded first thoughts, second thoughts and after-thoughts (Delamont, 1992) in relation to key themes and messages emerging from the interviews and as they spontaneously sprang to mind (Patton, 2002). These insights acted as a preliminary stage of data analysis. Each of the typed transcriptions was then photocopied onto different coloured paper, one colour for each participant, to aid identification of the informant during the process of data analysis.

3.5.2 Data Analysis

Because the data is unique, the analytical approach is also unique and dependent upon the skills and experience of the analyst (Patton, 2002). This is my first experience of research and, as a novice, I adopted an approach described by Strauss and Corbin (1990) as descriptive. This form of analysis aims to provide an accurate description of the inquiry findings by "weaving descriptions, speakers' words, fieldnote quotations, and their own interpretations into a rich and believable descriptive narrative" (Strauss & Corbin, 1990, p. 22). It is consistent with what Geertz (as cited in Wolff, 2004) calls 'thick descriptions'. These

descriptions are the product of inductive analysis which involves “discovering patterns, themes and categories in one’s data. Findings emerge out of the data, through the analyst’s interaction with the data” (Patton, 2002, p. 453) and are the product of a three stage process.

The first stage of data analysis is data reduction, “a process of selecting, focusing, simplifying, abstracting, and transforming the data” (Miles & Huberman, 1994). Having become familiar with the data through the transcription process and having kept a record of insights generated from this process, a framework of possible themes and categories useful for coding emerged. The source of these themes and categories came from words and phrases the participants used themselves, called indigenous concepts (Patton, 2002). They also came from words and phrases generated by me, based on my own knowledge of the research inquiry and professional practice, as well as those derived from the literature review. These are called sensitizing concepts (Patton, 2002). The indigenous and sensitizing concepts were recorded on the photocopied transcripts as left-hand margin notes. After another round of reading and rereading, the data was unitized (Maykut & Morehouse, 2001) by identifying chunks of meaning and recording this in the right hand margin. These chunks of meaning varied in length and included sentences, paragraphs and multiple paragraphs of over a page in length. The unitized data was then physically cut into segments of data, each conveying a unit of meaning, and organized in multiple piles of data according to common concepts and themes.

The second stage of analysis is called data display. During this stage, the organized, compressed assembly of data made it possible for me to identify regularities and patterns so I could place unitized data in categories through a process of convergence and divergence (Patton, 2002). Convergence seeks “recurring regularities” that are indicative of patterns and themes that converge to comprise a category. Categories established through convergence are characterized by data that firstly dovetails together meaningfully therefore displaying “internal homogeneity”, and secondly is distinctly different from other categories therefore displaying “external heterogeneity” (Patton, 2002, p. 465). Working back and forth between the data and the classification system, I used the

criteria of does this “look/feel-alike” (Maykut & Morehouse, 2001, p. 137) to constantly compare new units of meaning with existing categories and ensure placement of all the converging data.

Once analysis for convergence was completed, I began analysis for divergence (Patton, 1990). This allowed me to ‘flesh out’ the categories. It is “done by a process of extension (building on items of information already known), bridging (making connections among different items), and surfacing (proposing new information that ought to fit then verifying its existence)” (p. 404). This process of systematically “interrogating the data” (Delamont, 1992, p. 130) assisted with a process that can be likened to Maykut and Morehouse’s (2001) metaphor of the accordion player who squeezes and stretches the accordion to produce a melody. The data was compressed into categories, reviewed and stretched into alternative categories until all data was categorized. Once grouped, the distinguishing characteristics and properties that define each category were developed as a rule for inclusion. This led to a set of definitions called propositional statements. “A propositional statement is one that conveys the *meaning* that is contained in the data cards gathered together under a category name” (Maykut & Morehouse, 2001, p. 139). They were statements derived inductively from the clustered data. Once the data had been grouped and the possibility of creating any new categories had been exhausted, I moved to the third stage of analysis.

The third and final stage of data analysis is where the essence of what the data reveals is communicated. Maykut and Morehouse (2001) suggest one way of doing this is to closely examine the propositional statements and identify those that stand alone and those that form salient relationships and patterns. Where two or more propositions that are related to each other in some significant way can be connected, an outcomes proposition should be created. This was done by making careful judgments about what was significant and meaningful in the data, in a manner that was both technical and creative (Patton, 1990). Patton (1990) recommends that the outcomes propositions produced from the analysis should be practical and utilization-focused, rather than focused on the production of an “elegant theory” (p. 406). With this in mind, utilization-focused propositions were derived which provided a framework for reporting on the inquiry.

3.6 Representation and Reflexivity

Representing the findings of an inquiry can be likened to writing “what you have heard, seen and now understand, to create the harmonic sound of data coming together in narrative form to make sense of the phenomena you have studied (Maykut & Morehouse, 2001, p. 145). Denzin (2004) calls this process the ‘art of interpretation’ and compares the researcher to a “field-worker-as-*bricoleur*” (p. 447). A bricoleur is a quilt-maker who produces a “bricolage – that is, a pieced-together set of representations that are fitted to the specifics of a complex situation” (Denzin & Lincoln, 2003, p. 5).

In representing the findings of this research inquiry, I will become a bricoleur, selecting themes for inclusion that I deem to be relevant to answering the question that focuses this inquiry – how do experienced teachers explain the profound transformative influences on their teaching practice? The bricolage I create to represent the findings will, of necessity, be the result of multiple decisions about what is and what is not included, about whose story is told or not told, and about whose voice is heard or not heard (Denzin, 2004; Reinharz, 1992). Riessman (2002) reiterates the limitations of the process of representation. “Simply stated, we [researchers] are interpreting and creating texts at every juncture, letting symbols stand for or take place of the primary experience, to which we have no direct access All we have is talk and texts that represent reality partially, selectively, and imperfectly” (p. 228). I accept that my constructed account of the ‘social facts’ is an attempt to “balance a commitment to catch the diversity, variability, creativity, individuality, uniqueness and spontaneity of social interactions with a commitment to the tasks of social science to seek regularities, order and patterns within such diversity” (Cohen et. al., 2007, p. 169). While it is a “creative work by an author, who gives meaning to what she has found out” (Weiler, 1997, p. 638) my intention is to portray the complexity of both my own constructed account and the lives of those I am trying to understand.

The constructed account I present in the following chapters is the result of my involvement in the social world of the teacher participants being investigated, and as such is not without my influence in, and on, the research. Awareness and open

discussion of researcher influence on an inquiry is called reflexivity (Cohen et. al., 2007; Creswell, 2002). My own personal orientation towards this research is declared in the first chapter, while my theoretical orientation is declared in this chapter. I am mindful that as an interpretive bricoleur my “personal history, biography, gender, social class, race, and ethnicity and . . . those of the people in the setting” (Denzin & Lincoln, 2003, p. 9) will influence this research due to the interactive nature of the process.

I also acknowledge that translating what has been discovered in the field into a text communicating multiple meanings is a representation of reality, as constructed by me, the researcher, and because they are human constructions “the text and an author’s authority can always be challenged” (Denzin, 2004, p. 457). Guba and Lincoln (1994) state:

the sets of answers given are in *all* cases *human constructions*; that is, they are all inventions of the human mind and hence subject to human error. No construction is or can be incontrovertibly right; advocates of any particular construction must rely on *persuasiveness* and *utility* rather than *proof* in arguing their position. (p. 108)

One way to minimize challenge to the authority of an author and to reduce doubt being cast on the findings of research is to ensure it is trustworthy.

3.7 Issues of Quality

Lincoln and Guba (1985) propose that it is more appropriate to assess the quality of a research inquiry conducted from a constructivist-interpretive perspective using alternative criteria to that inherited from a scientific tradition. It is thus appropriate that “terms such as credibility, transferability, dependability, and confirmability replace the usual positivistic criteria of internal and external validity, reliability and objectivity” (Denzin & Lincoln, 2003, p. 35) and that the quality of this research be based on its claim to be trustworthy.

“The question of trustworthiness essentially asks: To what extent can we place confidence in the outcomes of the study? Do we believe what the researcher has

reported?” (Maykut & Morehouse, 2001, p. 145). To enhance the confidence of readers, I have attempted to make the research process as transparent as possible by providing a sufficiently detailed description of the systematic process used for gathering and analyzing data. An audit trail has been retained to verify this process. Since, in qualitative research, “accurate accounts of social facts at the level of descriptive validity are the basis for all subsequent representations” (Eisenhart, 2006, p. 574), all participant transcripts were verified for accuracy by the participants themselves and returned (Appendix 6, Appendix 7). It is anticipated that this will enhance credibility.

I have attempted to provide a rich description of the findings in the hope that readers find them credible and are able to trust the reported outcomes. I accept that in translating what has been discovered in the field into text, my authority as an author can be challenged (Denzin & Lincoln, 2003). To enhance credibility, I have declared my theoretical orientation as a researcher, and my novice status. I have also declared my personal orientation towards this research by stating the purpose and goals of the research inquiry in chapter one. I wish to further declare that I am a female, middle-class European given that “[a]ny gaze is always filtered through the lenses of language, gender, social class, race, and ethnicity. There are no objective observations, only observations socially situated in the worlds of – and between – the observer and the observed” (Denzin & Lincoln, 2003, p. 31).

Consistent with my theoretical orientation in the constructivist-interpretive paradigm, I believe that to produce a singular truth by way of a generalization is at odds with the belief that human behaviour is complex and multi-faceted. This research does not attempt to arrive at a generalization, but rather to provide a perspective that will stimulate further dialogue and inquiry. It attempts to provide “useful and understandable information” (Patton, 2002, p. 585) that will not only inform my own practice as a leader of learning, but the practice of other leaders of learning. The quality of this research will ultimately be judged by my peers who will either accept or reject its legitimacy.

3.8 Summary

This chapter outlined the theoretical framework in which this research inquiry is positioned, and described the process and procedures for gathering and analyzing data and presenting the findings. It identified issues related to representation and quality. I now present the findings of my inquiry into the research question “How do experienced teachers explain the profound transformative influences on their teaching practice?”

4 CHAPTER FOUR FINDINGS

4.1 Introduction

This chapter describes the profound transformative influences on teaching practice from the perspectives of experienced teachers and, where possible, tells their stories using the voices of the participants themselves. The organisational framework for the chapter is based on the themes that emerged from teachers' stories. As criteria for the selection of participants in this research included being a member of an EHSAS (Extending High Standards Across Schools) cluster, the influence of this on participants' teaching practice is the final theme to be reported on.

The seven teacher participants in this research are all experienced teachers with 14 or more years teaching practice and come from five different schools. The two male and five female participants have been assigned a gender appropriate pseudonym in alphabetical order as they are introduced.

4.2 Catalysts for Change

In this research, experienced teachers mostly changed their teaching practice voluntarily. There was one exception, in which the participant had two experiences of force influencing change to her teaching practice – one directly and one indirectly influencing her teaching.

4.2.1 Forced Change

Alice had been asked to teach in a two-teacher open-plan classroom and wasn't sure she wanted to do this. "I'd always been quite keen on my own space and [doing] my own thing." She felt pressured by a senior colleague to make the change:

You know, when someone asks you about something and the fact you're thinking about it, to them means you've decided you will. And that woman was also my syndicate leader, so I felt sort of forced in a way to do it, even though I hadn't really decided.

Alice agreed to the open-plan style of teaching and found that it was “a change in what we did at school and the way I taught.” She explained those changes as “we'd often take the whole lot of children, or else we'd use our strengths more She [syndicate leader] had a strength in science, I had a strength in art and so we would take those lessons.” This incident of forced change, where Alice worked in an open-plan setting, directly influenced her teaching practice.

Alice described a second experience in which it “was a change because I was forced to, and that was far more traumatic.” In this instance, “it happened because we went into redeployment. Our rolled dropped so quickly that the school at the end of one year had to get rid of four permanent teachers.” Alice was identified as one of the surplus teachers and, as a consequence of the regulations relating to redeployment, was able to upgrade her teaching qualifications. This enabled her to teach in Australia. Faced with “probably the most difficult class I've ever, ever been in” Alice changed her approach to teaching.

It was survival. It felt like survival. If I don't dig my toes in and tame these kids, they will finish me. And I will not allow them to finish me It only took six weeks before I knew I could [tame them], and for six weeks I was like a policeman.

Forced change had indirectly affected Alice's teaching. Adopting the style of a “policeman” was a voluntary act which allowed her to “survive” in teaching. The six other participants in this research voluntarily changed their teaching, but for different reasons, prompted by different circumstances.

4.2.2 Unplanned Voluntary Change

The serendipitous meeting of significant others influenced two of the participants to transform their teaching practice. Ben explained that at the start of his teaching career “you were placed there [in schools] in those days and I guess a

school's a school and people wanted a job. You just went to a school whether it was a conventional school or an open-plan school." In an open-plan school, Ben worked closely with his syndicate leader who influenced his teaching practice and his beliefs.

I got involved in a syndicate with a syndicate leader who was very, very liberal in his thinking – educational thinking, and used the open-plan structure to the nth degree, exploiting the pod to what we thought was its maximum. I thought he was quite advanced in his thinking at the time and I look at the key competencies now and, in terms of self management and relating to others, this was really at the sharp point of giving children responsibility for their learning.

Such was the influence of his syndicate leader, Ben adopted a philosophy of teaching that was enduring throughout his teaching career.

I'm sharing it [this story] because I think it's had a profound impact on my teaching right through, and I've extended that philosophy to my own classroom and I've extended that [philosophy again] because now I'm in a management position.

Serendipity influenced Chelsea's practice. "If we're thinking of a deliberate turning point it was probably the people I met, and it took a long time to meet those people or stumble across them." Meeting with significant others had a transformative influence on her teaching practice, allowing her to align her teaching practice with her beliefs:

I had, in my youth, been an art teacher and so I always believed in sort of a more creative process as opposed to a structured process of everything existing in isolation. So I worked under the auspices of [Deputy Principal] and she brought to the party quite a different method of teaching, of everything being integrated, and from that moment on it just all fell into place beautifully. So always working with a common theme throughout the term and transferring it all into all curriculum areas. The other thing that came to pass, just behind that, was when we changed with Shirley Clarke's 'Learning Intentions' and actually setting a deliberate purpose. And once we had the purpose that we could see transmitted into all curriculum areas, I started to feel I'd come home, and it'd taken a very

long time. And the other thing, about then, the other person I met at that time was [art advisor] . . . with both persons sort of encouraging me, [I began] to work with an integrated curriculum and diffusing the purposes throughout everything.

For both Ben and Chelsea, significant others had a profound transformative influence on their teaching practice. Unplanned change occurred by happenstance.

4.2.3 Planned Voluntary Change

Four participants described a process of self-initiated change to their teaching practice. In two instances, it was a planned, deliberate act in response to school-wide literacy data illustrating poor student performance. In another instance, it was a planned response to a personal sense of becoming stale in teaching. In the fourth instance, change was part of an informal plan to improve personal teaching practice.

Diana was troubled by the literacy data in her school. “For two years in a row we kept looking at the literacy results and there was one cohort just worrying us. It didn’t matter what we did, they stayed the same.” This revelation coincided with an opportunity to submit an EPF (Enhanced Programme Funding) application to the Ministry of Education. Diana capitalized on this, and, with her principal’s approval developed a different approach to teaching literacy for year five underachieving boys. Diana wanted to establish a “non-traditional” approach based on the needs and interests of the boys, that utilized direct experiences, and involved the boys’ whanau wherever possible. She employed a Maori male, Hemi [pseudonym], as the boys’ teacher, anticipating that the boys would relate positively to him, and that he would act as a role model. She was working alongside Hemi to implement the boys’ literacy programme in the style of an action research project.

Esther was equally concerned about the achievement of her students in literacy.

Three years ago we heard about Winning Ways [pseudonym] literacy programme and we were desperate to do something about our

underachieving Maori. We're 98% Maori and that's almost the whole school. In our Six Year Nets we had children who were coming through that were dictated text at six years¹, and Magenta and Red after a whole year at school², and we just knew we had this huge problem, so we have gone the Winning Ways literacy programme way.

Esther described how she was implementing the new literacy programme in her school. It had transformed her approach to teaching students in their first year of schooling, and she was providing support for her colleagues who were also transforming their practice as they implemented the programme.

Felicity found that after some years in teaching she needed rejuvenation.

You get a bit stale after a while. I think if you teach for so long you sort of cruise along and you think yes, I'm doing the right thing. And you're like that for about five years, and all of a sudden you get this awful feeling that maybe you're not. Maybe things aren't quite as right as they should be and maybe there's something else out there.

Felicity located a literacy course in a professional development book and, seeing that it blended art with writing, felt it matched her interests perfectly. She was a practicing artist in her spare time. Upon completion of the residential course, Felicity remembers "driving back in my car and I was actually buzzing. I was absolutely buzzing with this." Her goal of being rejuvenated had been achieved.

In contrast to all other participants who discerned an actual turning point in their teaching practice, Graham considered there to be no one specific turning point.

It's not a particular moment in time when you go "Ah, ha," where you think I've got to change everything I'm doing. I think probably it more evolves over time. You hear, or you see things, or you read things, and you think "I wonder if that's got merit in it?" So maybe I'll try that in my class . . . I'll trial it and see, "Well does this work, doesn't it work? What [aspects] do I need to modify?" if there are parts that do really work. And I think, "Well this is what I need to do with my teaching. I need to change

¹ Dictated text refers to students at a pre-reading level.

² Magenta refers to Reading Levels 1 – 2, and Red refers to Reading Levels 3 – 5. Expectations of students at age six, after one year at school, is that they are reading at Green, Levels 12 – 14.

this part of it.” So it’s not actually just a big moment of changing your teaching. I think it evolves.

Through a process of continuous reflection on his teaching, Graham modified his practice through deliberate actions of self-improvement. These planned actions influenced his teaching practice.

Teacher change may be forced or voluntary. Voluntary change may be triggered by happenstance or deliberate planning. The circumstances surrounding both types of change appear to be linked to the teachers’ orientation to change, which can vary at different times during one’s career.

4.3 Career Cycle of Teaching

As teachers move through their career, they are influenced by different learning needs. This was evident in Alice’s story, where teaching in an unfamiliar situation in Australia meant “it was survival.” Graham attributed his ability to reflect on his teaching and modify his practice to the increased time available to do so, now that he had moved past the early survival stage. “When you’re a younger teacher, it’s [planning] a bigger focus and some days you just think, ‘Well, what’ll I do just to survive today?’ ” Having become more settled in his career, Graham was now in a phase of experimentation:

If it’s something I think is worthwhile, I’ll trial it. And I’ll trial it in my classroom with my kids and say “Yes this can work, or no it can’t work.” And I’ll even throw it away if I think [it won’t work].

The experimentation phase can also be marked also by a phase of activism, as illustrated by Felicity’s sense of becoming “stale” after a state of “cruising” in her teaching. She felt she’d “come to a bit of a cross-roads and needed to do something to lift my teaching just that little bit.” This prompted her to attend a workshop on literacy in which the facilitator “was one of these infectious, vibrant women, who was thoroughly passionate about what she was doing.” Felicity returned to classroom teaching feeling reinvigorated.

Ben was profoundly influenced by his syndicate leader, and during the stabilization phase confirmed his commitment to a philosophy of teaching in self-managing classrooms. This early career experience contrasts with that of teachers as they approach the end of the career cycle, as explained by Felicity:

When you've been teaching for a very long time, nothing is new I'm not saying I know everything, but there's nothing out there at the moment that inspires me because there's nothing that I haven't read before, in some shape or form, through my teaching life.

Felicity has entered the stage of serenity, or relaxed confidence, in her teaching.

These findings demonstrate that teacher's learning needs vary according to their stage in the career cycle and this can have a transformative influence on their teaching practice.

4.4 Sources of Knowledge that Influence Practice

All seven participants in this research transformed their teaching practice as a consequence of developing new knowledge acquired via a learning experience facilitated by an external expert such as an educational consultant, an internal expert such as a fellow colleague, or by a combination of both sources of expertise. One participant was influenced by an external expert, four participants were influenced by a combination of internal and external expertise, and two participants were influenced by internal expertise alone.

4.4.1 External Expert

Felicity experienced a traditional form of professional development in which participants attend an off-site workshop. She attended a residential course on literacy during which the facilitator structured the learning so that Felicity, as a teacher-learner, directly experienced a new method of teaching writing. Felicity explained how the facilitator would

go round the room and give everybody a shell, and then she would sit and talk about it, and ask you to feel it and look at it, and then

draw it and then colour it. Then she'd start playing music, and then she'd ask you to write about it We were all adults and we were writing from our hearts. All of a sudden you discovered that you were actually a writer, and that what you wrote was valued.

Felicity's learning, sustained over four days, enabled her to replicate the procedure modeled by the facilitator upon her return to the classroom. What she found was "that for the next 10 years the writing that the children did in my classroom was of a really high quality. It was publishable."

4.4.2 External Expert with Internal Support

Esther attended Winning Ways literacy programme workshops with two of her colleagues as a means for introducing new teaching strategies into her school. The aim was to improve the achievement of Maori students in their first year of schooling. While at the workshops, Esther learned alongside her colleagues from an external expert. Back at school, Esther acted as the internal expert to support new learning and the implementation of new teaching strategies. The learning experiences provided by the tutor, an external literacy expert, were varied as Esther explains:

You take [instructional reading] books over and you say what you've done. You take over writing samples that you've done and the tutor will talk to the samples and people will share. She talks to you, writes notes on the board, challenges statements that you make and gradually you keep taking notes She puts you into groups working. She's talking, you're taking notes, and you're talking about what's happening in your room and how you're working it.

Esther felt that the interactive style of the workshops actively involved teachers as critical learners in discussions. Using artifacts from their own practice, the teachers were encouraged to interrogate their teaching, as Esther explains:

The tutor challenges you about why you're doing things that way, and so you really are unpicking your teaching. It is quite a change, quite a shift in the way people have taught You come back and you've really got to sort this out in your own head.

Through active involvement in challenging discussions, the external expert was assisting teachers to ‘unlearn’ old practices. In writing up their own notes following workshops, learning was personalized and teachers were able to internalize new teaching methods.

Esther noted that while one teacher expressed a change in attitude from resistance to the programme to support for it, her actions in the classroom did not match what she was articulating. In this instance Esther, acting as the internal expert, adopted the role of challenger as modeled by her tutor during the workshops:

I can think of this conversation I’ve got to have with one of our new entrant teachers. She’s still got alphabet–phonics things hanging up in the room, so I need to ask her why. And also [ask] about her activities They need to be of a high quality.

As the internal expert, Esther ensured that delivery of the programme remained faithful to the philosophy of the new literacy teaching methods. She sustained and supported new learning, monitored students’ progress, and sent reports to the tutor by set deadlines.

4.4.3 Internal Expert with External Influence

Diana had identified a problem with the literacy achievement of the year five boys in her school. Acting as the internal expert, she changed her approach to teaching literacy. She wanted to develop a programme using “non-traditional teaching strategies” that engaged boys in authentic learning contexts suited to their needs and interests, and hoped the new approach would result in improved achievement outcomes. While Diana had a clear idea about her expectations of the programme, she was less clear on the actual model of practice that was required to achieve this. She began developing a model based on her own expertise and that of her colleagues, and this was complemented by knowledge drawn from external experts. Diana explains the process:

I started talking with friends who perhaps think along the same wavelength [as me], and one of my friends at the time had been doing a lot of work with [educational consultant] and I’d had a few sessions with him a year or so before in a private consultation with one of our kids. I liked

some of his thinking (and he sort of came a little bit left field) and then I looked at some of the research to do with Te Kotahitanga. A lot of that was secondary based, but I couldn't see why some of these theories couldn't work in primary Joseph Driessen, I did a little bit of reading around him and went to one of his courses at the beginning of the year. I worked with our RTLB, and sort of said, "Hey, this is where I'm coming from" and they said, "Yeah, so-and-so has looked at a little bit of this sort of thing." Also [Principal], who's at [local Intermediate school], has a boys' class which is different again but there were aspects, ideas that I could take from that, and that's been quite successful for several years. So there's not a lot of hard facts that I've based it around. It's a bit of a gut feel. Hopefully I can create the hard facts.

Diana gathered ideas informally from her colleagues by "just pulling in aspects or people with ideas at the right time." The entire process of developing the programme was based on Diana's belief that "there's a lot of knowledge around us anyway, if you're open to listening to it and ask[ing] questions." Her approach to transforming her teaching practice was a process of weaving together the knowledge she gained from both internal and external experts and trying it out in practice. Diana described it as being "kind of a gut feel and as it's action research you can sort of keep reviewing and looking and seeing how things are going."

Chelsea was encouraged by her Deputy Principal and the visiting art advisor to develop an integrated approach to learning, with a clear focus on the purpose of learning. It transformed her practice to the extent that she experienced a sense of "coming home" suggesting that her teaching practice was now aligned with her teaching philosophy. The internal expert, Chelsea's deputy principal, and the outside expert, the art advisor, had jointly influenced her teaching practice. Some time later, Chelsea took up a leadership role in assessment and began developing school-wide assessment procedures based around portfolios. She had previously "done quite a few courses on assessment and gone up to a big workshop many years ago in Auckland with Lester Flockton and co[mpany]." Equipped with professional knowledge gained from external experts, Chelsea was by now an expert herself and, again with her deputy principal, began working on

school-wide assessment procedures. She explained how she and her deputy principal

sort of designed the prototypes and we gave it to certain people to see if it worked. So it was a little bit hierarchical, but it suited well that we were the catalysts and we had some people who were prepared to implement it. They came back with their findings.

Chelsea's teaching practice and that of her colleagues was transformed through the progressive development and refinement of ideas created by blending internal expertise from her colleagues, with external expertise, ideas gained from the course on assessment. Both Chelsea and Diana were shaping transformative teaching practice by weaving together ideas gathered from both internal and external sources of expertise.

Graham described his process of learning as being influenced by courses he had attended or books he had read. He felt that "professional development is very important for teachers and also taking time to reflect." He described his process of reflection as "looking back at what you're doing, why you're doing it, is it working, what can I do to improve it?" Using the example of inquiry learning, Graham illustrated his learning process:

You go along to a professional development that's organized for you and you hear the speaker speaking and you think in your head this could have merit so we'll go back and we'll try it. It was quite good because the whole staff did it [the professional development] and so we went back and there were two or three of us that got into it [inquiry learning] and we trialed it and thought this had merit. And it was really interesting to see [that] the kids were motivated, they were in control of the learning a bit more and it was like, yeah, this is really good. Inquiry learning has a future with us. And so therefore you refine it so you have the ownership of it . . . I think when I look back, that's probably what's happened over my teaching career.

The transformative influences on Graham's teaching were generated by a process of personal reflection on experimental teaching practice following his attendance at a professional development course facilitated by an external expert.

4.4.4 Internal Expert

There were two instances where the internal expertise of colleagues influenced change to teaching practice.

Ben's teaching practice was influenced mostly by his syndicate leader, whom Ben considered to be "quite advanced in his thinking." His learning took place during their daily work together in an open-plan classroom and was complemented by observations of colleagues at work in other schools. "We did visit [name of] Intermediate in [city], because they were acknowledged as being at the sharp point in terms of using this type of architecture effectively. So part of our learning was to see how others use it." In Ben's words, his experience of working with 130 students in an open-plan setting "opened my eyes from being a classroom teacher with pastoral care for 30 kids and obviously teaching care, to care for a wider group. And it opened my eyes to using teacher strengths." He also developed some theoretical understandings:

The whole philosophy was that children could achieve and work at their own rate. It acknowledged that children had learning styles and rates of learning that were all different. It allowed us to actually focus on needs, and teaching children specifically according to those needs. We would pull children out according to needs and teach them, just like we do in our classrooms nowadays, but we were doing it on a cross-class basis.

Alice's experience of working in an open-plan setting was developed on the job and through daily teaching practice with her syndicate leader. When asked how she developed this knowledge she replied "it was a learning curve. It was a social learning curve really, as well as a professional one." This on-the-job learning from a syndicate leader suggests that learning often occurs by working alongside a more experienced colleague within the school, and has parallels with Chelsea's story of learning alongside her deputy principal.

The stories in this section illustrate how participants' teaching practice has been influenced by knowledge from either external or internal experts, or by a combination of both sources of expertise. The manner in which the knowledge has

been worked with differs according to whether the participant adopted an individual or a collective approach to transforming their teaching practice.

4.5 Individual or Collective Approach to Learning

Some teachers appear to transform their practice by working with new knowledge on an individual basis, while others work as part of a collective.

4.5.1 Individual Approach

Graham felt the transformative influences on his practice were part of an evolving process that occurred through his personal reflection on his teaching when he judged the success or otherwise of his teaching according to “what worked,” and whether it had “merit” as determined by the extent to which students were motivated and enthusiastic. While there were times when he worked with his colleagues, most of the time Graham’s reflective practice was an individual activity. Graham also talked about formal learning to improve his qualifications but felt that the time and effort required was better invested in “what I can learn by myself to help my kids, or from different people or different organizations or courses that are run, that are more practical to focusing on helping your kids, rather than a lot of theory.” Graham’s focus was on his own practice and how best to tailor this to suit the needs of his students.

Felicity attended the residential literacy course by herself and implemented her new learning as an individual. “I was doing it quietly, so lots of people didn’t know. And it didn’t really matter. I wasn’t worried about that.” When asked who sustained her in her practice, Felicity said, “Nobody,” then added, “the Principal at the time loved writing and he would come into my room and read my kids’ writing and, and you know, was pleased with it. But that’s all.” Felicity was the driving force behind her own learning.

4.5.2 Collective Approach

For other participants, transforming teaching practice occurred as a joint project in collaboration with others.

Chelsea appreciated working with colleagues; “I’ve seemed to have met people . . . I’ve never existed in isolation, certainly in the last 15 to 20 years.” She expressed her preference for collective learning:

I think the walls coming down in classes was great for me, and being eligible to go into other rooms. When I first started teaching it was in isolation, and gradually under Tomorrow’s Schools you had bigger integration of people’s thinking. It wasn’t my thinking, it wasn’t your thinking, it was our thinking.

Diana articulated her belief in a collective approach by saying:

Particularly with this project, it’s not about me, it’s a team of us who are going to be working together to create something for the kids. I see it as a real team thing and it might have been my little baby to start with, but it’s to do with the team because we’ve got some people on our staff with amazing knowledge that I want to be able to tap into, as well as other agencies, and RTLBs, and other members from other staff.

Teachers appear to develop their skills on the job through classroom experiences, both on their own and in collaboration with others, and this has a transformative influence on their teaching practice.

4.6 Mode of Learning

4.6.1 Crafting Practice

Teachers are adept at crafting new teaching practice and modifying it to suit the unique needs and purposes of their own situation. This may occur informally rather than as a result of formal learning. When asked about professional

development to support his learning to work in an open-plan situation, Ben replied:

No, we didn't do anything like that. It was very much fly by the seat of your pants sort of thing. I'd probably summarize and say it was groundbreaking really, what we were doing, and I can't recall there being courses for open-plan teaching.

Teachers continuously craft their teaching practice following experimentation and reflection on the effectiveness of their work. This was the backbone of Graham's reflective practice. Diana said she was "using a basic of plan-do-review and just [kept] going round like that." Chelsea felt privileged that she had been given

that little bit of liberty I suppose. People offer me those opportunities. And often I'm given a brief but there's no preconceived model of it. I seem to be the person that will take it on board and design something that works for everyone, and being prepared to remodel and reconfigure and re-evaluate really.

Continuous crafting of teaching practice was a theme that permeated the findings of this research.

4.6.2 Learning from Talk

Teachers engaged in a variety of types of talk, from informal staffroom chats to more formal syndicate conversations. These conversations had an influence on teachers' practice. Diana's story illustrated the extent that informal talk had on shaping her boys' literacy programme. The talk occurring in Ben's open-plan school was the result of being "thrown into the mix of people" where "teachers had a whole range of understandings of how the open-plan could be exploited." This prompted a more formal style of talk at syndicate meetings during which:

We had to talk things out, we had to disagree with each other, we had to work through issues, and obviously there are issues when traditionally people are very happy to have their 30 children. And to change that understanding to "Right I've got to be responsible for 130 children, four classes," that's a mind shift.

Chelsea was explicit in describing the type of talk that was instrumental in shaping transformative practice for her. She explained it as “I think a lot myself and I like to challenge other people’s thinking, and it’s not everyone that appreciates that, or relishes it. People can sometimes feel threatened by it without any intent of threat.” Nevertheless, for Chelsea, this process gave her the opportunity to gain ownership of any ideas being developed which for her was “absolutely imperative.”

Teachers’ regularly engage in informal and formal talk with colleagues which can have a transformative influence on their teaching. The extent of this influence is dependent upon the filtering effects of the teacher’s personal belief system.

4.7 Impact of Learning on Teaching Practice

Teachers held strong personal beliefs about effective teaching and these influenced how they made changes to their practice. Where their philosophy aligned with a new way of doing things, the teacher would either adapt or adopt the new practice.

4.7.1 Adapting Practice

Graham articulated this process when encountering new ideas as:

If it’s in line with my philosophy of teaching then I’d probably say, “Yeah that could have some merits,” and if I think it’s got some merits I’ll probably do a little bit more looking at it myself and then think, “How can I adapt that into my class?” Being a little bit more conservative, I suppose, I keep control of things a little bit before I actually let it go, just to see how it goes. Often it surprises you with the kids, and things do work.

This illustrates alignment of Graham’s beliefs with his new practice, as well as his method of crafting teaching practice from experimentation.

4.7.2 Adopting Practice

Early in his teaching career, Ben found himself working in an open-plan school where “the whole philosophy behind the thing was children had to manage their time, and manage their learning. In other words, contract learning was a key plank of the whole organization.” Later in his teaching career, Ben worked in a single-cell classroom but continued to implement this philosophy. “I’ve adopted that same philosophy right through my teaching. This is our classroom. You’ve got to take responsibility for your behaviour, you’ve got to take responsibility for your learning.”

When Chelsea met two people who encouraged her to work an integrated programme based around the purpose of learning, she felt she’d “come home.” She added that “there’d been a lot of unease before that, in terms of my own philosophy and where my philosophy sat within the framework of a very conventional system.” She was relieved that she was able to transform her practice to align with her teaching philosophy:

I didn’t enjoy my early years [in teaching] when we had to do this here and this here. And the shift, too, to child ownership. I’d always believed with my own children that it’s about self management and of course now that we’ve got the Key Competencies, that’s validated that side too.

Chelsea describes her philosophy as one based on integrated themes, suited to a particular purpose, and grounded in student self-management.

Esther expressed a similar sentiment of at last finding a literacy programme that aligned with her beliefs, beliefs which she developed during her teacher training:

The more I’m around, the more I know we just had the most fabulous training . . . I’m finding that what the literacy tutor is doing is a lot of what we started out teaching doing, and I actually think there was a lot of merit in what we did.

This not only confirmed Esther’s commitment to the Winning Ways literacy programme but also strengthened her resolve to overcome the resistance she was encountering from her colleagues.

Teacher beliefs are a strong controlling mechanism for either implementing change or guarding against change. Some of the participants shared their beliefs about what they did not want to implement. Chelsea was adamant that her practice was strongly guided by the purpose of learning as determined by the needs of her students. “If it fits with my audience of children, I’ll do it at that point. I won’t be indoctrinated to over-ride my own belief.” Esther expressed her concerns about a former language programme in which

kids just wrote their thoughts and that was the most important thing. It does not appear to suit our children who will write for a whole year “I went to the shops and bought some lollies” because there’s no pushing them into a different world, building vocab, giving them new experiences, and [new] things to write about.

She felt strongly that “when new ideas come out we must be very careful that we don’t just adopt anything that’s going, but that we really look at it and see how it’s going to work for our children.”

Teacher beliefs influence their willingness to adapt, adopt or reject new knowledge and ideas. Where there is an alignment of beliefs about practice and teaching practice is transformed, it is sustained through a variety of perceived rewards.

4.8 Sustaining New Learning

4.8.1 Self-efficacy

Teachers expressed a depth of emotion that appeared to sustain transformative practice. The desire to make a difference in the lives of students was powerfully demonstrated by Diana’s body language and her being overwhelmed with emotion:

Well, it’s really, it’s just something, I’m just, [pounds clenched fist to chest twice.] Yeah, my heart goes every time I start talking about it and I sort of get all excited and there’s just something. These boys deserve the best and they’re not silly you know, they’re so capable. But you can just

see behaviour problems creeping in because they're struggling. You can put a lid on that, and make them feel confident about themselves. A lot of it's to do with pride, and we can show that we value them and their whanau. Then their sense of pride will go up and then all sorts of things open up.

Diana's belief in student success under the right conditions was echoed by Chelsea:

It's about not having excuses. It's about a sense of belief that anything's achievable within the right parameters and with the right amount of knowing what you want up here [tapping her head] and planning for it right down at those little incremental steps.

Chelsea is quite explicit in her belief that student success is the responsibility of the teacher who needs to be knowledgeable and skilful. "Sometimes, when it obviously hasn't cut the mustard, I'm really quite deliberate about making those changes [to my teaching]. It's not about massaging an ego. My job here is to raise the standards."

Felicity said:

So, to me it's about the children's learning needs, and how I best cater for that. And if I had to teach in a different way, then that's what I'd do If you don't change your practice, you're doing a disservice to the children that you're teaching.

For each of these teachers, a belief that they could make a difference in the lives of students was a powerful transformative influence on their teaching practice.

4.8.2 Student Success

Teachers appear to sustain change to their teaching practice as a consequence of the results they obtain from student learning. Graham found his students were more enthusiastic and motivated about their learning, while Ben found the open-plan approach "was motivating when the children weren't restricted to a classroom, weren't restricted to a desk and chair" and that the "informality of the situation took the pressure off the children" so that they could manage their own

learning according to their individual needs. When Felicity was asked what sustained her commitment to the new writing practice, she replied:

The parents and the children did, because the kids were so chuffed about what they were doing that they were going home and bringing their parents in before school and after school and [saying], “This is what I’ve been doing.” And so to see that happening made it worth it. And as the years went by, to meet up with children who were past pupils and parents who were saying, “My kid’s at university and they’re still writing.” That’s sort of the pay off you get. Teachers don’t get very much, there are no bonuses. Those are our perks really.

4.8.3 Job Satisfaction

Chelsea was motivated by her sense of being an effective teacher which she gauged by the extent to which students are “discussing their learning and that gives me a great deal of satisfaction.” Alice found that teaching in an open-plan setting had benefits not only for her students but also for herself. The combined syndicate planning and subject specialization reduced her workload and was satisfying. It “took quite a bit of pressure off me because it’s great to be able to teach in the areas you love teaching in. It feels good.” Alice also gained satisfaction from her sense of being able to help troubled students. She found the flexibility of open-plan beneficial for

children who had real problems, emotional problems, because my passion at that time was counseling and it gave me a chance to take them away, or to have a walk with them and talk with them and see if you could help more If you’ve got someone else there, when the moment happens, you can actually just say, “I’m off. I’m just going for a walk round the field.” I mean the chance to be able to do things like that, in that moment, is sometimes lost when you’re on your own in a room with 30 children.

Teachers’ transformed teaching practices were sustained when they were rewarded by their own sense of efficacy, by student success, and through job satisfaction.

4.9 School Factors that Influence Change

The participants' stories reveal certain factors within schools that influence change. These include aspects related to the structure and organization of the school, the relationships between colleagues within the school, and the influence of the principal in creating a culture of learning.

4.9.1 School Structure and Organisation

Within a school, certain structural features appeared to influence change to teachers' practice. For Ben and Alice, the structure and organization of the school, with its open-plan classrooms, required change to their teaching practice. They both mentioned how their teaching methods changed in order to accommodate the specific needs of students through cross-grouping, and to utilize teacher strengths across the syndicate.

4.9.2 Collegial Relationships

Ben and Alice spoke of working as part of a syndicate and this influenced their teaching practice. Ben's relationship with his syndicate leader was one of respect and admiration. "We were guided very strongly by the syndicate leader. He was energetic, hardworking, visionary and, to be fair, probably some of us were riding on his coat tails. We were inexperienced and we looked up to this syndicate leader." In contrast to Ben's positive relationship, Alice's relationship got off to a difficult start:

It got me into a situation where I felt like the student again, because she was a very strong woman. She was the senior syndicate leader and had her own ideas about things that were a bit different to mine. We turned out to be quite good friends, but it wasn't until I actually spoke my mind that things changed.

While their relationship improved, it did not survive long-term. This left Alice feeling that she'd "work in a double unit again with someone, but I would really have to have known them well first. They'd have to be a friend or a very close colleague, and then you can do it." In this situation where Alice was radically

transforming her practice, positive collegial relationships were critical to sustaining change.

Two participants mentioned the impact that coercive relationships would have on their practice, as a means to illustrate the importance of positive collegial relationships. Chelsea said, “I guess it’s the non-obligatory side of me – tell me to do something and I’ll dig my toes in, ask me to do something and I’ll walk a million miles.” The sense of mutual respect for colleagues is as important to Chelsea, as it is for Graham who felt “if I’m told that’s what you have to do, I probably wouldn’t be as enthusiastic about it.”

4.9.3 Culture of Learning

The relationship a principal has with their teaching staff can actively facilitate a culture of learning and this provides opportunities for teachers to transform their practice. This was the case for two of the participants.

Chelsea expressed her need to be able to generate new ideas and welcomed a style of principalship where she was able to “question things and think about whether things could be done in another way.” She was currently enjoying working with a leader that allowed this to happen. “I do like the high trust situation. I like to knock on [principal’s] door and say, ‘Have you thought about ___?’ or, ‘I’ve been thinking about ___.’ It’s just those endless possibilities.”

Chelsea expressed the importance of a principal that encourages risk-taking and went on to contrast the impact of two different styles of leadership on her practice.

I’ve worked in a situation previously where the person was a small picture thinker, so you’re constantly having to prove yourself. [Current principal] leads with high trust, and high trust is about, “I believe that you can achieve and you have my support in doing so. I also need to know if you’ve made errors and mistakes. You and I need to sort that, and our relationship has to be honest enough where we can have those hard conversations too.” I guess the thing is we all have incredible respect for her because she walks the walk and talks the talk, and I guess [because of]

her own current level of professional practice and her aspirations, again a big picture thinker, you just want to be part of it. You just want to be part of it, and you run to keep pace and catch up, you run to catch up. It's exciting.

Chelsea is suggesting that her principal not only encourages her to initiate change but is a continuous learner and risk-taker herself. The climate of professional learning and change that the principal is cultivating is welcomed by Chelsea who finds it inspirational.

When Diana found that a cohort of year five boys were not achieving as she would like them to, she felt strongly that

we keep trying to fit these boys into our education system. Our education system should be fitting these boys. Let's turn it around and, you know, square pegs round holes and all that sort of thing, and luckily I've had [principal's] support and input to come up with something slightly more non-traditional.

Diana felt her principal's support of a radically different approach to teaching literacy was critical to her success in transforming her teaching practice.

4.9.4 Leadership Opportunities

Chelsea felt that being given leadership opportunities enabled her to transform her teaching practice. "I guess the other thing is I always get given responsibility. Responsibility in terms of, 'Here's the parameter, go away and see what you can do with it.' That lateral creativeness and the ability to think outside the square." After she had developed school-wide assessment practices with her deputy principal, she was given a leadership role in literacy. She established an ESOL (English Speakers of Other Languages) class and some of the teaching practice she developed from this initiative was published nationwide in the *Effective Literacy Practice in Years 1 to 4* (Ministry of Education, 2003) handbook.

Where the culture of a school and the style of leadership provide a fertile environment for risk-taking and generating new knowledge and learning, teachers transform their practice.

4.10 Impact of Extending High Standards Across Schools

While the research sample selected from schools involved in EHSAS, not one of the participants spontaneously mentioned EHSAS as being a factor that had influenced transformation to their teaching practice. When asked directly how EHSAS had transformed their practice, five participants answered in the negative, three with an emphatic “It hasn’t.” Felicity said “I don’t think that EHSAS, for me, has changed anything and I’m the lead teacher EHSAS isn’t providing me anything, I guess, that’s new, that is inspiring me to, say, go off in a different direction.” She attributed this to the length of time she had been in teaching and explained that at her stage of career, “it’s a lot of the same old, same old stuff that I have gone to courses for, for years, or taught other teachers to do before.” In contrast to this, Graham spoke of his experience:

I’ve been involved in the literacy [professional development] and that’s changed immensely in our assessment of it and our moderating of it – the whole process of doing it. It’s trying to be more consistent school-wide from new entrants right through to year six.

For each of the schools, continuity of personnel in the cluster leadership role had been problematic. Graham explained that “our [EHSAS] cluster stuttered a bit to start with” while Alice witnessed turn-over of three different people in the cluster leadership role. It seemed that the turn over of teachers in the leadership role also had an impact on the vision and direction of the cluster. Alice found that “for the first eight months nothing happened” and in Chelsea’s opinion, the EHSAS cluster “hasn’t been well formulated from its initial inception. It went for a good year before it had any common goals.”

Alice was emphatic about the importance and reciprocal benefits of give-and-take in valuing people and working together for the common good. “You must have some sort of decent plan, so that everybody who’s involved feels important, feels that they are a decent cog in the whole machine.”

While EHSAS was viewed by the participants as having had a difficult start and lacking a clear focus from the outset, over time it appeared to be generating some

benefits. Both Graham and Esther said their clusters were initiating cross-school networks. Graham said “it’s been really good because we’ve got primary, intermediate and secondary all talking to each other, and not just in literacy but in numeracy as well, and we’re trying in leadership as well.” Esther commented:

There was a drive, and I think we will continue with it, to have teachers have critical friends across the school and also do observations and mentor and do things like that. And as literacy leaders we are working together a lot now, so that’s really good.

While EHSAS had provided learning opportunities that were considered beneficial and informative, it was not perceived as having had a profound transformative influence on the teaching practice of these participants.

4.11 Summary

The findings of this research reveal multiple forms of influence on transformative teaching practice. Teachers are either compelled by force to change their practice, or they transform it voluntarily. Voluntary change may be serendipitous or prompted by desire for a particular outcome. The stage in the career cycle influences a teacher’s receptivity to change in teaching practice. New knowledge gathered from external experts, internal experts, or a combination of both sources of expertise influences an individual teacher, or a group of teachers working collectively, to improve the effectiveness of their teaching practice. The process of transforming teaching practice is dominated by the art of crafting practice in everyday work through classroom experimentation. It is sustained by teachers’ deep personal commitment to making a difference in the lives of their students, and the intrinsic rewards gained from this work. Teachers are most likely to engage in transformative practice when school factors impact upon workplace conditions and make them conducive to teachers’ learning.

In the next chapter, these multiple forms of influence are discussed in relation to the literature.

5 CHAPTER FIVE DISCUSSION

5.1 Introduction

This research sought to locate from the literature and from the voices of experienced teachers the influential factors that transform teaching practice. It was expected that professional development would significantly influence teachers' practice, thus the literature review has a particular focus on the key elements of high-quality professional development. The literature recognises the influence of individual and school factors on teaching practice and acknowledges the impact that working in a community of practice has on transforming teacher practice. The findings confirm a range of dimensions each with multiple layers of influence on transformative practice. The following discussion weaves together key themes from the findings in chapter four with themes from the literature in chapter two. It includes further literature as appropriate, builds upon the concepts already introduced, and provides a multifaceted view of the factors which influence transformative teaching practice.

5.2 Catalysts for Change

While force may compel teachers to change their practice, the dominant form of change in this research was that made through autonomous choice. Whether a professional learning opportunity arose through serendipity or through planned action, teachers voluntarily made profound changes to their teaching practice. Grundy and Robison (2004) claim that professional development has two drivers – systemic and personal. Personal drivers relate to “personal engagement and/or commitment. This driver refers to the personal desire and motivation by teachers to sustain and enhance their professional lives” (p. 147). In this research, voluntary change was made in a bid to improve teaching practice and, in two cases of planned voluntary change, to also improve student achievement. Teachers were motivated by a strong desire to make a difference in students' lives and were rewarded by student success and increased student motivation. Enhanced teacher

efficacy and job satisfaction made a positive difference to teachers' professional lives. This suggests that personal drivers influence profound transformative practice.

It could be inferred that systemic drivers were also at work in the two cases in which the catalyst for voluntary change was a deliberate plan to improve poor student achievement in literacy. Currently in New Zealand, schools are experiencing a government influenced drive to address the long tail of underachievement by reducing disparity between the highest and lowest achievers. This drive is accompanied by a push for teachers to increasingly become accountable for improved student achievement, and especially that of those students most at-risk. In the two cases where improvement to literacy learning was the goal, systemic drivers may have influenced profound change to teaching practice.

While personal and systemic drivers provide the catalyst for voluntary change, teacher receptivity towards change appears to ebb and flow throughout their professional life cycle.

5.3 Career Stages in Teaching

The findings in this research provide examples of teachers at different stages in the career cycle being influenced to transform their teaching practice in different ways for different reasons. The examples illustrate the learning needs of teachers in four of the five stages of Huberman's (1992, 1995) career cycle – stage one, survival; stage two, stabilization; stage three, experimentation and activation; and stage four, serenity. They also illustrate Huberman's (1995) claim that movement through the five stages may not necessarily be one of continuous progression, but rather one "filled with plateaus, discontinuities, regressions, spurts and dead ends" (p. 196). In two cases survival was mentioned, one of which exemplifies an experienced teacher regressing to an earlier survival stage on account of teaching in an unfamiliar situation. In the case of Ben working in an open-plan setting, the stage of stabilization is illustrated. The influence of his syndicate leader confirmed

his teaching philosophy of self-managing learning. Felicity engaged in a period of activism to rejuvenate her teaching in response to growing stale and, in a later stage of her career, exemplified serenity when she felt there was “nothing out there at the moment that inspires me.”

The findings confirm the ebb and flow of teachers’ orientation towards change. They illustrate that career stage can trigger transformative teaching practice.

5.4 Models of Professional Development

Models of professional development reflect a range of learning processes where teachers interact with new knowledge derived from different sources of expertise. The transformative practice articulated in the findings is the result of a learning process facilitated by external and/or internal experts. It resonates to a certain extent with the models of professional development proposed by Sparks and Loucks-Horsley (1996) and Sprinshall et al. (1996). In some cases, there is a clear correlation between the participants’ story and the model of professional development. In other cases, the match is less precise.

5.4.1 Expert Model

The expert model (Sprinshall et al., 1996) and the training model (Sparks & Loucks-Horsley, 1996) are both based on an educational expert presenting new knowledge or skills at a workshop. The expert controls the pace, style and delivery of the learning, with the learning having a specific set of predetermined objectives or outcomes. This form of direct learning (Lieberman & Miller, 1999) and attendance at a residential course had a transformative influence on Felicity’s literacy teaching practice.

5.4.2 Interactive/Inquiry Model

The interactive model (Sprinshall et al., 1996) and the inquiry model (Sparks & Loucks-Horsley, 1996) are similar in that both are dependent upon the teacher initiating a line of inquiry with the intention of locating a solution to a work-

specific problem. Two of the participants, Esther and Diana, identified the problem of student underachievement in literacy and, while each teacher adopted a different approach to seeking a solution relevant to their own context, both were actively engaged in the development of complex cognition about pedagogical practice in literacy. This had a profound transformative influence on their teaching.

5.4.3 Craft Model

Parallels can be drawn between the craft model (Sprinthall et al., 1996) and the development/improvement model (Sparks & Loucks-Horsley, 1996) in that both are based on improving teaching practice using a process of trial and error experimentation. Chelsea's mode of learning as she developed school-wide assessment practices, and Graham's use of reflective practice to adapt inquiry learning to suit his teaching style, offer examples of these two models.

The craft model (Sprinthall et al., 1996) and the individually guided model (Sparks & Loucks-Horsley, 1996) also offer parallels based on the trial and error nature of the learning associated with each. The individually guided model is characterized by an individual determining their own goals for learning and involves developing new knowledge informally through discussion with colleagues and experimentation. This best describes the learning process adopted by Ben and Alice as they developed teaching practices that maximized the advantages and opportunities created by working in an open-plan setting.

5.4.4 Silences

Sparks and Loucks-Horsley's (1996) models of professional development include two models, the training model and the observation/assessment model, in which observation and feedback are a critical component of learning. They contend that observation can be a powerful means of professional learning because it provides teachers with data that enhances the reflective process and makes learning more rigorous. Observation and feedback on teacher performance did not feature in the participants' descriptions of transformative influences on teaching practice in this research.

The training model (Sparks & Loucks-Horsley, 1996) recommends feedback on a teacher's performance and follow-up coaching as a means of influencing change to teaching practice. While coaching was not mentioned by the participants, mentoring was implicit in both Ben's and Chelsea's stories. Ben's experience of "looking up to" his syndicate leader and Chelsea's sense of "both persons encouraging" her indicate the influence of a mentor. Mentoring a protégé is a process defined by Daresh (1995) as a wiser, more experienced person shaping and guiding a younger less experienced colleague. Mentoring appeared to profoundly influence the teaching practice of Ben and Chelsea.

5.4.5 Blended Models

The positioning of each participant's story within a specific model of professional development provides a less than accurate explanation of the transformative influences on teachers' practice. Many of the stories embrace elements of several of the models, irrespective of which set of models are used as the organizing framework.

Five of the participants were using an element of trial and error from the craft model to transform their teaching practice, three of whom were also using elements of the development/improvement model, and one of whom was also using the inquiry model. In this case, transformative teaching practice included elements of influence from three different models of professional development. It appears that the process by which teaching practice is transformed does not sit comfortably within the specific parameters of any one of the professional development models provided, but rather within the overlapping margins of several of the models.

This finding is consistent with Sparks and Loucks-Horsley's (1996) contention that teachers may learn through "blended use" of the models. While this notion may provide greater accuracy in describing the process of influence on transformative practice, wider examination of the literature reveals (besides a dearth of literature on professional development models) a model by Huberman (1995) that is more relevant to the findings of this research. This alternative model

represents the sources of knowledge as well as the nature of teachers' approach to the learning process.

5.5 Individual or Collective Approach to Learning

Huberman (1995) proposes a model of professional development based on the assumption that teachers are most likely to learn from a variation of the craft model and that they may learn either as an individual or as a collective. The model embraces four complementary cycles of learning – two individual cycles, and two collective cycles. This model accurately reflects the findings of this research.

5.5.1 Individual Approach

Huberman (1995) acknowledges that the most frequently used, though not necessarily the best, process of teacher learning is the “lone-wolf” (p. 207) paradigm. He claims that this model will be the mainstay of teacher learning because teachers are

professional craftspeople who, like artisans, work primarily alone, with a variety of new and scrounged-together materials, in a self-tailored work environment. Like good artisans, they are active tinkerers, intent on developing an instructional repertoire that responds to – even anticipates – most contingencies in the classroom. (p. 208)

Huberman's (1995) model proposes two variations of the ‘lone-wolf’ paradigm – the closed individual cycle and the open individual cycle.

The closed individual cycle relates to an individual responding to a problem by crafting their practice through trial and error experimentation. Graham used this process to transform his practice. He described it as an evolving process of trying things out and reflecting on the outcome.

The open individual cycle uses a similar cycle of crafting practice through trial and error experimentation, but includes input from experts, either internal or external. This model explains the transformative influences on Graham's practice

when he attended a course on inquiry learning and adapted it to suit his own teaching practice. It also explains the transformative influences on Felicity's practice following her attendance at a literacy course and applying her new knowledge to the teaching of written language.

5.5.2 Collective Approach

Moving from the "lone-wolf" to the "innovating" paradigm (Huberman, 1995, p. 208), Huberman proposes a model of learning that embraces a collective approach and depicts two complementary cycles – the closed collective cycle and the open collective cycle.

The closed collective cycle describes a collective approach to gaining knowledge in response to a perceived problem of practice. By accessing and generating knowledge from within the group, internal expertise is utilized to solve work-specific problems. This mirrors the method that transformed the practice of Ben and Alice as they learnt how to teach in an open-plan setting, from and with their colleagues, and through daily practice and experimentation in their work. It also describes the process of learning Chelsea engaged in when she developed school-wide assessment practices with her Deputy Principal, and involved her colleagues in trialling the "prototypes."

The open collective cycle describes a collective approach to learning in which teachers work together in search of solutions to a work-specific problem. It includes input from external experts, the development of ideas for trial and experimentation, reflection on the effectiveness of new ideas based on evidence of learning gathered through data analysis, and further experimentation. It approximates the approach Diana used to develop her boys' literacy programme and mirrors the approach Esther used to transform her own and others' teaching practice in literacy. The open collective approach is one in which the ownership and agenda for learning rests with the collective, based on their own perceived problem of practice (low levels of literacy achievement). The external expert may also facilitate opportunities for the learners to observe demonstrations of the new ideas applied in practice, share their experiences of experimenting with the new

practice, develop new methods, analyze data, and refine newly developed methods (Huberman, 1995). These elements were evident in the learning process described by Esther as she transformed her own and others' teaching practice using the Winning Ways literacy programme.

The four cycles of professional development – closed individual cycle, open individual cycle, closed collective cycle and open collective cycle (Huberman, 1995) offer a more accurate explanation of the interaction of factors having a profound transformative influence on teachers' practice in this research. Huberman's (1995) model explains the method of learning – individual or collective, the source of new knowledge – internal or external expertise or a combination of both, and the process of learning – crafting practice by engaging in trial and error experimentation. They are consistent with the findings of this research which reflect teacher ownership of an identified problem of practice, a process of active involvement in solution-seeking using internal and/or external expertise, and trial and error experimentation to craft practice.

Huberman's (1995) model makes a distinction between the approach and process of learning, and the source of the expertise, but does not prescribe the site of learning. In this research, one participant attended a course off-site, one participant engaged in learning both on- and off-site, while the remaining five engaged in on-site learning. This suggests that an influential factor on transformative practice is on-site, job-embedded learning.

5.6 Characteristics of Professional Development

The characteristics of high-quality professional development include content characteristics, process variables and context characteristics (Guskey & Sparks, 1996; Timperley et al., 2007). The dominance in the findings of on-site, job-embedded learning suggests that one characteristic of professional development in particular is significantly influential upon teaching practice – the process. Content and context characteristics are also influential, but to a lesser degree for the participants of this study.

5.6.1 Process Variables

Six of the seven participants' stories presented a common theme of job-embedded learning through collaboration with colleagues. This process of learning is consistent with the literature calling for a break away from traditional forms of learning – workshops and conferences – to a new style of learning where teachers are actively involved in opportunities to discuss, think about, develop, and trial new ideas as part of their every-day work (Ball & Cohen, 1999; Darling-Hammond & McLaughlin, 1995; Hawley & Valli, 1999; Lieberman, 1995). Lieberman and Miller (1999) refer to this style of learning as “growth-in-practice” (p. 59) and depict three essential elements that characterize the style – learning in a professional community, combining inside knowledge with outside knowledge, and creating an ethic of collaboration.

A significant finding in this research was the multiple sources of knowledge: external expert, internal expert, or a combination of both. Lieberman and Miller (1999) recognize that:

Teacher growth and development comes about in many ways. Teachers learn from “outside knowledge” – research, reform ideas, conferences, books, workshops, speakers, consultants. But they also learn from “inside knowledge” – by teaching and picking up ideas from fellow teachers and trying them out in their classroom. (p. 63)

Noting the limitations of too much outside knowledge as potentially being overly theoretical and abstract, while too much inside knowledge risks learning being reduced to simply sharing war stories and context-specific tales, Lieberman and Miller (1999) support learning that combines inside knowledge and outside knowledge. They argue that “teachers learn by inventing together and by understanding how to support one another” (p. 64). The fact that four of the seven participants in this study were influenced by a combination of inside and outside knowledge may indicate this as a preferred approach to learning. Two of the participants were influenced by an internal expert alone, suggesting that inside knowledge can be a powerful source of influence, and that outside knowledge is not always necessary to transform practice. There was only one instance of learning from outside knowledge. Rather than focusing on improving the technical skill of their teaching by attending off-site workshops and learning from

outside experts, the findings of this research demonstrate that teachers' practice is transformed when they develop understandings about pedagogy on-site, working collaboratively with their colleagues. The findings also suggest that the reform style of professional development which actively involves teachers in continuous learning has a profoundly transformative influence on teaching practice.

5.6.2 Content Characteristics

The literature review highlights the influence of content knowledge on transforming teacher practice, particularly when no one kind of content knowledge is developed in isolation (Timperley et. al., 2007). The literature also provides evidence of the relationship between depth and breadth of teacher knowledge and change in teaching practice (Borko, 2004; Loucks-Horsley et al., 1996; Mundry, 2005a; Porter et. al., 2003). In contrast, a specific focus on the development of content knowledge, and in particular on the development of depth and breadth of knowledge, did not emerge in this study's findings as a consistent factor of influence.

The findings did reveal, however, the development of pedagogical knowledge for four of the participants, two of whom were working in an open-plan setting and two of whom were crafting improvements to their practice – one in inquiry learning, the other in developing an integrated curriculum. Increasing pedagogical content knowledge in literacy was the focus for three of the participants. In five of the seven cases, there was no evidence of the participants developing depth and breadth of content knowledge by combining the various forms of knowledge – subject-based knowledge, pedagogical knowledge, pedagogical content knowledge, or knowledge of how students learn. In two instances there was evidence of two types of content knowledge (subject-specific content knowledge and pedagogical content knowledge) being developed. In these instances teaching practice was transformed by the influence of external expertise combined with internal expertise in literacy, and through teaching practice being challenged either by the external or internal expert.

Lack of depth and breadth of content knowledge is not a barrier to teachers in this research profoundly transforming their teaching practice. There is a possibility, however, that the relative absence of content knowledge across the range of content knowledge types might mean that changes to teaching practice may have little or no profound effect on student learning (Borko & Putman, 1995; Kennedy, 1999; Mundry, 2005b; Timperley et. al., 2007).

5.6.3 Context Characteristics

Learning on the job, from and with colleagues, was the dominant mode of learning in this research. This form of growth-in-practice requires workplace conditions that support an ethic of collaboration. School factors, such as the principal developing a culture of learning, influences its development.

5.7 School Factors that Influence Change

The literature review signals the important role leadership plays in developing a culture of learning and how this contributes to transforming teachers' practice (Bryk et. al., 1999; Hopkins et. al., 1994; Robinson, 2007; Sparks, 2009). The findings of this research corroborate that understanding.

5.7.1 Culture of Learning

Two participants, Chelsea and Esther, indicated that the principal was crucial in developing a culture of collaboration. They considered the principal achieved this by establishing relationships of trust that made risk-taking possible within a safe environment. These findings are consistent with the literature that identifies the principal as playing a pivotal role in creating a culture of collaboration and learning (Bryk et. al., 1999; Timperley et. al., 2007; Sparks, 2009). While not all participants specifically mentioned the principal's contribution to a collaborative culture, the essence of their learning was generated through interactions with their colleagues, and this confirms the existence of norms of collegiality that support collaboration and risk-taking. The findings are consistent with Guskey's (1994)

view that successful change occurs when teachers work in an “atmosphere of collegiality and respect” (p. 45).

The culture of collaboration portrayed in the stories of Diana and Esther, suggests they were involved in true ‘joint work’ where teachers work together on substantive tasks by engaging in “thoughtful, explicit examination of practices and their consequences” (Little, as cited in Darling-Hammond & Richardson, 2009). Prompted by an inquiry into a problem of practice, Diana and Esther were questioning their existing practice, and developing rich understandings about pedagogical practice from, and with, their colleagues. This exemplifies true joint work and a style of learning consistent with that which occurs in learning-enriched schools (Rosenholtz, as cited in Hopkins et al., 1994). These findings confirm that working in a learning-enriched school, supported by a culture of learning, has a profound transformative influence on teaching practice.

5.7.2 Leadership Opportunities

The extent to which participants in this research engaged in trial and error experimentation in order to craft their practice emphasizes not only their willingness to take risks, but also a level of autonomy over their own learning. While only one participant specifically mentioned having leadership opportunities, all participants inferred ownership of their particular inquiry, suggesting that they had ownership and leadership of their learning. A further review of the literature indicates an alignment of this finding with the literature on teacher autonomy (Clement & Vandenberghe, 2000), teacher leadership (Durrant & Holden, 2006; Harris, 2003; Lambert, 2003; Muijs & Harris, 2003) and on school factors that influence transformative practice. Smylie (1995) contends that workplace conditions that promote “shared power and authority”, “egalitarianism among teachers”, and “variation, challenge, autonomy, and choice in teachers’ work” (p. 105) have a transformative influence on teachers’ practice. He argues for workplace conditions where teachers can share in the leadership as well as participate in decision-making, where teachers are not denied opportunities because of positional status, and where they are challenged by new enterprises as a means for promoting teacher learning and transforming teachers’ practice. The

findings of this research are consistent with these beliefs. Teachers in this research “had that little bit of liberty” (Chelsea) which enabled them to exercise autonomy and experiment in their teaching in ways that had a profound transformative influence on their teaching practice.

These workplace conditions have characteristics analogous to some of the design principles of effective professional development.

5.8 Design Principals of Effective Professional Development

A key finding in this research inquiry is the profound transformative influence on teachers’ practice of learning from and with colleagues, in response to authentic problems of practice arising from the workplace. These critical factors of influence correlate with four of the eight design principles of effective professional development articulated by Hawley and Valli (1999) – school based learning, collaborative problem-solving, teacher involvement, and continuous and supported learning. The presence of these four principles in six of the seven participants’ stories indicates that what teachers perceive as influencing transformative practice is consistent with the literature. A significant difference, however, is that the literature indicates the need for all eight principles to be at work simultaneously for changed teacher practice to be linked to improved student achievement. The findings of this research do not reveal any cases in which all eight principles were present simultaneously. This could mean that while teachers were changing their practice, the changes may not necessarily have been accompanied by improved student outcomes.

In two cases, another principle of effective professional development (Hawley & Valli, 1999) was evident – goals and student performance. The gap between expectations of student achievement and actual student achievement was a significant factor of influence which transformed Diana’s and Esther’s teaching practice in literacy. The principle of theoretical understandings (Hawley & Valli, 1999) was also evident in these two cases. Diana was attending to the “expansion and elaboration” (Hawley & Valli, 1999, p. 146) of her professional knowledge

by reading research and attending professional seminars. Esther's involvement in the Winning Ways literary programme facilitated the development of complex theoretical understandings. Being challenged by the tutor to "unpick" her teaching prompted her to "sort this out in [her] own head." It is likely she put these theoretical understandings into practice when she engaged in difficult conversations and challenged the practice of her colleagues.

The two remaining principles of effective professional development – rich information about the professional learning process and outcomes for students, and professional learning as part of a comprehensive change process (Hawley & Valli, 1999), were not mentioned by the participants. It appears that those principles which link change in teaching practice to improved student outcomes are not being implemented in totality. If the aim of professional development is transformative teaching practice that has a positive influence on student outcomes, then change agents may fall short of their goal. Timperley et.al. (2007) claim that change in teacher practice may have no impact and even impact adversely on student achievement. If the goals of professional development are to be met, there is sound justification for wider knowledge and the comprehensive application of all eight design principles.

5.9 Impact of Extending High Standards Across Schools

The participants in this research were selected purposively because of their involvement in an EHSAS cluster. It is significant, though not surprising, that EHSAS was not mentioned as an influential factor of change, and was not seen as part of a comprehensive change process. The literature makes it clear that "contrived collegiality" (Hargreaves, 1992, p. 229) is an administrative mechanism to encourage collegiality where it has not previously existed and that "simply convening stakeholders from different organizational or institutional communities may be efficient, but will probably accomplish little by way of learning and progress without opportunity for them first to have conversations about their different perspectives and understandings" (McLaughlin, 2002, p. 113). Chelsea's view that "each school had its own goal which didn't mesh well

with the goals of the other schools” echoes different perspectives and understandings. It is perhaps reasonable to infer from the participants’ views of what was not happening, which factors they considered were important for influencing change – continuity of leadership, clear vision and purpose, shared understandings, and positive relationships that are mutually respectful. These expectations indicate teachers’ willingness to work in professional learning communities (DuFour & Eaker, 1998; DuFour, Eaker, & DuFour, 2005; Hord, 2004, 2009; Stoll & Louis, 2007) to enhance teaching practice.

5.10 Professional Learning Communities

Professional learning communities, that have structures and processes in place that make joint work possible, can influence change to teaching practice and impact positively on student learning (Darling-Hammond & Richardson, 2009). The findings of this research indicate that structures such as supportive school leadership, mutually respectful relationships, and a climate that invites risk-taking and innovation were present in most cases, but not consistently for all participants. Similarly, a process of communication that uses challenge and conflict productively to enhance teacher learning was evident in some cases, but not in all. This demonstrates that, in several instances, true joint work in the manner of a professional learning community was occurring, and had a profound transformative influence on the teaching practice of those participants. It also demonstrates that even when a professional learning community does not display all of the desirable structures and processes, teachers’ participation in an emerging professional learning community can have a profound transformative influence on their teaching practice. Given the incomplete presence of all the attributes required for true joint work to occur, it may be that while teachers change their practice, this may not be accompanied by improved student outcomes.

5.10.1 Discourse Communities

The findings illustrate that teachers’ everyday work, acting as the basis of constructive professional development, can transform practice. This is consistent

with Ball and Cohen's (1999) contention that much of what teachers need to learn can be learned in and from their practice, especially where 'disequilibrium' is generated and prompts teachers to engage in rigorous discourse. This was evident in some cases of talk where "we had to disagree with each other" (Ben) and where there was "challenge [to] other people's thinking" (Chelsea).

A community of practice in which learning talk influenced transformative teaching practice was particularly striking in one case. Learning talk is most effective when a facilitator creates dissonance and prompts teachers to review ineffective practice and replace it with more effective practice (Annan et al., 2003; Cochran-Smith & Lytle, 1999; Timperley et al., 2007). This occurred in the case of teachers implementing the Winning Ways literacy programme – the tutor "challenges you about why you are doing things that way" prompting a "shift in the way people have taught" (Esther). Engaging an outside expert as a facilitator where learning is not "bound and *delivered* but rather *activated*" (Wilson & Berne, 1999, p. 194) appears to transform beliefs and influence transformative teaching practice.

5.10.2 Learning Conversations

Learning conversations occur within a community of practice that exhibits an inquiry habit of mind, embraces relationships of respect and challenge, and holds conversations based on evidence of student achievement (Earl & Timperley, 2008). There was evidence of this practice in two cases where concern was expressed about school-wide data showing low levels of literacy achievement. All of the participants in this research displayed an inquiring habit of mind and were party to respectful relationships, but in only two cases was data used to inform the inquiry. This indicates that learning conversations can profoundly influence change in teaching practice, but the use of them to facilitate change is an emerging practice and is not widespread.

Learning conversations parallel a process of co- and self-regulatory learning which involves a sequence of three inquiries – to identify student needs, to identify teacher needs, and to evaluate the effectiveness of teacher action from the

two previous inquiries. It engages teachers in a process where “teachers collectively and individually identify important issues, become drivers for acquiring the knowledge they need to solve them, and monitor their impact and adjust practice accordingly” (Timperley & Alton-Lee, 2008, p. 353). The findings in this research indicate that while the practice of identifying issues, acquiring new knowledge, and solving problems of practice was widespread, there was limited evidence of the practice of monitoring the impact of teaching and adjusting practice accordingly. The process of deep interrogation of teaching practice in relation to evidence of student achievement was implicit rather than explicit in the case of Diana and Esther, and was not evident in the findings of other participants. The combined use of all three co- and self-regulatory inquiries was not evident in this research.

5.10.3 Inquiry as Stance

The findings also reveal that inquiry as stance is equally limited in its use based on the findings of this research, suggesting an emerging practice for influencing profound change that is not yet widespread. Inquiry as stance involves generating “local knowledge *of practice*” (Cochran-Smith & Lytle, 1999, p. 250) that is constructed through social interactions using an inquiry approach. The prevalence in this research of teachers learning from and with their colleagues within the workplace illustrates teacher preference for engaging in “joint construction of knowledge through conversation” (Cochran-Smith & Lytle, 1992, p. 309). This method of constructing knowledge appears entrenched in the psyche of teacher-learners. Inquiry as stance, however, describes a deep learning process that moves beyond solving problems of practice. It is ‘intellectual work’ where communities of teachers generate local knowledge-of-practice by challenging their own practice and the practice of others, and interrogating the theory and research of others (Cochran-Smith & Lytle, 1999). It is both social and political on account of the process and purpose – to connect communities of teachers to broader agendas for school and social change (Cochran-Smith & Lytle, 2001). There were two cases in this research in which the participants could be considered to be engaging in intellectual work and acting upon social and political agendas. This is on account of their concern for the achievement of under-performing Maori students.

Diana and Esther were actively investigating and challenging their own practice and that of others. Their “questioning” and “challenging the system” (Cochran-Smith & Lytle, 2001, p. 56) is indicative of the process and purpose of inquiry that links with the social and political agenda inherent in inquiry as stance.

Diana’s sentiment that “traditional things are not working. We keep trying to fit these boys into our education system, our education system should be fitting these boys” echoes inquiry as stance. Adopting this stance had a profound transformative influence on the teaching practice of these two participants.

Embedded in the stance of Diana and Esther, and driving their inquiry, was a deep sense of emotion coupled with an ethic of care. This trait was common across all cases in the research findings.

5.11 Individual Factors Influencing Change

5.11.1 Emotional Involvement

The depth of emotional involvement revealed by participants as they expressed their commitment to improved student learning confirms that “intense human emotions and passions are often at the very heart of teacher commitment and desire” (Hargreaves, 1995, p. 24). Participants were motivated by the belief that they could make a difference in the lives of students. They were intrinsically rewarded by perceived student successes in learning, and this enhanced their self-efficacy. The combination of motivation, intrinsic rewards and self-efficacy had a profound transformative influence on the teaching practice of participants. Their commitment and desire to improve the quality of their teaching and student learning indicates a source of potential that could be capitalized upon if profound transformative practice is the goal of a wider social and political agenda for a democratic education. The intensity of teachers’ emotional involvement also signals a caution. Hargreaves (1995) argues that to abandon consideration of human emotions in teachers’ professional and personal lives, especially in the present context of post-modern society where teachers are under pressure to accept "complexity, diversity, and uncertainty," is to risk teacher “burnout and

cynicism” as a result of their "anxiety, frustration and guilt" (Hargreaves, 1995, p. 25). One possibility for sustaining teacher commitment and avoiding this outcome is to cultivate stronger communities of practice in which the collective generation of local knowledge-of-practice fuels individual emotion, passion, commitment and desire. This could be achieved by adopting inquiry as stance.

5.11.2 Beliefs

The findings in this research confirm that the beliefs teachers hold act as a mediating force between new learning and change in practice. Where new learning was aligned with teacher beliefs, teachers either adopted or adapted that learning into their practice. This finding raises a question about the purpose of transformative practice and of professional development. If the purpose of professional development is to increase the quality of teaching in order to raise student achievement, and if lifting the quality of teaching demands higher order reflective learning that influences beliefs (Earl & Timperley, 2008; Smylie, 1995; Timperley et. al., 2007), then change that occurs only when new learning aligns with current teacher beliefs may not achieve the goals of professional development. This concern has been raised by Timperley et al. (2007). They claim that linking change in teaching practice with improved student outcomes requires a process of learning where dissonance is created and resolved through substantive change in beliefs and in teaching practice.

A second issue regarding teacher beliefs, arising from an implicit silence in Graham’s story, questions the impact of new knowledge on teacher’s practice when it does not align with existing teacher beliefs. This leads to a wondering about whether teacher beliefs that initially do not align with new knowledge shift to align with new knowledge if that knowledge is deemed worthy of implementation or trial. This research did not examine the change process of teacher beliefs nor examine whether teacher alignment of beliefs with the new practice was pre-existing or newly aligned. The literature reveals contrasting views on the order in which change to teacher beliefs occurs. Richardson and Hamilton (1994) found in their study of teacher change and professional development in reading instruction, that in some instances teacher beliefs changed

prior to the teacher implementing a new practice. This contrasts with Guskey's (1986, 2006) view that it is only after teachers change their practice and recognize it as being successful that they change their beliefs. Richardson and Placier (2001) suggest that one explanation for this difference can be attributed to the type of strategy used in the change process. They postulate that it is likely an empirical-rational approach to superficial change will result in teachers changing their beliefs *after* they experience success using a new teaching approach. If, however, a normative-re-educative approach to transformative change is adopted, change in teacher beliefs is likely to *precede* change in teaching practice. This, they argue, is due to a constructivist orientation to change that defines the normative-re-educative approach. The normative-re-educative approach to change is based on generating new meaning through the "interaction of what they [teachers] already know and believe and the ideas with which they come into contact" (Richardson & Placier, 2001, p. 913).

In this research, six of the seven participants were learning from internal experts (their colleagues), either with or without external input. The prevalence of transformative practice, occurring as a result of teachers constructing new knowledge with their colleagues, suggests that the preferred style of teacher learning for transformative practice is consistent with the normative-re-educative strategy for change.

5.12 Strategies that Effect Change

When planned, deliberate change is the goal, change agents may utilize different strategies to effect this change. Chin and Benne (1969) identify three change strategies – power-coercive, empirical-rational, and normative-re-educative, each of which have relevance to this research project.

The research findings provide an example of the power-coercive strategy for change in Alice's story when she was redeployed and when she taught in an open-plan setting. An example of the empirical-rational strategy in action is illustrated by Felicity's story when she implemented a new teaching strategy in literacy following her attendance at a residential course. The remaining participant stories

provide examples of change that approximate the normative-re-educative approach to change. This approach accepts that change will occur only as persons involved are brought to change their normative orientations to old patterns and develop commitments to new ones. And changes in normative orientations involve changes in attitudes, values and significant relationships, not just changes in knowledge, information, or intellectual rationales for action and practice. (Chin & Benne, 1969, p. 34)

This strategy for change is consistent with the principles and processes that underpin professional learning communities, learning conversations, and inquiry as stance.

A critical element of the normative-re-educative approach to change, claim Richardson and Placier (2001), is dialogue with colleagues that allows examination of beliefs and practice. They contend that this kind of dialogue most likely occurs with other teaching colleagues, whether they are internal or external experts, or a mix of both. They emphasize the difference between the empirical-rational approach and the normative-re-educative approach to change as being the source and direction of change. The empirical-rational approach is one in which change originates with an external change agent and is applied to teachers as targets of change. The source of change in the normative-re-educative approach lies with the teachers for whom the change is relevant. The major difference between the two approaches, the source and direction of change, has relevance to the findings of this research. Change to teaching practice was initiated by five of the seven participants, through the identification of a problem of practice, and resolved by the teachers themselves, often in collaboration with their colleagues. This finding suggests that a normative-re-educative approach to learning has a profound transformative influence on teaching practice and may be the preferred approach to change.

The normative-re-educative approach to change underpins three types of communities of practice – professional learning communities, learning conversations, and inquiry as stance. In this research study, these communities of practice appeared in an emergent form, rather than a fully-formed state. Strengthening these emergent communities of practice would ensure that

transformative practice does not become an end in itself, but rather a means to continuous improvement in teaching practice that is accompanied by improved student outcomes and thus achieves the ultimate goal of professional development. To reach this goal, communities of practice need a greater commitment to the process of building local knowledge-of-practice than these findings reveal. A greater focus on this outcome offers teachers the possibility of individual autonomy and agency over their learning and practice whilst attending to the collective learning agendas associated with improved outcomes for all students.

5.13 Summary

The findings of this research reflect congruence with the literature in some areas and highlight divergence in others.

Participants' explanations of profound transformative influences on their teaching practice align most closely with Huberman's (1995) model of professional development. The four learning cycles that make up the model embrace the diverse factors to which teachers attributed influential change. Those factors include an individual or collective approach to learning, a process of trial and error experimentation, and the source of new knowledge and expertise as being external and/or internal. The participants' also identified workplace conditions as being influential. They attributed collaborative practices supported by a culture of learning, and a workplace environment that encourages risk-taking and promotes ownership of learning, as being influential on transformative practice. This resonates with the literature that identifies these structures and processes as defining characteristics of professional learning communities. Participants' were driven by powerful emotions that connected them to the learning needs of their students and initiated and sustained improvement to their teaching practice.

One of the critical areas of divergence between the literature and the findings relates to the relative absence of depth and breadth of theoretical understandings of content knowledge across the four major content domains, and the limited use

of rich assessment information about student learning and about the effectiveness of teachers' practice. This is consistent with the revelation in the findings that the eight design principles for effective professional development were not consistently evident, nor present in their entirety. Another critical area of divergence relates to the processes required to develop co- and self-regulatory practices. A sequence of inquiries into student learning needs, teacher learning needs, and the effectiveness of teaching on learning is necessary to develop co- and self-regulatory practices. These inquiries were not practiced in conjunction with each other, but rather as separate and disjointed activities, and this suggests lack of coherence in programme planning for teacher learning, thus limiting the extent of teachers' engagement in the kind of intellectual work that enables them to build local knowledge-of-practice. Knowledge-of-practice is a rich conception of knowledge (Cochran-Smith & Lytle, 1999) linked to professionalism in teaching where the focus is on improving the quality of teaching practice in order to improve outcomes for all students. While the absence of these critical attributes does not restrict teachers from transforming their practice, it does limit the potency of any changes they make on outcomes for students. This indicates a gap between the purpose and the outcome of professional development.

6 CHAPTER SIX CONCLUSION

6.1 Introduction

This research inquiry set out to investigate how experienced teachers explain the profound transformative influences on their teaching practice. Contrasting viewpoints in the literature about whether or not teachers are likely to change their practice as a consequence of professional development experiences, coupled with my own views gleaned from my professional experience and anecdotal evidence, prompted this study. The findings reveal widespread willingness by teachers to change their teaching practice for improvement, and the discussion chapter explores those factors which influenced transformative practice. The discussion signaled a gap between those factors that influence transformative practice for the teacher participants in this study, and those identified in the literature that are associated with effective professional development. This gap suggests that the transformative practice of the research participants may not necessarily be linked to improved student outcomes. This raises a question about the goal of transformative practice.

The purpose of this chapter is to draw on the understandings of and insight into profound transformative teaching practice gained from this research inquiry, and to suggest possibilities for educators who are charged with the task of facilitating transformative teaching practice. It is anticipated that this will enhance their efforts to transform practice that not only improves the quality of teaching, but simultaneously achieves the ultimate goal of professional development – to improve outcomes for students.

6.2 Constructing a Framework for Transformative Practice

If the purpose of transformative practice is to improve the quality of teaching and raise student outcomes, then what is known from the literature about effective professional development must be more rigorously implemented. It is likely that

substantive change to teaching practice that also impacts on student outcomes requires active facilitation by an educator who has an understanding of the underlying principles of influence on transformative practice. Principles which influence transformative teaching practice and impact positively on student outcomes, as drawn from both the literature and the findings of this study, can be represented by a framework that embraces four critical components: approach, structure, process, and product of teacher learning.

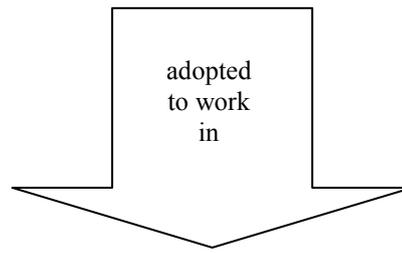
A normative-re-educative approach to teacher learning and change underpins transformative teaching practice. A theoretical understanding of this approach provides the foundation upon which to establish the structure of learning for transformative teaching – a community of practice. Communities of practice, complemented by appropriate workplace conditions, provide a fertile environment for learning and change. Effective communities of practice are able to engage teachers in the process of co- and self-regulatory learning through which local knowledge-of-practice can be developed. A diagrammatic representation of the framework is provided in Figure 1 (see over).

6.3 Conceptualizing a Cycle of Learning for Transformative Practice

Linking this study's findings on the factors which influence transformative teaching practice based on the findings of this study, with the literature on effective professional development, leads to the possibility of conceptualizing a cycle of learning for transformative practice. The alignment of the findings of this study with Huberman's (1995) model of professional development indicates its utility in explaining the learning process. The need to include all eight principles of effective professional development (Hawley & Valli, 1995) in the cycle of learning, to ensure change in practice is coupled with improved student outcomes, signals the potential of co- and self-regulatory learning practices in order to achieve this. Thus, an amalgamation of Huberman's model of professional development, and in particular the open collective cycle of learning, with

Strategy

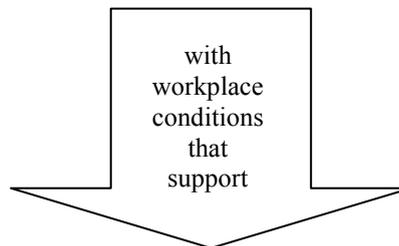
Normative-re-educative approach



Structure

Communities of practice

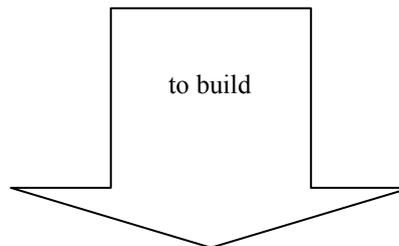
- Professional learning community
- Learning conversations
- Inquiry as stance



Process

Co- and self-regulatory learning through a cycle of inquiry into:

- Student needs
- Teacher needs
- Impact and effectiveness of practice



Product

Local knowledge-of-practice

Figure 1: Framework of underlying principles of influence on transformative teaching practice

Timperley and Alton-Lee's (2008) cycle of inquiry could provide a helpful diagrammatic representation. Such a model extrapolates what teachers currently do, based on the findings of this research, to include what they need to do to ensure that transformation in teaching practice simultaneously achieves improved student outcomes. A diagrammatic representation of the learning cycle that builds knowledge-of-practice is provided in Figure 2 (see over).

Teachers who individually and collectively build knowledge-of-practice based on the framework in Figure 1 and use the knowledge-building learning cycle in Figure 2 have the potential to continuously enhance the quality of their teaching and improve learning outcomes for students. Knowledge-building in this manner could pave the way for a new form of professionalism where communities of practice become the site and source (McLaughlin, 2002) of life-long teacher learning.

6.4 Recommendations for Influencing Transformative Practice

Building knowledge-of-practice should be embedded in teachers' daily work. This is dependent upon teachers having a theoretical understanding of a richer conception of knowledge that distinguishes between three forms of knowledge: knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice. Building knowledge-of-practice requires a deep learning process that goes beyond solving problems of practice. It is intellectual work where communities of practice generate local knowledge-of-practice by interrogating and analysing their own teaching practice and the practice of others, interrogating and interpreting research knowledge, and analyzing and interpreting rich assessment data to determine the impact of their teaching practice on student learning. To build knowledge-of-practice, teachers must adopt a new language, develop a new mind- and skill-set, and actively engage in cycles of inquiry that generate local knowledge-of-practice.

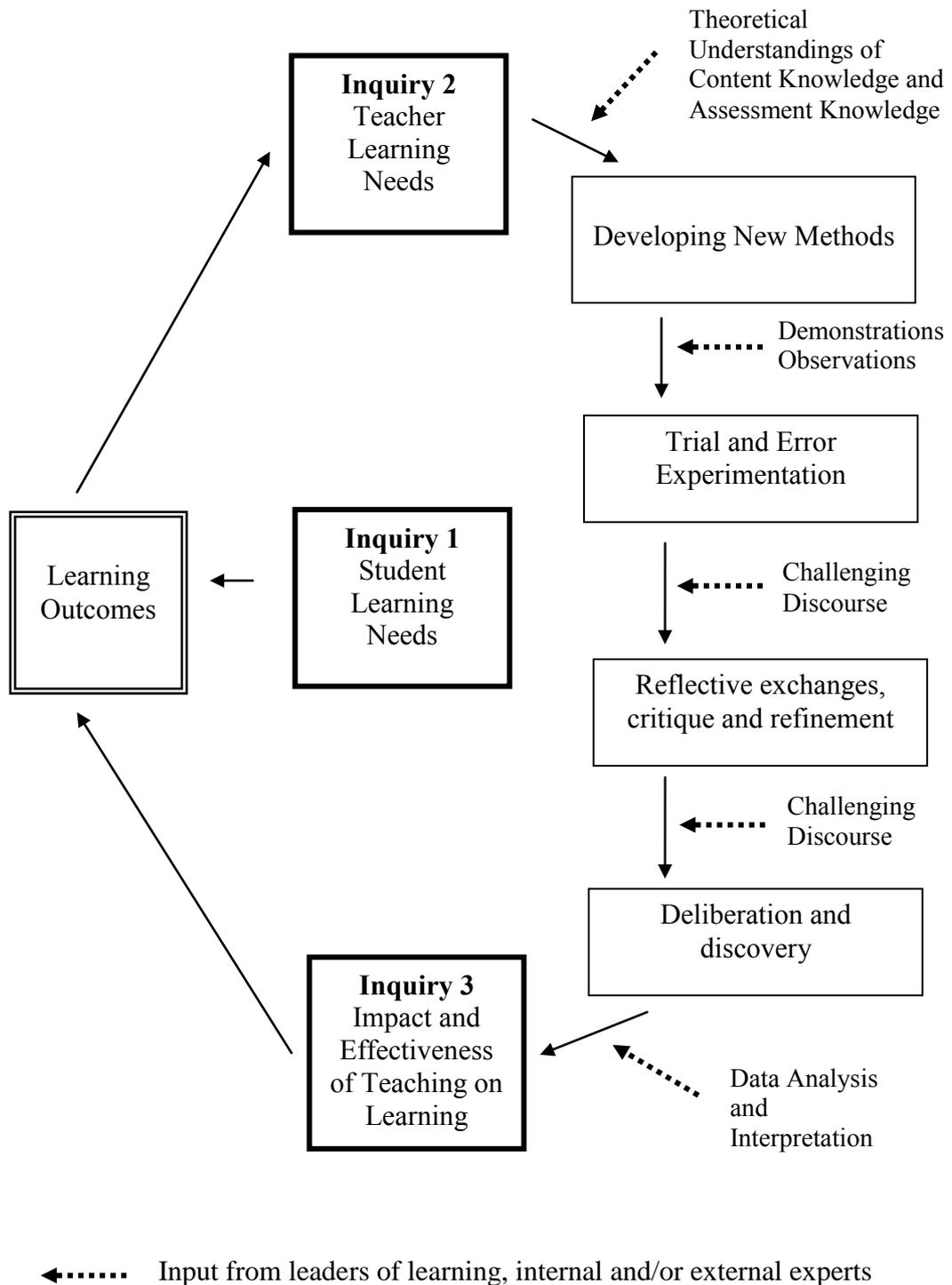


Figure 2: Knowledge-building learning cycle

Adapted from *Professional Development in Education: New Paradigms and Practices* (p. 213), by T. Guskey and M. Huberman, 1995, New York: Teachers College Press, and “Reframing Teacher Professional Learning: An Alternative Policy Approach to Strengthening Valued Outcomes for Diverse Learners,” by H. Timperley and A. Alton-Lee, 2008, *Review of Research in Education*, 32, p. 354.

The mind-set necessary is one that tolerates uncertainty and ambiguity, and which welcomes risk-taking and creativity. The skill-set required is a form of discourse that invites challenge to existing norms of practice, and accepts silence as a means of processing new ideas, and considering alternative beliefs and values.

Communities of practice, engaging in the intellectual work required to build knowledge-of-practice, will need skilful facilitators who can assist them in embedding the knowledge-building cycle into their daily work. These facilitators will be leaders of learning who have a sound theoretical knowledge and understanding of the approach, structures, purpose, and product of teacher learning (Figure 1). Leaders of learning will need the skills to activate teacher learning by promoting challenging discourse, creating disequilibrium, encouraging interrogation of theory and research, and facilitating teacher questioning of and challenge to their existing practice. They will need to do this in a way that builds a culture of learning based on an ethic of collaboration.

Leaders of learning, who facilitate the knowledge-building cycle, may be internal experts with inside knowledge or external experts with outside knowledge. Irrespective of the source of knowledge, leaders of learning must expand the depth and breadth of teachers' knowledge across the four content knowledge domains (subject-specific knowledge, pedagogical knowledge, pedagogical content knowledge, and knowledge of how students learn) and extend teachers' assessment knowledge. Rich assessment knowledge gathered from a range of sources must inform each of the three inquiries which make up the sequence of the knowledge-building learning cycle (Figure 2).

Leaders of learning must ensure that transformative teaching practice is not an end in itself. The end point and ultimate goal of transformative practice is to improve student learning outcomes. Leaders of learning must ensure that the knowledge-building learning cycle is the essence of sustainable professional development and continues throughout teachers' careers, thus promoting a new form of professionalism.

6.5 Limitations of the Research

This research project was conducted in a small number of primary schools in a restricted geographic region. The data was gathered using a single method – semi-structured interviews. To increase the rigour of this research and gain a richer picture from breadth and depth of findings, data could be gathered from a larger sample of participants, taken from a broader group of the teaching sector and from a wider geographic area, using multiple methods of data gathering.

The findings are based on experienced teachers' perceptions of those factors that influence profound transformative practice. Their view of what did, or did not, constitute transformative practice was not challenged or judged by any set of criteria. Identifying a turning point in teaching practice was utilized as a focal point to enhance clarity of explanation of self-reported factors which influenced participants' transformative practice. It is accepted that teachers' self-reporting of experiential events is an interpretation of their reality.

The principles, the knowledge-building learning cycle and recommendations that emerge from this research should be viewed as tentative ways forward, rather than concrete generalizations.

6.6 Further Research

This small-scale research project revealed that transformative practice occurs in the presence of some, but not all, of the design elements of effective professional development, and in the presence of some, but not all, of the elements of co- and self-regulatory learning. This suggests a gap between the purpose and outcomes of professional development. The dual purpose of professional development is to improve teaching practice and student outcomes. A research project with greater depth and breadth of scope would provide a richer picture of the link between transformative practice, improved student learning outcomes, and the elements of effective professional development.

The findings of this research inquiry illustrate the extent to which teachers learn from, and with, their colleagues based on authentic problems of practice arising from their daily work. Further research into communities of practice that investigates the role and skills of leaders of learning and their effectiveness in building knowledge-of-practice, and examines the balance of influence from a variety of sources of knowledge – internal expertise, external expertise or a combination of both, would add to the body of knowledge about transformative teaching practice.

The findings of this study reveal that alignment of teachers' beliefs with new ideas influences transformative teaching practice. It was not clear whether aligned beliefs were pre-existing or newly developed. Further research investigating what occurs when teachers' beliefs do not align with new ideas, and examining the change process associated with shifts in teacher's beliefs, would add to the body of knowledge about transformative teaching practice.

6.7 Conclusion

Schools that utilize a strategy, structure and process which builds teacher knowledge-of-practice could contribute to achieving Sarason's (1990) goal of making schools places that create and sustain conditions for productive learning for both teachers and students. Smylie (1995) echoes this sentiment, suggesting that we must "acknowledge the importance of schools not only as places for teachers to work but also as places for teachers to learn" (p. 92). If schools become places that create opportunities for teachers to become life-long learners, continuously learning about and improving their teaching practice, students might benefit from improved learning outcomes. This eventuality could lead to future students serving a new form of 'apprenticeship-of-observation,' one which instills in them the habit of life-long learning and ensures that they have the best possible opportunities for developing the 'brain power' required to run a knowledge economy – the power to think deeply, creatively and innovatively, and to exercise boundless ingenuity.

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APPENDIX 1

LETTER OF INTRODUCTION TO PRINCIPAL

[Date]

Dear [Principal's Name]

Your school has been identified by School Support Services as currently being involved in, or having recently completed involvement in, an EHSAS cluster and I am requesting your assistance to conduct a small research project in order to complete my Master of Educational Leadership thesis. My supervisor is Michele Morrison, Senior Lecturer, School of Education, University of Waikato.

I am a school Principal and am interested in what contributes to effective professional development. My research question is *'How do experienced teachers explain the profound transformative influences on their teaching practice?'*

I am seeking your assistance in providing the names of experienced teachers who have had eight or more years teaching experience and have been at your school two or more years whom I could approach seeking their permission to participate in this research. Those teachers whom you identify will receive a letter of invitation with an information sheet explaining the research and what that involves. They will also receive a follow-up phone call from me. A copy of the Letter of Invitation and the Information Sheet is enclosed for your perusal.

This research will not affect the operation of your school. The teachers whom you identify will be asked to take part in an interview at a time and place that is convenient to them. Their participation is entirely voluntary. They will be under no obligation and may either consent or decline to take part in the research. Every effort will be made to protect the identity of participants and the school. No descriptors of your school will be given and pseudonyms will be used for people and schools.

I will phone you in the next couple of days in the hope that you will be supportive of this research and are able to provide me with two or three names of experienced teachers working at your school. Thank you for considering this request and I look forward to speaking with you soon.

Yours sincerely

Cynthia Holden

APPENDIX 2

PARTICIPANT INVITATION

[Date]

Dear [Participant's Name]

RE: INVITATION TO PARTICIPATE IN A SMALL RESEARCH PROJECT

I am a school Principal currently working on a Master of Educational Leadership thesis and am seeking your help with a small research project. My supervisor is Michele Morrison of Waikato University.

Your name has been given to me by your Principal because you are an experienced teacher who has been at the school for two or more years. I am hoping that you will be willing to help me conduct my research.

My research focuses on teacher learning and professional development from the viewpoint of experienced teachers. My specific research question is '*How do experienced teachers explain the profound transformative influences on their teaching practice?*' and in investigating the answer to this question I would like some experienced teachers to share their stories about an occasion that caused them to make significant change in their classroom practice.

If you decide to participate in this research, you will be asked to share your story in a face-to-face interview of approximately one hour (but not longer than 90 minutes) at a time and place that is convenient to you. The interview will be audio-taped and transcribed. Transcription will be undertaken by a third party who is bound by a signed confidentiality agreement. A transcript of the interview will be sent to you for checking and you can edit or change any part as you wish.

Your participation in this research is entirely voluntary and you are not under any obligation to participate. My research project will adhere to the University of Waikato *Ethical Conduct in Human Research and Related Activities Regulations 2008* which ensures confidentiality. Should you decide to participate in this research, please read the enclosed Information Sheet and Consent Form that outline the conditions of participation as well as my responsibilities as a researcher.

Thank you for taking the time to consider my request. I will phone you in the next few days to ascertain your willingness to participate in this small research project. I look forward to speaking with you soon.

Yours sincerely

Cynthia Holden

APPENDIX 3

INFORMATION SHEET

How do experienced teachers explain the profound transformative influences on their teaching practice?

Background

You are invited to take part in a small research project investigating the influences that motivate experienced teachers to profoundly transform their teaching practice. This research forms part of the requirements to complete my Master of Educational Leadership degree.

What participation in the research involves

If you participate in this research, you will be asked to share your personal story in response to the following prompt:

*Think of a time that was a turning point in your teaching, when you decided to teach in a radically different or significantly different way. (This may have occurred in your current school or in a previous school).
Tell me about that experience.*

You may wish to consider the following aspects of the experience as you tell your story:

- *How did it begin?*
- *What were you thinking about at the time?*
- *What did you actually do?*
- *How did this differ from what you were previously doing?*
- *Was anyone else involved?*
- *What did you notice as a result of the change?*
- *Do you still do this? (use these changed practices?)*

It is likely that the story telling conversation will take approximately one hour, but not longer than 90 minutes, in a face-to-face interview at a time and place that is convenient to you. The interview will be audio-taped. A transcript of the interview will be sent to you for checking and you can edit or change it to ensure you are satisfied that it accurately reflects the story you wanted to tell.

Consent to participate

Your participation in this research is entirely voluntary, and while you have been nominated by your Principal, you are not under any obligation to participate. You

may choose to consent or decline. If you choose to participate, you have the right to withdraw from participation without explanation at any stage up until a fortnight after you have returned your edited transcript to me. Should you choose to withdraw, all information provided by you will be destroyed and will not be used in the research project.

While this research may not benefit you directly, it has the potential to add to the existing body of knowledge about those factors that appear to raise the effectiveness of professional development programmes and to the identification of factors that engender change in teaching practice.

Confidentiality

Your interview will be transcribed by a third party who has signed a confidentiality agreement. Your confidentiality will be respected and every attempt made to protect your privacy. Pseudonyms will be used for names of people and schools in all reported findings. All electronic data will be stored on my personal computer/laptop and protected by password. All hard copies of material will be kept by me in a locked cabinet for a period of five years following the completion of the research. Thereafter it will be destroyed.

Should you have any concerns at any stage of this research you may contact my supervisor, Michele Morrison, at the University of Waikato. Her contact details are listed below.

Cynthia Holden

APPENDIX 4

CONSENT FORM FOR PARTICIPANTS

How do experienced teachers explain the profound transformative influences on their teaching practice?

I have read the background information sheet and I understand that:

- I am being asked to participate in an interview of approximately one hour, but not more than 90 minutes, about my experience of implementing transformational change in my classroom teaching practice.
- I will be audio-taped during the interview and will receive a transcript which I am able to edit or change.
- My identity will be protected in any publication by the use of pseudonyms.
- My participation is entirely voluntary and I am under no obligation to participate in the research.
- I may withdraw from participation any time up until a fortnight after the interview transcript has been returned to the researcher without explanation.
- All electronic data will be stored on the researcher's computer/laptop and protected by password. All hard copies of material will be kept by the researcher in a locked cabinet for a period of five years following the completion of the research. Thereafter it will be destroyed.
- I may refer any concern or complaint I have to the Supervisor, Michele Morrison, of the University of Waikato.
- The information I provide will only be used for the purpose of a M.EdL. thesis and any associated scholarly presentations or publications of the researcher's choice.
- A copy of the thesis will be made available to me.

I have read the information sheet and the consent form. I have had all questions answered to my satisfaction. I agree to participate in this research and give my consent freely.

Name: _____

Signed: _____

Date: _____

APPENDIX 5

TRANSCRIBER CONFIDENTIALITY AGREEMENT

This agreement is between [name], the Transcriber,
and Cynthia Holden, the Researcher.

I agree to transcribe the audio-taped interviews provided to me by Cynthia Holden
as part of her Master of Educational Leadership thesis.

In transcribing the audio tapes, I will ensure the data is kept confidential at all
times. I understand that:

- I will transcribe the text verbatim.
- I will not save the data to any computer hard drive.
- I will save the data only to the flash drive provided to me for the sole
purpose of this research.
- When the flash drive is in my possession, I will keep it in a secure place
that is only accessible by me.
- I will not discuss the data I transcribe with anyone other than Cynthia
Holden.

I have read this agreement and I understand the conditions.

Name: _____

Signed: _____

Date: _____

APPENDIX 6

RETURN OF TRANSCRIPTS

[Date]

Dear [Participant's Name]

Thank you for the privilege of hearing your story about a time in your teaching experience when you made a transformational change to your teaching practice. I really appreciate the time you took to do this for me.

Enclosed, please find a copy of the transcript of your interview held on [date]. Your interview was transcribed by [name] who has signed a confidentiality agreement. Your transcript is saved to a flash drive which is only accessible by me, and when it is not in use it is securely locked away.

The transcript is verbatim and therefore includes ums and pauses that are a natural part of conversation and everyday speech. You will notice that when we speak conversationally our language is not always grammatically correct. This is fine and does not need to be altered. You will also notice that pseudonyms replace the actual names you used to protect privacy.

Would you please read through your transcript, taking the time to ensure that it accurately reflects the story you wanted to tell about your transformational experience in teaching. Please feel free to write directly onto the transcript, or on a separate piece of paper, wherever you wish to change, add or delete parts so that it accurately portrays the story you wished to tell. You do not have to make any alterations if you do not wish to.

Once you have done this, please sign the transcript release form and return it together with the transcript in the enclosed reply-paid envelope. If you have any questions about the transcript, please do not hesitate to contact me.

Thank you again for your time and involvement in this research.

Kind regards

Cynthia Holden

APPENDIX 7

TRANSCRIPT RELEASE FORM

I [Name of Participant] have received a transcript of the interview held on [date] at [venue] and have read it.

The following ticked situation applies:

The transcript is acceptable as raw data provided that the conditions agreed to on the original consent form are met. I have made no alterations.

I have altered the text of the transcript. Once these alterations are made, the text is acceptable as raw data provided that the conditions agreed to on the original consent form are met.

I want to withdraw from the research project. Please destroy any data you have collected from me.

Name: _____

Signed: _____

Date: _____

Cynthia Holden