Teacher Coaching in Aotearoa New Zealand Secondary Schools: An Exploratory Study

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ABSTRACT

Teacher coaching is a personnel development approach that has developed out of the popular concepts of sports, business and life coaching. The purpose of this study was to explore how teacher coaching is being implemented in New Zealand secondary schools and fill the knowledge gap between the promotion and use of teacher coaching and the lack of informed evidence regarding teacher coaching in the New Zealand context. Five research questions formed the basis of this study. The questions explored why school leaders have adopted teacher coaching, the ways that teacher coaching has been implemented, the strategies that have been used, and the challenges that have been presented. A pragmatic mixed methods approach was identified as the most suitable in order to achieve the study's exploratory purpose. A dominant qualitative approach, using a sequential design, incorporating triangulation of methods, perspectives and across time, provided an appropriate research design framework.

The findings show teacher coaching is a popular professional development approach that has been enthusiastically implemented throughout New Zealand secondary schools. Participants did not have a shared definition of teacher coaching in the schools in which they operated. Teacher coaching is perceived differently in different schools and by different stakeholders in the same school. Teacher coaches are being used for a host of different reasons.

The concept of teacher coaching is a social construct that is not only influenced by unique environmental contexts but also the individual perceptions of all those involved. There is no one way of understanding teacher coaching, but a plethora of different definitions, approaches and perceptions. Consequently, programme leaders in New Zealand secondary schools are faced with a complex challenge when implementing teacher coaching. The four factors of: purpose, evaluation, training and funding have been shown by this study to be interrelated factors that are perceived to have an influence on the outcome of teacher coaching programmes.

Teacher coaching in New Zealand secondary schools holds much promise. However, currently there is a danger those involved in teacher coaching ignore the complexities
of this intervention and subsequently diminish its potential outcomes. If stakeholders involved in the practice of teacher coaching continue to reflect upon and refine their activities then there is a significant chance that teacher coaching will deliver upon its perceived potential and support teachers across New Zealand to develop their practice and improve outcomes for their students.
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GLOSSARY

Aotearoa, p.1. The Maori name for the country of New Zealand. The literal translation of Aotearoa is land of the long white cloud.

Community of Learning (CoL), p.10. Groups of approximately ten schools that come together as a working party. Communities of learning have to contain organisations from primary through to secondary schools and their formation and membership must be approved by the Minister of Education.

Decile, p.10. Deciles are a measure of the socio-economic position of a school’s student community relative to other schools throughout the country.

E-asTTle, p.15. E-asTTle is an online assessment tool, developed to assess students’ achievement and progress in reading, mathematics and writing.

Provisionally Certified Teachers (PCT), p.21. Provisionally certificated teachers are newly qualified teachers who do not have enough teaching experience to meet the Practising Teacher Criteria. They need to complete a programme of induction to gain full certification.

Specialist Classroom Teacher (SCT), p.2. A specialist classroom teacher provides professional development, guidance, mentoring and induction to other staff at a secondary school. They are appointed from a school’s permanent staff.
CHAPTER ONE: INTRODUCTION

Teacher coaching is a personnel development approach that has developed out of the practice of sports coaches, business coaches and life coaches (Barkley & Bianco, 2010; Rush & Shelden, 2003). The term ‘teacher coaching’ is used interchangeably with the concept of mentoring. However, as coaching has developed its own literature base so the differences have become more defined. Coaching can be used to develop a personal specific focus area or to meet the aims of development required within a particular professional development programme. It is often provided over a specific period of time with the intention of helping the person being coached (the coachee) to reach their own solutions (Reardon, 2008).

Coaching, in the context of educational organisations, uses both different models and names. Wise and Hammack (2011) list a number of coaching approaches in schools which include: instructional coaching, cognitive coaching, literacy coaching, content coaching and leadership coaching. Even though these models differ in their context, the overall approach and purpose is similar, which is to develop a learning based relationship that is created in order to develop a person’s skills in a particular area of their teaching or leadership. As part of this relationship the coachee focuses on evidence relating to their practice and explores an issue raised by the evidence (Megginson & Clutterbuck, 1995).

The term coach has been applied to the idea of a tutor carrying through a student since mid-1800. However, the development of coaching as an independent discipline is acknowledged in the business coaching literature as an interventionist approach which is still in its early stages of development (Bond & Seneque, 2013). Therefore, this research aims to develop greater understanding of coaching used in the education context. This study focuses on teacher coaching programmes established in New Zealand secondary schools and draws on exploratory research methods. It focuses specifically on secondary schools because currently in New Zealand it is primarily secondary schools which are funding coaching programmes with a large amount of time and money.
In New Zealand secondary schools coaching has been adopted as the chosen intervention in a variety of different development initiatives, these include the: Specialist Classroom Teacher (SCT) role (Ward, 2007); Te Kotahitanga project (Meyer, Penetito, Hynds, Savage, Hindle & Sleeter, 2010); the Assessment to Learn project (Poskitt & Taylor, 2008) and the work of Robertson (2008) in using coaching to develop leadership capacity in individuals and organisations. Furthermore, I am aware individual schools have created and funded their own systems of professional development which involves some kind of coaching role.

Even though teacher coaching is becoming increasingly popular in New Zealand secondary schools, the effectiveness of this intervention is yet to be evaluated and understood (Bennett & Monsen, 2011). The one evaluative study of the Specialist Classroom Teacher position, which is a teacher coaching role established in every secondary school in the country, stated that “the extent to which the role has enhanced professional practice across schools or impacted on student achievement is more difficult to ascertain” (Ward, 2007, p.1). Whilst, an evaluative study of the Te Kotahitanga project explained “shadow coaching did not appear to be well understood or used according to the model” (Meyer et al., 2010, p.1). In my experience coaching roles established in schools have been subjected to only minimal evaluations that focus primarily on participants’ feedback.

As an educational leader and a teacher coach who has experienced teacher coaching in several different New Zealand secondary schools, I observed an issue with the use of teacher coaching. The problem was two-fold. Firstly, there was very little research in relation to the use of teacher coaching in New Zealand secondary schools. Consequently, although schools were investing in teacher coaches they did not know if the coaching was achieving their stated objectives. Secondly, even though some literature does exist internationally in relation to the effectiveness of coaching (Wise & Hammack, 2011) there are few studies that determine the factors of teacher coaching which influence its impact (Bennett & Monsen, 2011). Therefore, this research set out to explore these issues in the New Zealand secondary context.
1.1 Purpose, aims and research questions

The purpose of this study was to explore how teacher coaching is being implemented in New Zealand secondary schools. The purpose of this study was to fill the knowledge gap between the promotion and use of teacher coaching throughout New Zealand secondary schools and the lack of informed evidence regarding teacher coaching in New Zealand.

This study aimed to:

- Examine how teacher coaching is conceptualised in the literature
- Examine why school leaders are adopting teacher coaching as a teacher development intervention in New Zealand secondary schools
- Examine the features of different teacher coaching models used throughout New Zealand secondary schools
- Examine the perceived impact of different coaching strategies used in New Zealand secondary schools
- Analyse if aspects of teacher coaching are problematic for those involved in teacher coaching programmes.

These aims led to five research questions that formed the basis of this study which was focused on exploring the practical use of teacher coaching in New Zealand secondary schools:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?
3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?
4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?
5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

It can be seen the five research questions explore teacher coaching on both a national scale and within the context of individual coaching programmes.

1.2 Outline of chapters
Chapter Two is a conceptual framework that focuses on four concepts relating to teacher coaching which were uncovered by following a conceptual framework development process. The chapter explains the process that was used in order to establish how these concepts were uncovered and describes the relationship between them and teacher coaching in New Zealand secondary schools. Chapter Three is a review of the literature pertaining to teacher coaching and it contextualises this study within the current body of knowledge relating to the topic of coaching. The literature review takes a critical approach in order to explore how the current literature offers evidence to answer the study’s five research questions. Chapter Four justifies the pragmatic mixed methods approach chosen for this study. The subsequent sections in this chapter provide a rationale for each of the research design decisions and justifies why this overall design provides the most robust and valid approach to investigating the research questions. Chapter Five uses the research questions as a framework to present the findings of the study. Finally, Chapters Six and Seven discuss the findings of this study in relation to the literature presented in Chapters Two and Three. A visual representation displays the interdependent features of teacher coaching in New Zealand secondary schools, together with conclusions, implications and recommendations for practitioners, policy makers and future researchers of teacher coaching.
CHAPTER TWO: CONCEPTUAL FRAMEWORK

2.1 Introduction

Teacher coaching in New Zealand secondary schools is the topic that forms the basis of this study. Traditionally a study of this nature might begin with a literature review that explores all of the relevant literature relating to teacher coaching within the New Zealand secondary school context. However, as has been presented in the introduction to this study, the topic of teacher coaching in New Zealand exists in a unique position. On the one hand it is a concept that exists throughout the New Zealand education landscape, evidenced by references to teacher coaching in key Ministry of Education project documentation (Ministry of Education, 2014), yet on the other hand it is a topic that sits within a research vacuum in the New Zealand education context. To further challenge an exploratory approach to teacher coaching in New Zealand secondary schools, within the education community of New Zealand the concept of teacher coaching is one that appears to have a plethora of meanings and approaches. The researcher involved in this study has worked in New Zealand schools for 16 years and in that time has experienced the term ‘teacher coach’ being used in a variety of different ways. In some schools it is a concept attached to a position that holds the title ‘teacher coach’; in other organisations coaching is a skill that is used by teachers, or school leaders, to support professional learning. Furthermore, in some organisations and publications the term coaching is used interchangeably with the term mentor, in others it stands alone as a concept different to mentoring. Consequently, once the research questions had been established, it was decided that it would be beneficial to precede the literature review chapter with a conceptual framework in order to establish the current teacher coaching environment in New Zealand.

This conceptual framework chapter focuses on four concepts relating to teacher coaching that were uncovered by following a conceptual framework development process. These four concepts are presented in figure 2.1:
In the context of this study, the concept of professional learning is defined as an internal process in which individuals create professional knowledge, whereas professional development involves the dissemination of information to teachers in order to influence their professional learning (Timperley, Wilson, Barrar & Fung, 2007). The concept of ‘The political landscape of professional learning in NZ schools’ influences teacher coaching in New Zealand in relation to how professional development funding is distributed. ‘National professional development project reviews’ relates to teacher coaching being used as a strategy to implement nationwide initiatives funded by the Ministry of Education. ‘NZ focused professional development and teacher coaching research’ relates to the literature relevant to teacher coaching, which includes education, coaching and professional development studies. ‘MOE and EDUCANZ resources and courses’ refers to websites from these two organisations which promote coaching as a strategy that could be used in New Zealand schools. This chapter explains the process that was used in order to establish how these four concepts were uncovered and describes the relationship between them and teacher coaching in New Zealand secondary schools.
A conceptual framework is a written or visual presentation that “explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables – and the presumed relationship among them (Miles & Huberman, 1994, p.18). A conceptual framework serves as a spring board for theory development by supporting the researcher to identify clearly the boundaries, variables, concepts and the overall context within which a phenomena that is being studied exists (Patidar, 2014). A conceptual framework can be based on the literature and personal experience of the researcher, serving as an anchor for a study and allowing the researcher to organise the topic of study into ‘intellectual bins’ (Baxter & Jack, 2008).

Jabareen (2009) describes a conceptual framework as a “technique or tactic that aims to generate, identify, and trace a phenomenon’s major concepts, which together constitute its theoretical framework” (Jabareen, 2009, p.53). Jabareen (2009) presents an eight phase procedure in order to develop a conceptual framework, the eight phases are: mapping; reading and categorising; identifying and naming; deconstructing and categorising; integrating; synthesis; validation; and rethinking. Jabareen’s (2009) approach to developing a conceptual framework provides a structured process to follow when creating a conceptual framework. Therefore, this study adopted Jabareen’s (2009) procedure in order to provide an initial understanding of the phenomenon of teacher coaching within the New Zealand context.

When conducting a conceptual framework analysis the texts selected:

Should effectively represent the relevant social, cultural, political and environmental phenomenon or social behaviour, and the multidisciplinary literature that focuses on the phenomenon under study. An important point is that they should also represent practices related to the phenomenon. The data should therefore come from a variety of types. (Jabareen, 2009, p.53)

Subsequently, the building of a conceptual framework becomes a process of exploration in which the sources of data are themes created across multiple disciplines which are presented in a range of different texts addressing the social, cultural, political or environmental aspects of the phenomenon in question (Jabareen, 2009).
In terms of this study, it was clear to the researcher at the start of the research process a conceptual framework analysis would be beneficial owing to the fact that the phenomena of teacher coaching in New Zealand secondary schools was poorly defined, had a limited research base and the concept was used interchangeably with mentoring. Therefore, Jabareen’s (2009) analytical process was used to gather a wide variety of literature that referenced teacher coaching in the New Zealand context and in particular within the secondary school environment. The objective was to analyse these data sources in order to identify the boundaries, variables, concepts and overall context within which teacher coaching was operating. The intention of this process was to provide a broad understanding of the topic and a road map for the proceeding literature review. In the first instance both a Google search and an academic resource bank search was conducted using the key words ‘teacher’, ‘coach’ and ‘New Zealand’. This initial search identified seven broad sources of possible data, these were: research studies; the Education Gazette magazine; Ministry of Education publications; Education Review Office publications; advertisements for teacher coaching courses; published reports on professional learning projects; and individual school information. Within these sources of information relating to teacher coaching there were four domains that were evident which are analysed in greater depth below, these were: the political landscape of professional learning in New Zealand schools; national professional development project reviews; New Zealand focused professional development and teacher coaching research; Ministry of Education and Education Council of New Zealand resources and coaching courses (EDUCANZ, 2015; Fitzgerald, 2008; Ministry of Education, 2014; Poskitt & Taylor, 2008).

2.2 The political landscape of professional learning in New Zealand schools
The preliminary Google and academic resource bank search discussed above showed in the New Zealand education system the concept of teacher coaching operates within the field of teacher professional development and learning. In New Zealand the State has become indirect regulators of teachers’ development and performance through a culture of audit managed through its governing body the Ministry of Education and regulatory body the Education Review Office (Fitzgerald, 2008; Husbands, 2001). Boards of Trustees and school principals are required within their school to establish a performance management system that serves both the functions of professional development and accountability (Ministry of Education, 2011). This focus on a teacher
A professional learning system that encourages development and accountability has been one of the ongoing changes effected in the New Zealand Education system by the introduction of the 1989 Education Act and the 1991 Education Amendment Act. The introduction of these two acts was initiated due to increased political and public interest in the quality, effectiveness and evaluation of the school system (Elliot, 2001; Eraut, 1997; Gleeson & Husbands, 2011; Husbands, 2001). In New Zealand, during the 1980s, there was a focus on improving the efficiency and effectiveness of public services. The government of the day believed competition led to improvements. This philosophy created a market driven business model in schools that introduced management accountability into the education system (Boston, Martin, Pallot & Walsh, 1996; Codd & Nash, 1990; Court, 2004).

From the perspective of individual schools in New Zealand there is an expectation from the Ministry of Education (Ministry of Education, 2013) each year every school reports to them their charter, strategic and annual plan, within which the professional learning of teachers must be addressed. Similarly, when the Education Review Office visit schools, there is an expectation schools will be able to present their professional learning plan for teachers. From the perspective of individual teachers they must provide evidence of their involvement in professional learning as part of the process of applying every three years to the Education Council of New Zealand in order to maintain their teacher registration.

Although the requirement for a school in New Zealand to provide professional learning for its staff is highly regulated, the content and form the professional learning takes has previously not been directed by the Ministry of Education nor the Education Review Office. Subsequently, school leaders have developed a wide variety of professional learning approaches including: conferences, school-wide projects, subject associations, workshops, individual teacher inquiries and teacher coaching (Timperley et al., 2007). However, the way professional learning is funded and managed in schools is currently changing due to the introduction of the government initiative ‘Investing in Education Success’ (IES). The Ministry of Education describe IES as providing a process that:

Is intended to enable the most effective teachers and principals to share their knowledge and expertise across multiple schools, to
everyone’s benefit. It is aimed at making it easier for schools to work
together around a child’s journey through the education system to
tackle educational challenges, and get the professional resources
they need to do that. (Ministry of Education, 2014, p.1)

At the core of this initiative are Communities of Learning (CoLs), which are groups of
approximately ten schools who will come together as a working party. Communities
of learning have to contain organisations from primary through to secondary schools
and their formation and membership must be approved by the Minister of Education.
Within these communities there are paid leadership positions and teacher coaching
positions in which selected staff work across the ten schools to support the
professional learning of their colleagues. In the descriptors for the new teaching roles
it states “people in the across community teacher role will work across a Community
of Learning, coaching and mentoring others” (Ministry of Education, 2014, p.1).

Soon after the government’s announcement regarding the introduction of the Investing
in Schools initiative a further announcement was made regarding the provision of
professional development and learning in schools, it stated, “we are changing PLD –
what it is focussed on, who delivers it and how schools, Kura and CoL can access it”
(Ministry of Education, 2016, p.1). Even though these changes only apply to
government funded professional learning this announcement presented some
significant changes to professional learning in schools. These changes included:
centrally funded professional development will be focused on government identified
priorities, centrally funded professional development will be allocated by government
appointed panels, schools and CoLs can choose professional development facilitators
from a government approved list (Ministry of Education, 2016). Schools have the
choice not to join a Community of Learning nor access centrally funded professional
learning and development. However, schools not in a Community of Learning cannot
access funds earmarked to allow teachers to complete personal inquiries nor would
teachers be allowed to apply for any of the teacher coaching positions. If schools do
not apply to access centrally funded professional learning they would have to pay for
all required professional development from their own budget, which for small or lower
decile schools that traditionally have smaller budgets, would be a challenging
scenario. Therefore, there are significant financial benefits for schools to be part of a
Community of Learning and to access the centrally funded professional learning and
development fund. However, as can be seen above, both of these approaches to teacher development are structured in such a way that there is significant government direction and management of how schools access and experience professional learning through these two new initiatives. Consequently, schools in New Zealand are being managed through the National Administration Guidelines (Ministry of Education, 2013) and the Education Review Office to provide accountability regarding professional learning and now they are also being coaxed to join initiatives that will further allow government intervention into the content and structure of their professional learning for teachers.

It is within this highly managed system of professional learning and development that the topic of this study, teacher coaching in New Zealand secondary schools operates as a possible vehicle for supporting teachers to develop their practice. The fact that the press release which described the ‘across community teacher roles’, announced as part of the IES initiative, described these roles as coaching and mentoring positions, suggests that coaching is seen by the government and those sector representatives that developed the IES initiative as an effective strategy for implementing professional learning. Nevertheless, they have yet to release any further information about these roles, coaching approaches that might be used or training that will be provided for these coaches. Currently, coaching is not mentioned in the press release regarding the changes to centrally funded professional development and learning, however the press release suggests further information will be forthcoming and the changes will be phased in over two years (Ministry of Education, 2016).

2.3 National professional development project reviews
Another concept that was identified in the initial search for teacher coaching in New Zealand was the use of coaching in a number of government funded national professional development projects. Before the changes introduced to centrally-funded professional development outlined in the preceding section, it was common for the Ministry of Education to fund a group of facilitators to develop a professional development project focused on a particular perceived area of educational need. In the period 2000-2012 there were projects that focused on: providing professional support to teachers – The Specialist Classroom Teacher project; supporting teachers to understand assessment for learning principles – The Assess to Learn (AtoL)
Project; raising the achievement of Maori students – Te Kotahitanga; raising the reading and writing achievement of Year 9 and Year 10 students – The secondary literacy project. Each of these projects began in a small number of schools and then were up-scaled across a larger number of organisations. This section of the conceptual framework will explore the part that teacher coaching played in each of these projects.

The Specialist Classroom Teacher (SCT) project was introduced as part of the 2004 collective agreement and was seen as providing support for professional learning in schools by creating a Specialist Classroom Teacher role in every secondary school. The first SCT roles were implemented in 2006 as part of a pilot project. The position in each school was advertised, with the intention of drawing the SCT from staff who had taught for more than six years and who would then receive an allowance of $8000 per annum and four non-contact hours to carry out the role (Ministry of Education, Post Primary Teachers’ Association & New Zealand School Trustee Association, 2007).

In 2007 a review of the Specialist Classroom Teacher pilot project was carried out in order to identify areas of concern and to inform future policy and practice. In the initial Ministry of Education information relating to the SCT role the concept of coaching is not mentioned, however the review of the SCT pilot project referred to the concept of coaching nine times and firmly established a relationship between the SCT in secondary schools and teacher coaching. The review stated, “the SCT role is a new one that requires teachers to work with their colleagues in a coaching/mentoring role as well as in a facilitator one” (Ward, 2007, p.9). The review also describes the work of the SCT to be “coaching more experienced teachers who wanted help with a particular problem or solution” (Ward, 2007, p.49) and the need for teachers carrying out the role of the SCT to be trained in “coaching, mentoring, observation and feedback techniques” (Ward, 2007, p.80). Overall, the SCT pilot review deemed the SCT role to be a perceived success in areas such as providing professional development support and providing an alternative career pathway for teachers. However, in terms of the concept of coaching in schools the review left many unanswered questions, the most important of which were what do they mean by ‘coaching’, is it effective and what is best practice? No definition was provided in the report, at times coaching is used interchangeably with the term mentoring and in other sections it is described as a skill
to be acquired or developed. The SCT role is now established in secondary schools across the country and often it is talked about as a teacher coach role, which has raised the profile of teacher coaching in schools. However, what schools mean by a teacher coach role and how coaching is actually being implemented in NZ schools has not been explored since the SCT pilot review in 2007, and therefore will be one of the foci of this study.

The Te Kotahitanga project began in 2001 as a research project undertaken by the School of Education at the University of Waikato. Over the proceeding decade the project developed into a national professional development initiative funded by the Ministry of Education and involved thousands of teachers and tens of thousands of students in multiple secondary schools (Bishop, Berryman, Cavanagh & Teddy, 2007). The overall aim of the project has been to investigate how to improve the educational achievement of Maori students. In its final phase this involved teams of facilitators working with teachers to share findings, collect student voice and to observe and provide feedback to teachers. An approach called ‘shadow coaching’ was used which involved the coach giving input to the teacher throughout the lesson, rather than in a private feedback session at the end. It is unclear in the Te Kotahitanga literature how this unique ‘shadow coaching’ approach to teacher coaching was developed and why it was chosen. Unfortunately, even though the overall Te Kotahitanga professional development model was deemed to be a success the shadow coaching was the one strategy that participants did not validate (Meyer et al., 2010). In their extensive review of the Te Kotahitanga project Meyer et al. (2010) stated:

The implementation of shadow coaching across Phase 3 and Phase 4 schools appeared variable. Data analysis indicated that some lead facilitators and facilitators were less knowledgeable and/or confident about the implementation of shadow coaching in their school. Some teachers also indicated that they were unclear about the process of shadow coaching, how it differed from other components of the PD model and/or its contribution to their ongoing professional development. (Meyer et al., 2010, p.7)

In contrast to the SCT project, it appears from the literature that the development of the Te Kotahitanga professional development model placed greater emphasis on defining and describing shadow coaching and the function it should carry out within
the schools involved. However, implementation of the shadow coaching approach appeared not to be effective. To improve the shadow coaching element of the project, Meyer et al. (2010) suggested that “more attention needs to be placed on facilitators’ knowledge and use of shadow-coaching and the quality of its implementation within participating schools” (Meyer et al., 2010, p.7).

A third extensive national professional development project that was delivered in over 200 New Zealand schools between 2005 and 2007 was the AtoL Professional Development Project. This was a project that offered in-depth professional learning for teachers on the use of assessment for learning principles. Similar to the Te Kotahitanga project, the model involved a group of facilitators working with a school to share findings, lead workshops and carry out observations and coaching sessions (Poskitt & Taylor, 2008). Also similar to the Te Kotahitanga project, the AtoL project designers justified the use of coaching as a strategy to support individual teacher development by referencing seminal international research regarding teacher coaching published by Showers and Joyce (1996). Poskitt and Taylor (2008) produced an extensive report that investigated the impact that the AtoL project had on teachers, students and schools in New Zealand. The report found that “involvement in AtoL resulted in significant shifts in learning and achievement for the majority of students, and shifts in professional learning and pedagogical practice for most teachers involved” (Poskitt & Taylor, 2008, p.27). However, unlike the Te Kotahitanga review, the AtoL review did not identify different aspects of the professional development model that had been more or less effective in supporting the significant shifts in practice reported. Therefore, it was unclear if, like the Te Kotahitanga project, the coaching aspect of the AtoL model was perceived to be more or less successful than other aspects or if the teacher coaching strategy was a significant one for teachers attempting to develop their practice.

A final nationwide professional development project, that used teacher coaching as a strategy included in the professional learning model, was the Secondary Literacy Project (SLP) that was implemented in 60 New Zealand schools between 2009 and 2011. This project used a small number of facilitators to train teachers in each school to become literacy leaders. These leaders were then expected to work regularly with twelve teachers each in a focus group scenario. The literacy teachers were provided
with funded release time in order to observe lessons and provide follow up coaching to the focus group participants. McNaughton, Wilson, Jesson and Lai (2013) reviewed the effectiveness of the Secondary Literacy Project in meeting the aim of raising Year 9 and Year 10 literacy. They found that some gains were made, however due to difficulties with the e-asTTle online assessment tool, the effectiveness of SLP and the effectiveness of the implementation strategies, these gains were reported to be tentative. Furthermore, the observation and coaching element of the professional development model was reported as being the least effective element of the model as it was found that of those teachers questioned by the review team the majority had only been observed once and therefore this proposed coaching element of the model had not been carried out regularly as planned (McNaughton et al., 2013). The review stated:

> Only 10 LLs reported conducting more than 10 observations in total, and only 7 reported observing more than 10 Focus Group teachers. The number of workshop sessions provided and the number of observations held raises two important questions. Firstly, is the amount and frequency of professional learning time likely to be sufficient for shifting teacher knowledge and practice in a substantive way? Secondly, is the type of PD likely to provide teachers with sufficient support? (McNaughton et al., 2013, p.23)

Overall, it can be seen that professional development project designers working in New Zealand over the past fifteen years have, due to international research, chosen to draw on teacher coaching as a strategy to support teachers to change their practice. Yet, implementation of this aspect of professional development projects has in some cases been poor (McNaughton et al., 2013; Meyer et al., 2010). Reviews of some of the most commonly experienced and extensively funded professional development projects present coaching to be a strategy that lacks definition, is poorly understood by participants and in some cases simply not implemented. These are findings that challenge why teacher coaching continues to be implemented across New Zealand schools.
2.4 New Zealand focused professional development and teacher coaching research

A third domain which was shown to have a connection with teacher coaching in New Zealand schools was that of research based on professional development and teacher coaching. Research in the New Zealand context regarding teacher coaching is limited to one paper and a few Masters thesis, however there is a wider body of work that is focused on teacher professional development and learning that does refer to coaching. Two of the most significant pieces of educational research completed in New Zealand over the last decade are *Visible Learning: A synthesis of over 800 meta-analysis relating to achievement* (Hattie, 2008) and the *Best Evidence Synthesis: Teacher professional learning and development* (Timperley et al., 2007). Both of which do explore teacher coaching in some form, albeit in a limited fashion.

*The Best Evidence Synthesis: Teacher professional learning and development* was firmly focused on the New Zealand context and is described in the foreword as “an extraordinary synthesis” (Timperley et al., 2007, p. i). It moves the discourse about what we learn about learning for teachers onto a different plane” (Timperley et al., 2007, p.vii). The process for completing this study involved creating a theoretical frame consisting of 84 different characteristics of the professional learning environment likely to impact on student outcomes and then using this framework to analyse the literature. In the index of this study the concept of teacher coaching is not listed, however it is referred to ten times within the body of the document. The first point that is made about coaching is that like all the other professional development activities which were analysed in the 84 studies, was that “every type of activity that was part of the core studies with positive outcomes was also associated with studies with low or no impact” (Timperley et al., 2007, p. xxxviii).

The only activity which was evident in all the studies was listening to others with greater expertise, although this activity alone was deemed insufficient to change teachers’ practice. Therefore, Timperley et al. (2007) concluded that, “teachers require similar conditions to students when in-depth learning is being promoted; that is, they need multiple opportunities to learn through a range of activities” (p.xxxviii). Another reference to teacher coaching in the *Best Evidence Synthesis: Teacher professional learning and development*, is a reference to another recent meta-analysis
of student achievement in mathematics and science which concluded that “particular activities did not yield different effects, although it was noted that nearly all interventions involved workshops plus coaching. No finer grained analysis of activities were undertaken” (Timperley et al., 2007, p.xiv). A final three references to coaching in the Best Evidence Synthesis: Teacher professional learning and development are in the case studies section, in which three school based professional development projects are described, each of which made use of teacher coaching in some capacity. One of the cases described is the Te Kotahitanga project explored above.

A final reference to teacher coaching made in the Best Evidence Synthesis: Teacher professional learning and development is a statement made early in the document with regards to language used throughout the findings, it states:

Attempts have been made to avoid generic expressions that have multiple meanings. For example, terms such as ‘coaching’ and ‘professional learning community’ are not used consistently in the literature. They can refer to any one of a number of different professional learning opportunities and forms of interaction and do not necessarily identify what content was learned. (Timperley et al., 2007, p.28)

In this way, this seminal piece of research presents teacher coaching in the New Zealand context as an ambiguous concept. Not only do the findings suggest that as a professional development activity it is no more or less effective than other strategies, this study also suggests that the concept of teacher coaching is one that is not used consistently and has multiple meanings. These findings concur with those presented above regarding nationwide professional development contracts, that showed teacher coaching is poorly defined, has different meanings in different contexts or projects and is yet to be proven to support teachers to change their practice in New Zealand. Findings that once again raise the question why does coaching continue to be used in New Zealand schools and who is driving this implementation?

A second significant New Zealand based educational study that also referred to the concept of coaching was Visible Learning: A synthesis of over 800 meta-analysis relating to achievement (Hattie, 2008). In this study Hattie compared the effect size of multiple factors that influence student achievement in schools. The question was
which strategies and innovations work best in order to improve student outcomes? Teacher coaching was not analysed as an influence on its own, however teacher professional development was found to have an effect size of \( d=0.62 \) which suggested that it was the ninth most important influence in student achievement. In relation to the concept of professional development Hattie (2008) stated:

Four types of instruction found to be most effective on teacher knowledge and behaviour are: observation of actual classroom methods, microteaching, video/audio feedback, and practice. Lowest effects are from discussion, lectures, games/simulations, and guided field trips, as were coaching, modelling, and production of printed or instructional materials. (p.392)

Therefore, although it was encouraging that this internationally acclaimed research presented teachers’ professional learning as having a significant influence on student achievement, coaching as a strategy was not one of the activities regarded as having the greatest influence on teacher change.

A final piece of New Zealand research that refers to teacher coaching is *Coaching teachers: Effective professional development but difficult to achieve* (Hawk & Hill, 2003). This was a paper prepared for the AARE/NZARE conference and significantly is the only literature that could be found which focused explicitly within the New Zealand secondary school context on teacher coaching. The paper focuses on a project in nine urban secondary schools operating in a learning community labelled AIMHI. In 2002 each school began a programme of ‘coaching’ to provide professional development for their teachers, the abstract states:

This paper looks at the underpinning philosophical and research base for coaching and the earliest decisions made by the schools about their individual approaches. It explores the setting up processes used by the schools and the adaptations that have been made as the various approaches were trialled. While the learning is ongoing, it has been possible to draw some conclusions about what works and what has been difficult. (Hawk & Hill, 2003, p.1)

The first finding that was made was that all nine schools adopted different coaching approaches and structures to meet the needs of the different schools. At the time of the report, one school had one coach, five schools had created three coaching
positions and the remaining two schools had created four and six coaches. In terms of problems that those setting up coaching programmes encountered, these were uncovered to be: not all teachers could be coached due to limited time; senior leaders did not have enough time to coach; schools with one coach lost the institutional coaching knowledge if they left; being a single coach is a lonely experience that lacks support, some teachers resigned when they felt pressured to change; when teachers identified their own needs some of the needs were trivial (Hawk & Hill, 2003).

The successes attributed to the coaching programmes across the nine schools were found to be: new teachers to the schools felt well supported by the coaches; the learning for teachers was perceived to be at a deep level; the coaching staff developed high level feedback, observation and coaching skills; it was perceived that teachers were making progress in being more effective practitioners; it was perceived more students were engaged in learning and in some schools this is led to a positive improvement in the learning culture (Hawk & Hill, 2003). Although this study was focused on a smaller sample size compared to the other research studies explored in this section, the work of Hawk and Hill (2003) suggests that teacher coaching in New Zealand is a professional learning activity that is perceived as an effective strategy for supporting teachers to improve or develop their practice and subsequently improve learning outcomes for their students.

Another piece of research that was found to be focused on teacher coaching in New Zealand schools was a Masters thesis titled Coaching for improving teacher practice within a professional development initiative (Cowie, 2010). This study aimed to find out how teacher coaching was being used to support professional learning and the development of teachers involved in the Extending High Standards Across Schools (EHSAS) professional development project. The sample size was small, involving only two schools, however the findings uncovered concurred with many of the findings presented in the larger published studies described above, Cowie (2010) stated that the findings indicated that:

Those in leadership positions need to establish a culture of learning to support the coaching process and that all involved need a shared understanding of the language of coaching and supervision. Further
At both the individual thesis level and large scale national study level it can be seen that teacher coaching is a concept which is being used across New Zealand schools as a professional development tool that aims to support teachers to change their practice. However, the findings are currently inconclusive regarding what teachers understand teacher coaching to be, if coaching can support teachers to change, the differences between the coaching adopted in different projects or contexts and if coaching can actually lead to improved outcomes for teachers and their students? The intention of this study is to go some way to exploring these current gaps in the research.

2.5 Ministry of Education and Education Council of New Zealand resources and coaching courses

A final domain that the preliminary Google and academic resource bank search showed teacher coaching to exist within was the realm of resources provided by the Education Council of Aotearoa New Zealand and Ministry of Education (EDUCANZ). Even though these are not published studies, these resources from the primary organisations leading education within New Zealand suggest that coaching has a current and significant role to play in the education system.

The Education Council of Aotearoa New Zealand (EDUCANZ) is a recently formed professional body that represent teachers in New Zealand. EDUCANZ’s role is described as promoting “good teaching practice and helping raise the status and image of the teaching profession” (EDUCANZ, 2016, p.1). The council also has a regulatory function in that it processes teacher registration applications and deals with complaints about teachers. A search of the EDUCANZ website in relation to teacher coaching provides three resource pages, which are: two videos relating to using coaching in an appraisal process; a set of Guidelines for Induction and Mentoring Mentor Teachers; and a list of courses relevant for mentor teacher development.

The pages that provide two videos relating to using teacher coaching in an appraisal process form part of EDUCANZ’s appraisal of teacher project. Their website states that the goal of this project was to support professional leaders of appraisal in schools
“with the opportunity to strengthen their systems to ensure their teachers and students benefit from appraisal as a professional learning and development process” (EDUCANZ, 2016, appraisal p.1). The first video titled Coaching as a Tool for Professional Learning and Leading presents a Deputy Principal from a New Zealand secondary school talking about using a coaching model within their schools’ appraisal process to promote professional learning. In this presentation it explains how the school’s Principal coaches the Heads of Department around what they are doing when coaching their own teachers to achieve departmental goals and school goals? The second video resource is filmed at the same secondary school and presents two of the staff, who had become coaches within the described appraisal process, discussing their newly acquired roles as coaches. These two resources on the website of New Zealand teachers’ professional council presents teacher coaching in a significantly different context than those described in earlier sections of this conceptual framework. With no definition or explanation of what is coaching, these videos move coaching from the context of professional development and teacher support to the realm of teacher appraisal and thus competency. These two resources present coaching as a tool for professional learning, however the fact that the coaching is being implemented by those in positions of authority to their subordinates as part of a regulated appraisal process creates a different approach to coaching compared to those described above in professional development projects such as Te Kotahitanga or AIMHI.

The second resource relating to coaching provided by EDUCANZ on their website is the Guidelines for Induction and Mentoring and Mentor Teachers. It states in the introduction to these guidelines that they have been produced to, “provide nationally consistent, high quality and comprehensive support for Provisionally Certified Teachers (PCTs) in their first years of practice and enable them to became fully certified teachers” (EDUCANZ, 2015). The term teacher coaching is not evident in this document, however as we have seen earlier in this conceptual framework section, coaching and mentoring are terms that are used interchangeably within the New Zealand education system. Furthermore, many of the activities that are described on the page titled ‘High Quality, Intensive Induction and Mentoring’ are skills that are described as coaching skills in the projects and literature reviewed previously in this chapter. In the Guidelines for Induction and Mentoring and Mentor teachers
(EDUCANZ, 2015) there are a number of coaching skills that are promoted as best practice for those mentors working with provisionally certified teachers, these skills include: detailed observation; range of tools used in observation; professional discussion – challenge pedagogy, active listening; learning conversation process (listening); get PCT to think more and have evidence of what they are doing. On one hand this document further raises the profile of coaching skills by highlighting how coaching activities such as active listening are fundamental in developing the practice of new teachers in the profession. Also, this document is promoted on the Ministry of Education website under the title Coaching and Mentoring resources. On the other hand, these guidelines further cloud the discussion regarding where coaching is placed within the New Zealand educational landscape because the actual term coaching is not mentioned once in the body of this document.

A final resource relating to coaching provided by EDUCANZ on their website is a list of Courses Relevant for Mentor Teacher Development, it states:

If you are a mentor teacher or interested in becoming one, there are many training providers offering professional development mentoring courses. To the best of our knowledge, the courses below align with key principles of the Induction and Mentoring and Mentor Teachers Guidelines, however they have not been formally audited or reviewed by the Council. (EDUCANZ, 2016)

The list of courses presented are provided by both universities and private training organisations and once again the concept of coaching is used alongside mentoring, for example one of the papers advertised by Victoria University of Wellington is, EPOL511: Effective mentoring and coaching for educational leadership. The fact that there are nine available courses for coaches and/or mentors advertised on this site suggests that there is a significant market for coaching and mentoring skills within New Zealand.

Coaching resources provided by the Ministry of Education are divided between two different websites. The first is a website created by the Ministry of Education to present resources relating to leadership development. A subsection of this page is a web page
specifically focused on *Mentoring and Coaching* (Ministry of Education, 2016b). Three resources are presented on this page; the *Guidelines for Induction and Mentoring and Mentor teachers* discussed above as well as two articles written by Dr Jan Robertson that focus on using coaching to develop effective school leaders (Robertson, 2004, 2008). Both articles focus on coaching as a leadership development tool, rather than a teacher development strategy, however many of the coaching strategies suggested by Robertson are the same as those proposed by the guidelines for inducting teachers. Robertson (2008) suggests that for coaching to be effective coaches are required to: develop a positive relationship, listen and use reflective questioning.

The second Ministry of Education resource that relates to teacher coaching is on a page called *Laying the Foundations for Coaching and Mentoring* (Ministry of Education, 2016a) which appears on a section of the Ministry of Education resource pages that were created to support the implementation of the revised New Zealand curriculum. The resource is a video of a New Zealand school principal describing how they used teacher coaching to first support teacher development regarding literacy strategies and then to support an inquiry focused professional development initiative that was focused on the revised curriculum. Once again Jan Robertson’s work is referred to in the video as the coaching model that was used.

Overall, the resources presented by the Ministry of Education and the Education Council of New Zealand suggest that teacher coaching has an important role to play in education within New Zealand. The resources explored above suggest that the two leading organisations of education in New Zealand believe teacher coaching can be used to support new teachers, implement a new curriculum, develop teachers and leaders, and as part of an appraisal process. The work of Robertson (2004, 2008) is presented as a coaching model that can be used to both support the implementation of a new curriculum and to develop school leaders, which provides a guide for those educators who wish to duplicate the use of teacher coaching in their schools. The resources that present teacher coaching as a tool to be used in appraisal processes or to support the induction of new teachers are less prescriptive, but do present some strategies for coaches or mentors to use. The overall impression provided by these resources is that coaching is popular and is used in a multitude of different ways.
However, the reasons for choosing coaching, what is coaching best practice and does it ‘work’ in terms of meeting stated programme objectives is less clear.

2.6 Conceptual framework conclusion

The definition of a conceptual framework proposed in the introduction of this study stated that a conceptual framework is a written or visual presentation that “explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables – and the presumed relationship among them (Miles & Huberman, 1994, p.18). A conceptual framework can be based on the literature and personal experience of the researcher, serving as an anchor for a study and allowing the researcher to organise the topic of study into ‘intellectual bins’ (Baxter & Jack, 2008). Subsequently, this chapter has presented the intellectual bins of teacher coaching in New Zealand secondary schools to be: how coaching is situated within the political landscape of professional learning in New Zealand schools; how teacher coaching is used as a vehicle in national professional development projects; how teacher coaching is presented in the New Zealand focused professional development and teacher coaching research; and how coaching is presented by the Ministry of Education and Education Council of New Zealand resource pages as a tool that can be used to support appraisal processes, implement a new curriculum, support the induction of new teachers and to support the development of school leaders. The literature review which forms the next chapter of this study will explore these concepts in greater depth. The literature review begins by presenting a list of guiding questions that were formed by reflecting on the four concepts presented by the Conceptual Framework in relation to the five research questions that form the basis of this study.
CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

This chapter is a review of the literature pertaining to teacher coaching and it has been established in order to contextualise this study within the current body of knowledge relating to teacher coaching. This literature review takes a critical approach in order to explore how the current literature offers evidence to answer this study’s five research questions. The five research questions of this study are:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?
3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?
4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?
5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

The overall aim of this chapter is to explore in greater depth the ‘intellectual bins’ identified by the preceding Conceptual Framework Chapter as both the concepts and the context in which teacher coaching interacts and operates in the New Zealand secondary school system. The concepts which were identified by the conceptual framework and subsequently form the focus of this Literature Review Chapter are: influences upon the development of teacher coaching; professional development; the socio-political context of professional development; defining coaching in education; the practice of coaching in education; and evaluating the impact of coaching. Each section aims to consider what is already known about teacher coaching, both globally and in New Zealand and to relate this literature base to the research questions of this study. This exploratory process, will also aim to identify the gaps in the current
literature, whilst also presenting an opportunity to uncover the focus areas that the research methods of this study will investigate.

### 3.2 Framing the review

In response to the conclusions of the Conceptual Framework and in order to guide the review of the current coaching literature a series of subsidiary questions were developed in relation to each of this study’s research questions. The subsidiary questions that guide the literature review and their relationship to the study’s overall research questions are summarised in Table 3.1 below:

**Table 3.1 Summary of guiding questions for the literature review**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Guiding questions for the literature review</th>
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<tbody>
<tr>
<td>1: In what ways are school leaders using teacher coaching in New Zealand secondary schools?</td>
<td>How is teacher coaching being defined?</td>
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<td></td>
<td>What are the different ways that teacher coaching is being used in New Zealand secondary schools?</td>
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<td></td>
<td>Is there a relationship between different factors involved in New Zealand secondary schools and the way that schools are using teacher coaching?</td>
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<td>What is the purpose of coaching as a form of professional development?</td>
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<tr>
<td>2: Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?</td>
<td>What are the characteristics of effective professional development?</td>
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<td>Are the characteristics of effective professional development reflected in current approaches to coaching?</td>
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<td></td>
<td>How and why has coaching developed as a form of professional development in NZ secondary schools?</td>
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<td>Question</td>
<td>Sub-question</td>
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</table>
| **3:** What are the features of teacher coaching programmes implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes? | What are school leaders aiming to achieve by implementing teacher coaching programmes?  
Are the desired objectives of school leader’s being met by teacher coaching?  
What are the approaches, roles, principles and strategies being used by teacher coaches to achieve the stated objectives of teacher coaching programmes?  
Are certain features of teacher coaching more effective at impacting upon programmes stated objectives?  
What is the impact of teacher coaching and how is it being evaluated?  
What is the socio-political context in which professional development operates in New Zealand schools?  
Which factors influence the way that professional development and in particular teacher coaching is implemented in schools?  
Are there any challenges associated with implementing teacher coaching in schools?  
Does a current theory of teacher coaching exist worldwide and/or in New Zealand?  
What are the strengths of the current teacher coaching literature? |
| **4:** What are the tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in a sample of New Zealand secondary schools? | What are the perceptions of staff regarding the teaching strategies and expected outcomes?  
What are the coaching strategies being used in the schools?  
What are the expected outcomes of the coaching programmes?  
What are the socio-political factors influencing the implementation of teacher coaching in schools?  
What are the challenges associated with implementing teacher coaching in schools?  
Does a current theory of teacher coaching exist worldwide and/or in New Zealand?  
What are the strengths of the current teacher coaching literature? |
| **5:** How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching? | What are the benefits of teacher coaching in New Zealand secondary schools?  
How can teacher coaching contribute to the development of a theory of teacher coaching?  
What are the strengths of the current teacher coaching literature? |
Where are the gaps in the current teacher coaching literature?

How does the current literature already answer the 5 research questions of this study?

What questions need to be asked of this study’s participants in order to fill the gaps in the current literature?

In the subsequent sections of this literature review the guiding questions presented above form a framework with which to explore the literature.

3.3 Influences upon the development of teacher coaching

Coaching as a form of professional development is an approach that has been a popular intervention strategy for many years in the world of business. The term coaching has developed from the French definition of moving a valued person from one place to another (Carey, Philippon & Cummings, 2011; Haas, 1992). Even though this idea originally referred to the idea of coach travel, the definition today is used in a multitude of organisations and contexts to describe an intervention strategy that supports employees to develop their practice (Brounstein, 2011).

In the mid-20th century coaching in business organisations developed as an intervention strategy in order to 'move' or develop executive leaders who were perceived to be in need of support. It later progressed into a professional development strategy that focused on leadership development, workplace performance and supporting employees to develop their skills for career advancement (Bennett & Bush, 2009; Bono, Purvanova, Tower, & Peterson, 2009; Carey et al., 2011).

Coaching in education was first documented in the work of Joyce and Showers in 1982, at which point the use of coaching in the world of business had already been established for over 30 years. Therefore, the topic of coaching within the corporate field has a more extensive experience, research and literature base on which to draw. This section of the literature review will investigate the extensive business, organisational and executive coaching literature by exploring the common themes
presented by previously completed literature reviews within these three areas. This section of the literature review provides an opportunity to draw on an extensive body of research relating to coaching within business organisations in order to explore if this body of work can offer any insight into the research questions of this study. Furthermore, by examining the long history of research that examines coaching in the business environment, this section also presents the wider context from which teacher coaching research has been developed.

By the early 21st Century coaching was established as one of the top five leadership development choices in large business organisations (Underhill, 2005) and over the last decade coaching activities “have continued to develop, evolve and expand at a phenomenal rate” (Garvey, Stokes & Megginson, 2014, p.1). Carey et al. (2011) report that an integrative literature review from 1996 to 2010 yielded 1,414 titles, suggesting that there is a significant amount of research relating to the use of coaches outside of education.

Definitions of coaching within the business world include the idea of a short term relationship aimed at providing feedback, and also a relationship aimed at cultivating professional growth with the objectives of enhancing behavioural change and learning (Carey et al., 2011). It has been found that organisational coaching can positively affect leadership, increase charismatic behaviour, impact upon employees’ perceptions of leaders and improve leadership capabilities (Bennett & Bush, 2009; Kampa-Kokesch & Anderson, 2001). The multi-faceted nature of business coach definitions, objectives and possibilities highlights the broad goals that can possibly be achieved using coaching as an intervention, it also presents the differentiated approaches which coaching can offer.

Ten years apart the work of Kampa-Kokesch and Anderson (2001) and Carey et al. (2011) both explored the literature in relation to coaching being used in the world of business and medicine. Both reviews highlight the increased popularity of coaching as an intervention for supporting employee development and change in complex environments. Both reviews suggest that coaching in business can have a positive impact, although they also suggest that there are only small amounts of research regarding the impact of coaching and how this impact is created, which are aims that
these researchers then attempted to explore in their work.

Kampa-Kokesch and Anderson (2001) report that although their extensive literature review presented a myriad of approaches to executive coaching, there is considerable overlap amongst them regarding the stages of executive coaching. Five common themes identified in their study were: "relationship building, assessment, intervention, follow-up and evaluation" (p.209). They also reported that within the literature there is agreement regarding the desirable assessment techniques used in coaching partnerships, such as: "360-degree feedback questionnaires, qualitative interviews, and psychological instruments such as personality and leadership style inventories" (p.209). However, in contrast to these shared ideas, Kampa-Kokesch and Anderson (2001) suggest that there lacks in the executive coaching literature any explanation regarding how the coaching process outlined above achieves desired objectives, for example, “do process and outcome look different when coaching is remedial versus developmental? What specifically about the coaching process is responsible for the desired outcome?...What about executive coaching effects change?” (p.207). Even though these questions relate to the field of business, they are also pertinent in relation to teacher coaching being used in education.

It is noted in the literature that the research and findings relating to coaching within business organisations is not a fixed entity, it is something that is changing and developing as the needs of business change and the process of coaching develops (Carey et al., 2011; Garvey et al., 2014). Bennett and Bush (2009) reported five developing organisational coaching trends to be:

1. Need/demand for coaching increasing and changing
2. Coaching evolving as a discipline and a profession
3. Demand for measurable impact and quality increasing
4. Number and influence of professional organizations changing
5. Coaching is becoming a commodity (p.3)

It would appear from the findings of the Conceptual Framework of this study that these five trends could be just as relevant in the context of teacher coaching in New Zealand secondary schools. The Conceptual Framework showed that there is high demand for teacher coaching, it is being used in a multitude of different contexts, it is being
commercialised in the form of coaching courses and the limited research is calling for further inquiries into the impact of teacher coaching (Bossi, 2008; Cusumano, Armstrong, Cohen & Todd, 2006; Matsumera, Garnier, Correnti, Junker & Bickel, 2010; Murray, Ma & Mazur, 2009; Pruitt & Wallace, 2012).

Overall, there appears to be lessons that can be learnt from the development of business coaching in order to aid the continued introduction of teacher coaching into New Zealand secondary schools. The qualities afforded to business coaching that are outlined in the literature above could also be attractive to those implementing professional development in New Zealand’s secondary schools. If teacher coaching is to draw on the trends presented in the business coaching literature then it would appear that there are three foci required of teacher coaches: the need for teacher coaches to define and clarify the objectives of the work they do; the development of strategies to measure the impact of the teacher coaching in relation to their stated objectives, and further analysis of the activities which coaches employ in order to create this impact. Subsequently, all three of these foci form the basis of research questions in this study and questions that will be asked of the study’s participants.

3.4 Defining professional development in education
The Conceptual Framework of this study presented the concept of teacher coaching in New Zealand secondary schools to be grounded in the wider topic of professional development in education. Therefore, this section of the review explores the current literature regarding professional development in education, with the intention of understanding how the current professional development literature can support the exploration of this study’s five research questions.

The professional development literature does not provide a consensus regarding a definition of professional development in education (Buysee, Pamela & Rous 2009). Instead there is a broad range of approaches, activities and resources which are labelled professional development, even though they serve different aims and make use of different strategies. In its wider sense, professional development begins in pre-service training and continues throughout a teacher’s career and includes any activity that partly or primarily prepares staff for improved performance (Buysee et al., 2009; Darling-Hammond & Mclaughlin, 1995; Desimone, 2009). The kind of activities that
may be experienced in order to change and improve a teacher’s practice include: development of curriculum materials; workshops; conferences; college courses; coaching; classroom observations; paired reflection; action research; and involvement in professional associations (Desimone, 2009). This list is not exhaustive, but serves as an example of the wide range of possible approaches and activities which could be considered to be professional development. Buyssee et al. (2009) suggest that the diversity of this list and the lack of a shared definition or understanding of what is professional development is a weakness in the field of education, they state that:

Even more unsettling is the realization that there is no agreed-upon definition of the term professional development in education or related fields...which likely contributes to the lack of a common vision for the most effective ways of organizing and implementing professional development. (p.235)

Even though there is no shared definition of professional development, there is consensus in the literature regarding the need for professional development which will improve individual teachers’ practice in a way that will lead to improved learning and achievement for their students (Buyssee et al., 2009; Darling-Hammond & McLaughlin, 1995; Desimone, 2009; Garet, Porter, Desimone, Birman & Yoon, 2001; Piggot-Irvine, 2006; Timperley et al., 2007). There is also general agreement concerning the purpose of professional development, the opportunities it should provide for teachers and the kinds of activities that lead to the greatest sustained shift in teachers’ practice and students’ achievement. The next section will explore the literature regarding these themes.

3.5 The characteristics of effective professional development

Even though different researchers of professional development may use different terminology regarding the opportunities that professional development can offer teachers, there is considerable evidence available with regards to the characteristics of professional development that create impact and allow teachers to improve their practise and raise student achievement (Desimone, 2009; Garet et al., 2001).

Professional development needs to be a critical concern of school leaders and should be based on a holistic model which meshes leadership, performance management and strategic management (Cardno, 2005). Professional development should be
connected to the work that teachers are doing with their students, provide opportunities for teachers to examine students’ work collaboratively and should be linked to other areas of school culture (Darling-Hammond & McLaughlin, 1995; Desimone, 2009; Ingvarson, Meiers & Beavis, 2005). Professional development should also allow teachers to reflect on their practice, engage them in identifying what they need to learn and allow them to be involved in the planning of how these needs will be met. Finally, professional development should provide opportunities for teachers to use a cycle of inquiry to test new methods of practice, whilst receiving coaching and support from their colleagues (Darling-Hammond & McLaughlin, 1995; Desimone, 2009; Ingvarson et al., 2005; Timperley et al., 2007).

In terms of approaches to professional development which lead to sustained changes in teachers’ beliefs and skills, the Victoria Department of Education and Training (2005) present a range of models that can be used to “help teachers analyse and reflect on the impact of their practice and generate ideas for improvement” (Victoria Department of Education & Training, 2005, p.1). The models they offer are: action research; team examination of student work; study groups; case discussions; peer observation; and small group lesson study. Even though the format of these models are significantly varied, all of them allow the teacher to be part of a small group or pair, and all of them allow the teacher to take part in reflective development, which are both common features of the New Zealand based coaching programmes presented in the Conceptual Framework. Similarly, Lord and Miller (2000) believe that recent curriculum reforms ask for teachers to significantly develop how and what they do in their classrooms, a deep level of change that “requires more powerful approaches to professional development” (p.1). They suggest that in order to effect complex and ambitious change of this nature, leaders must adapt a professional development approach that employs teacher leaders or coaches from within a school’s own teaching staff. Lord and Miller (2000) state that one response to large-scale curriculum implementation in the USA:

Has been to identify and deploy a corps of teacher leaders to provide support to their colleagues in changing instructional practice… There are simply too few administrative staff, with the needed expertise or experience to provide the professional development that might lead to lasting change among classroom teachers. The most likely source for
satisfying this leadership is the district’s corps of experienced teachers. (p.3)

Timperley et al. (2007) suggest that the most important characteristic of professional development which leads to fundamental change in teachers’ practice is that teachers are provided with “multiple and aligned opportunities that support them to learn and apply new understandings and skills” (p.xxx). Timperley et al. (2007) also support the ‘teaching as inquiry’ approach presented in the revised New Zealand Curriculum (Ministry of Education, 2007), which makes a link between how teachers reflect on and develop their own practice and the learning outcomes of their students. However, it should be acknowledged that just providing a teacher with professional development opportunities of a particular kind does not guarantee impact as individual motivation and engagement will also play a part (Penuel, Fishman, Yamaguchi & Gallagher, 2007).

In order to promote sustained and fundamental change in teachers’ practice it is not enough for school leaders to only implement the effective characteristics of professional development outlined above, they must also consider the context of the school culture into which the implementation will occur (Guskey, 2003; Penuel et al., 2007; Timperley et al., 2007). Consequently, leaders of professional development need to consider the socio-political context in which their school operates and the school culture at the time of their professional development implementation. They must also take into account the demands that the professional development activities will place on individual teachers and how well these activities will align with teachers’ own attitude, perceptions and beliefs (Penuel et al., 2007; Timperley et al., 2007). For professional development to be effective, in that the aims of the activity are met and student learning is ultimately improved, then school leaders must be aware that all professional development occurs in situations which have many contextual factors and drivers that may influence a professional development activity. Guskey (2003) writes:

   It seems clear, therefore, that differences in communities of school administrators, teachers and students uniquely affect professional development processes and can strongly influence the characteristics that contribute to professional development’s effectiveness. Because of these powerful contextual influences, broad-brush policies
and guide-lines for best practice may never be completely accurate.

(p. 16)

Professional development that necessitates change to teachers’ working practices can profoundly challenge their beliefs. Therefore, opportunities for professional development need to be thought through carefully and accommodate a wide range of individual teachers’ needs, styles and attitudes to change (Broad & Evans, 2006).

Overall, the literature relating to effective professional development presented in this section provides compelling evidence that teacher coaching can offer many of the features of effective professional development presented in the literature (Lord & Miller, 2000; Timperley et al., 2007). Therefore, in terms of a starting point for this study, it would appear that there is evidence to suggest that teacher coaching is a professional development opportunity which offers some promise. Yet, as was shown in the Conceptual Framework this is not always the case, as the shadow coaching of the Te Kotahitanga project (Bishop et al., 2007) was specifically reported as the least successful element of this major nationwide professional development project. Consequently, this study aims to inquire further into what are the perceived differences between the different coaching approaches implemented in New Zealand schools and which strategies that the coaches use have the greatest impact on teacher change and student outcomes.

3.6 The socio-political context in which professional development operates in New Zealand schools

This study focuses on teacher coaching, however the Conceptual Framework and the preceding section of this review have shown that coaching is located within the wider discipline of teacher professional development. In particular the research questions centre this study within the environment of the New Zealand secondary school system. However, as was presented in the Conceptual Framework professional development of teachers does not function in a vacuum and is influenced by the socio-political context in which professional development is positioned within the New Zealand education system. A combination of social and political factors create the environment and culture within which professional development programmes, such as teacher coaching are implemented. Therefore, this section of the literature review examines the context in which teacher professional development operate and investigates how
this context influences the implementation of professional development and in particularly teacher coaching.

Within New Zealand secondary schools two forces which drive continuous teacher development are the external regulatory demands for teacher and organisational accountability and the internal moral accountabilities of professionals to grow and develop their practice (Eraut, 1994; Ministry of Education, 2011). Even though these two influencing factors of teacher development share the same central goal of improving the quality of teaching, their effects upon teaching staff can be perceived quite differently. The Ministry of Education (2016) presents the need to monitor and regulate the professional development of teachers as a way of supporting increases in academic achievement for ‘priority learners’, whilst others such as Court (2004) and Fitzgerald (2008) argue that the effect of increased state intervention is to de-professionalise teaching (Court, 2004; Fitzgerald, 2008).

The external demands for teacher and organisational accountability in the New Zealand education sector has come about due to increased political and public interest in the quality, effectiveness and evaluation of the school system (Elliot, 2001; Eraut, 1997; Gleeson & Husbands, 2011; Husbands, 2001; Ministry of Education, 2014). In New Zealand, during the 1980s, there was a focus on improving the efficiency and effectiveness of public services, which in turn led to a market driven business model being adopted in schools as a way of introducing management accountability into the education system (Boston et al., 1996; Codd & Nash, 1990; Court, 2004). Consequently, in New Zealand the State has become the indirect regulator of teachers’ development and performance through a culture of audit that is managed through its governing body the Ministry of Education and regulatory body the Education Review Office (Fitzgerald, 2008; Husbands, 2001). Boards of Trustees and school principals are required within their school to establish a performance management system that serves both the functions of professional development and accountability (Ministry of Education, 2011).

The government further influences and regulates the way that schools develop and manage their teacher’s performance through control of the centrally funded professional development budget. Over the last twenty years this funding has been
tagged to individual projects such as the AToL project, the Te Kotahitanga project or the Specialist Classroom teacher role. Schools have been encouraged to adopt these initiatives with the offer of funding to support the implementation of the project (Bishop et al., 2007; Poskitt & Taylor, 2008; Ward, 2007). In recent times, this funding has been reviewed, and in March 2016 it was announced that professional development funding would now be tagged to Ministry priority objectives and Ministry audited facilitators (Ministry of Education, 2016). Subsequently, the implementation of the professional development of teachers in New Zealand secondary schools is significantly influenced by decisions made centrally at government level. An approach which conflicts with professional development that is evidence based, individualised and contextually relevant to the school in question, which are the characteristics of effective professional development presented in the literature above (Broad & Evans, 2006; Lord & Miller, 2000; Timperley et al., 2007).

The regulatory and centrally controlled approach to teachers’ professional development that the Ministry of Education has adopted for over thirty years has, by the government’s own admission, not achieved the very focus of these initiatives which was to raise the academic achievement of priority learners (Ministry of Education, 2014; Ministry of Education, 2016). This approach has also been challenged by Codd (2005) who suggests that “managerialism, with its emphasis on efficiency and external accountability, treats teachers as functionaries rather than professionals and thereby diminishes their autonomy and commitment” (p.201). Therefore, if this current ‘market’ approach to managing education organisations is not producing positive outcomes for the students it professes to be targeting and it is reducing teachers’ dedication, it raises the question is there another way to develop the effectiveness and efficiency of the teaching profession? Some education professionals see teacher coaching and other similar professional development interventions as the approach which will best support teachers to develop their effectiveness (Broad & Evans, 2006; Desimone 2009; Lord & Miller, 2000). Consequently, one of the foci of this study is to explore the impact of teacher coaching and to inquire into whether this approach to professional development can offer improvements for teachers’ practice and their students.
3.7 Defining coaching

There currently does not exist a definitive definition for coaching or mentoring within education (Borman, Ferger & Kawami, 2006; European Mentoring & Coaching Council, 2011; Poglinco, Bach, Hovde, Rosenblum, Saunders & Supovitz 2003). Primarily, because coaching and mentoring within the context of education is used in a multitude of schools and for a wide variety of different reasons (Borman et al., 2006; Guskey, 2000).

The terms mentoring and coaching are commonly used interchangeably, and in organisations such as the European Mentoring and Coaching Council they are defined in the same way (Fletcher & Mullen, 2012). Indeed in some publications mentoring and coaching are one and the same as in Nolan (2008) who describes the process of ‘mentor coaching’. However, over the last decade as the literature regarding coaching has developed and become established, so discrete definitions of coaching have emerged that position coaching as a practice that is distinguished differently to that of mentoring. Nevertheless, it should be noted that the variety of coaching definitions presented below originate from a wide range of sources which have been developed from research, opinion pieces and texts that ‘teach’ the skills of coaching.

Coaching is increasingly popular within education as a strategy for colleagues to develop best practice and to support each other to participate in professional development (Pearce & Crilly, 2009). In educational organisations coaching is being used as a learning based relationship usually employed in order to develop a person’s skills in a particular area. As part of this relationship “the coachee, which is the name given to the person being coached, focuses on evidence relating to their practice and explores an issue raised by the evidence” (Megginson & Clutterbuck, 1995, p. 13). Coaching is typically provided in a structured format which is part of an organisation’s professional development, appraisal or induction programme. In these contexts coaching takes on a consultant approach which is task orientated and structured (Carey et al., 2011). Coaching is a professional development activity in which one person supports another to develop their teaching practice; coaching differentiates itself from mentoring in that it relies primarily upon non directive questioning (Bruce & Ross, 2008). Coaching is “a special, sometimes reciprocal relationship between (at least) two people, who work together to set professional goals” (Robertson, 2004,
“Coaching usually relates to a particular issue that needs to be addressed. Often relating to a key objective or development area. It is often delivered over a specified period of time with the aim of helping the person being coached to reach solutions themselves” (Reardon, 2008, p.1). In summary, although there does not exist a definitive definition of either coaching or teacher coaching, it can be seen from the literature above that there does exist commonalities between the various definitions which have been created, these include: coaching is an activity based on a relationship established between a coach and a person or persons being coached; coaching is carried out to develop those being coached; coaching is a structured and explicit activity that makes use of regular meetings and observations of practice; coaching involves the setting of goals and the use of evidence to establish development towards these goals; and coaching is a process that seeks to support the person being coached to reflect in order to discover their own solutions. Furthermore, teacher coaching incorporates all of the above statements, but also specifically focuses on developing teachers in order to improve student outcomes and therefore by its nature will be likely to set goals and use evidence relating to the students in a teacher’s care. Although, these common features do exist amongst the coaching definitions presented above, these multitude of definitions also highlight that coaching can be defined in many different ways, is used in many different contexts and is offered as the solution to a variety of different educational issues. Therefore, one of the foci of this study is to consider if these different coaching definitions influence or affect the practice of those who are implementing teacher coaching programmes in New Zealand secondary schools.

3.8 The Practice of teacher coaching

The teacher coach literature presents for the reader the roles, approaches, principles and strategies upon which ‘successful’ coaching partnerships are based (Antsey & Clark, 2010; Bearwald, 2011; Bruce & Wellman, 2007; Cordingley, 2005; Deussen, Coskie, Robinson & Autio, 2007; Fullan & Knight, 2011; Hartnett-Edwards, 2011; Knight, 2011; L’Allier, Elish-Piper & Bean 2010; Tung, Ouimette & Feldman, 2004; Zwart, Wubbles, Bolhuise & Burgen, 2008). All of these studies were completed in either the United States of America or the United Kingdom and their approach is one that could be described as general commentary, in that these researchers have reviewed both their own and the studies of others in order to offer shared themes or
guidance about teacher coaching. The general commentaries can be divided into two categories. The first of these categories are those that are based on broad reviews of the available literature, in which the researchers have investigated a number of studies and identified key elements of teacher coaching that they perceive as being relevant and necessary (Bearwald, 2011; Bruce & Wellman, 2007; Cordingley, 2005; Fullan & Knight, 2011; Hartnett & Edwards, 2011; Knight, 2011; L’Allier et al., 2010; Tung et al., 2004). The second of these categories involve the researchers being focused on one specific coaching programme in a particular cluster of schools and then reporting what was found to be important for the teacher coaches operating within these programmes (Antsey & Clark, 2010; Deussen et al., 2007; Zwart et al., 2008). This section of the literature review will explore the current literature to understand what findings have already been presented in relation to the topic of teacher coaching practice and how these findings relate to the New Zealand context and the five research questions of this study.

3.8.1 Approaches to teacher coaching

Within the literature which explores and defines approaches to teacher coaching there are a number of different terms and precepts that are espoused in order to explain how teacher coaching may be approached within an educational organisation. The approaches described are inextricably linked with the intentions of different coaching programmes and the role that the teacher coaches are performing within an educational organisation. Broadly the approaches to teacher coaching can be divided into three categories: coaching by paid ‘external coaches’ who are facilitators brought into a school; coaching by ‘expert’ teachers selected from the current staff and given a paid role; and unpaid ‘peer’ coaching of teachers by their colleagues in a reciprocal partnership (Ackland, 1991; Antsey & Clark, 2010; Murray et al., 2009).

The work of Fullan and Knight (2011) and Tung et al. (2004) both explore the work of full-time coaches who are employed from outside of a school in order to come into an organisation and coach the teachers. Tung et al. (2004) describe the work of external teacher coaches of this kind who work for The Centre for Collaborative Education in 80 schools throughout the USA. Upon reading the work of Tung et al. (2004) it is clear that this external approach to coaching connects the work of the coach more directly to reform mandated at a state level. They report that one of the challenges
that coaches using this approach find is the tension between forming relationships with staff and implementing their reform agenda:

In CCE there are two ends to the spectrum of coaching: 1) building a professional collaborative culture before pushing the aspects of reform; and 2) pushing all aspects of the theory of action and model principles simultaneously. (Tung et al., 2004, p. 20)

In contrast, Hawk and Hill (2003), in one of the few pieces of New Zealand literature that explores teacher coaching, document an ‘expert’ approach to teacher coaching in which teachers were selected to be coaches. Each school involved in what was termed the AIMHI coaching project developed their own approach and processes to setting up teacher coaches within their schools, all nine drew on current experienced staff, whom they trained in order to carry out the teacher coach role. Hawk and Hill (2003) present a list of decisions which are relevant to any educational organisation that may be considering the use of expert coaches drawn from the staff at their school, these include: “How many coaches? How coaches would be selected? How the release for teachers and coaches would be managed?” (p.4). The paper suggests that the intention of all nine coaching programmes was to help teachers improve their classroom practice and therefore improve student learning and achievement. It is not explicitly shared how these objectives were measured, although later in the paper it does suggest “clearly the coaching programme has delivered already on these outcomes” (Hawk & Hill, 2003, p.3). In this way, Hawk and Hill’s paper acts more as a reflective mirror in order to aid others to consider their own approaches to coaching, rather than evidence of empirical research. However, one of the strengths of their research is that they present some of the issues faced by the nine schools in relation to using expert teacher coaches drawn from the current staff. These challenges included: limited resources available reducing the possible number of coaches, having only one coach who then resigned, coaches operating on their own felt isolated, teachers found it difficult to front issues with their colleagues and coaches felt responsible if colleagues resigned when they felt pressured to change (Hawk & Hill, 2003).

Peer coaching would be the approach to coaching which is most commonly described and investigated within the teacher coach literature. Since the early 1980s Bruce
Joyce and Beverly Showers (1980, 1981, 1982, 2002) have explored the approach of colleagues within schools working together as part of their professional development. The process may involve regular observation of lessons, reflective conversations, feedback and assistance (Valencia & Killion, 1988). Contrary to the expert coach approach described previously, the concept of peer coaching is one which is founded upon collegiality and small groups of staff working together to study teaching (Showers & Joyce, 1996).

From the initial work which Joyce and Showers published in the early 1980s they promoted a peer approach to teacher coaching that focused on an equal learning relationship being experienced by the coach and the teacher being coached. In most cases reciprocal partnerships are described in which small groups of teachers are encouraged to take turns coaching each other (Joyce & Showers, 1982). Throughout their work they have emphasised how peer coaching needs to avoid being hierarchical or involve evaluation of teachers’ practice, instead focusing on evidence based reflection that has students’ work at the core of the conversation (Showers & Joyce, 1996). However, by focusing on the need for collegiality this creates challenges for peer coaches who struggle to give feedback to colleagues, find it hard to measure the effectiveness of the coaching and need to find the time to carry out their coaching role amongst the many other responsibilities that teachers must maintain (Hawk & Hill, 2003; Sumner, 2011).

As peer coaching has developed throughout the 30 years since Joyce and Showers began their research it has been divided into a number of different sub-categories based on the strategies that are used within the process or the focus of the coaching partnerships. Wong and Nicotera (2003) list the variations to include: technical coaching; team coaching; collegial coaching; cognitive coaching; and challenge coaching. They see the divide between the sub-groups as one focused primarily on the outcomes of a coaching programme or partnership. With technical and team coaching aiming to incorporate new techniques into a teachers’ repertoire; collegial and cognitive coaching seeking to develop collegiality; and challenge coaching focusing on the identification and solving of problems (Wong & Nicotera, 2003). Similarly, Antsey and Clark (2010) present their own review of the peer coaching literature which suggests peer coaching can be subdivided into a different six
categories that are focused on a range of coaching outcomes and strategies, these are: change coaching; coaching focused on attitude; coaching focused on cognition; coaching focused on inquiry; coaching focused on leadership development and coaching focused on culture. In both the work of Wong and Nicotera (2003) and that of Antsey and Clark (2010) there is little to assist the reader to identify the strengths and weaknesses of each of these general groupings and little in the way of research to support these classifications.

It is clear from comparing the work of Tung et al. (2004), Hawk and Hill (2003) and Showers and Joyce (1996) that these 'external', ‘expert' and ‘peer' approaches to teacher coaching are different and come with their own unique consequences. In the school based activities described in Hawk and Hill’s (2003) work we see issues presented, such as the teacher coaches being embarrassed to confront teachers, difficulties managing coaching activities around other commitments and being a single coach described as an isolating experience. Whereas the external coaches described by Tung et al. (2004) raise concerns regarding the development of trusting relationships with teachers that they have not met before and the cost of employing external facilitators. These contrasting challenges show how the approach used within a teacher coach programme can have a significant effect on how the coaches' role is played out.

The literature that investigates the three different approaches of external, expert and peer coaching provides ample description, but few conclusions. One issue that faces researchers of teacher coaching is that coaching programmes can look very different from programme to programme and even school to school. With each coaching programme differing in philosophical base, practice and methodology, this creates challenges when attempting to pinpoint how coaches effect teacher practice and student achievement (Sumner, 2011). It is evident from the studies presented in the section above that the coaching approach chosen by a government, organisation or school will influence significantly how teacher coaches operate. The work of the external coaches in the USA described by Tung et al. (2004), places coaches firmly within a world that sees coaching as a reform strategy which is used by governments to implement policy decisions. In contrast, the peer coaching approach developed by Joyce and Showers (1982) presents a professional development strategy which
supports teachers to work in a collegial culture of high trust that allows them to inquire into, reflect upon and to develop their own practice using evidence which they have collected.

One critique of the studies which explore the different approaches towards teacher coaching is that there is little in the literature which endeavours to investigate the key differences or similarities between the approaches and if these differences have an impact on the outcomes of the coaching programmes (Sumner, 2011)? It is therefore an intention of this study to explore these omissions highlighted above in the current literature and to investigate within the New Zealand context which are the different teacher coaching approaches being used in secondary schools, why were they chosen and if these choices have had a perceived impact?

3.8.2 The role of the teacher coach

A theme which can be identified in the literature that explores the underlying principles of teacher coaching is the role of the coach. Both the work of Fullan and Knight (2011) and Tung et al. (2004) identify the complex position that teacher coaches hold within schools. Tung et al. (2004) place the multi-faceted role of the coach at the centre of their research by asking “How do coaches balance pushing the reform agenda and meeting the immediate needs of schools staff?” (p.3). This statement highlights one of the challenges that schools and their coaches face and it also raises a question of where teacher coaches find themselves operating within the socio-political culture of their own coaching programme and also within their own school. Tung et al. (2004) introduce their journal article by stating:

For much of the past decade, the federal government has supported comprehensive school reform as a way to improve under-performing schools (US Department of Education, 1998). As a result, thousands of schools across the country are implementing scores of different whole school reform models with the hope of improving school culture and raising student performance. Many of these models use external facilitators, or coaches, to guide school change. (p.1)

Clearly, they place the role of teacher coaches at the centre of not only individual school reform, but also within the wider context of government driven country-wide educational reform. Tung et al. (2004) appear happy to accept that teacher coaching
is a reform strategy which is being used in order to improve school culture and raise student performance. Like many of the research studies that will be explored in this literature review these assumptions are based upon the perception of the researchers and leave the reader to inquire as to who is driving these reforms, the nature of what an improved school culture might involve and what areas of students’ performance will be focused upon and raised?

Despite the work of Tung et al. (2004) and Fullan and Knight (2011) ignoring the wider socio-political questions regarding the role of teacher coaches within schools, they do both focus on teacher coaching at the macro level in schools or individual coaching programmes. Both of these studies highlight the multiple roles which coaches fulfil, including facilitator, guide, teacher of teachers, reflective mirror, professional development team leader, counsellor, and reflective friend (Fullan & Knight, 2011; Tung et al., 2004). As was highlighted in an earlier section of this review, the need for coaches to enact multiple roles within an organisation can also lead to challenges created by a lack of time and also by staff feeling unable to confront their colleagues as part of the coaching process (Hawk & Hill, 2003). From the variety of roles described in this list it is clear that there is no one size fits all model of teacher coach and that even within one coaching programme different coaches may play multiple roles. Individual teacher coaches need to adapt who they are and what they are doing depending upon who they are working with, the needs and goals of individual teachers, and the function of the activity they are involved with at any particular time.

The findings of Tung et al. (2004) and Fullan and Knight (2011) are also supported by the work of Deussen et al. (2007) who explore the role of literacy coaches within an American teacher coaching programme called ‘Reading First’. The Reading First programme aims to professionally develop teachers in order to support them to “become more thoughtful and more effective in their instruction” (Deussen et al., 2007, p.i). In their report, Deussen et al. (2007) explain how teacher coaches working in five American states spent their time. Deussen et al. (2007) present teacher coaching as an intervention strategy which has been adopted enthusiastically throughout American schools in recent years, they state “that so tantalizing is the promise of coaching that in recent years states, districts, and school across the nation, eager for a means to strengthen instruction and student learning, have rushed to implement literacy
coaching” (p.i). Similar to Tung et al. (2004), Deussen et al. (2007) present teacher coach programmes as initiatives that are focused on reform which is government funded and driven by policy at a state or national level. Deussen et al. (2007) also agree that teacher coaching has at its end point the need for teachers to somehow change their practice in order to have an effect on student achievement. Their report shows that although teacher coaches within the same programme hold the same job, that individual coaches define the role differently and carry out their work in many different ways. These differences occur for a variety of reasons including the leadership of the organisation, leadership of the programme, training provided, the context of the programme and the approach used by an individual coach (Deussen et al., 2007). Moving between these different roles is a challenging endeavour for individual coaches, particularly as for most teacher coaches this will be only one position that they hold within a school. Deussen et al. (2007) report that the teacher coaches operating in the Reading First coaching programme spent 28 percent of their total working hours coaching teachers as they were also likely to be a classroom teacher, sports team manager and possibly hold some other position of responsibility within their school.

It is clear from the research that is focused on the role of the teacher coach that coaches operate uniquely within different schools and also within the same professional development programmes. It is therefore the intention in Phase 2 of this study, to gather evidence from a range of different teacher coaches in the New Zealand secondary system in order to provide findings relating to participants’ perceptions about different coaching approaches and roles.

3.8.3 The principles underlying teacher coaching
The literature that explores the principles of teacher coaching draws its findings from observations and interviews carried out within coaching programmes that have operated in both the American and British education systems. Some of the research is focused on individual programmes such as Antsey and Clark (2010) investigating teacher coaches operating within a Mathematics professional development programme. In contrast, other literature that explores the principles of teacher coaching is written by researchers such as Knight (2011) who has summarised the seven key principles that he believes good coaches have. Knight (2011) lists these
principles as: equality, choice, dialogue, voice, reflection, reciprocity and praxis. Similarly, Cordingley (2005) writes about the ten principles and activities of effective coaching that are shared in the *National Framework for Mentoring and Coaching* which was produced collaboratively in the United Kingdom. These ten principles and activities are presented as:

- a learning conversation;
- a thoughtful relationship;
- a learning agreement;
- combining support from colleagues and specialists;
- growing self direction;
- setting challenging and personal goals;
- understanding why different approaches work;
- acknowledging the benefits to mentors and coaches;
- experimenting and observation; and,
- using resources effectively. (Cordingley, 2005, p.70)

None of the literature that purports to present the principles of teacher coaching explores the socio-political culture in which the coaching programmes they draw upon operate. Neither do the articles explicitly state the purpose of the coaching programmes investigated, nor how and why they were funded (Antsey & Clark, 2010; Bearwald, 2011; Bruce & Wellman, 2007; Cordingley, 2005; Deussen et al., 2007; Fullan & Knight, 2011; Hartnett-Edwards, 2011; Knight, 2011; L’Allier et al., 2010; Tung et al., 2004; Zwart et al., 2008). However, all the literature in this area does suggest that at the core of the relationship between a teacher coach and a teacher is the focus of change in either what a teacher believes, how they act within the classroom, the activities that they use to teach, or a blend of all three of these change foci. Consequently, teacher coaching is identified and described as a ‘change agent’ be it at an individual, school, state or national level. It is less clear from these studies why or how particular foci of change were identified and who is driving the need for these changes (Antsey & Clark, 2010; Bearwald, 2011; Bruce & Wellman, 2007; Cordingley, 2005; Deussen et al., 2007; Fullan & Knight, 2011; Hartnett-Edwards, 2011; Knight, 2011; L’Allier et al., 2010; Tung et al., 2004; Zwart et al., 2008).
Another shared concept which is presented in the literature that explores the principles of teacher coaching is the idea that coaches should spend the majority of their time face to face coaching other teachers. Fullan and Knight (2011) are critical of their own research finding that showed in a state-sponsored coaching workshop, of the 50 coaches in attendance more than 75 percent reported that they had spent less than 25 percent of their time in school on coaching. This precept is supported by L’Allier et al. (2010) who also see “time working with the teacher” (p.554) as one of the seven guiding principles for literacy coaches. It would appear sound advice to suggest that if coaches want to support teachers to change their practice then they must spend their time working face to face with teachers. However, these studies are less clear about what instructional improvement looks like. Fullan and Knight (2011) suggest that time spent with the teacher is focused “relentlessly on instructional improvement” (p.51), a foci that appears more directive than the research of L’Allier et al. (2010) who suggest that coaches need to focus on activities which support teachers to enhance their instruction and students to improve their learning. However, neither the work of Fullan and Knight (2011) nor L’Allier et al. (2010) offer clear definitions or measures of success and instead rely on broad descriptions of best practice as perceived by the writers.

Another theme that is shared within the literature which explore the principles underlying teacher coaching is the idea of setting challenging and personal goals (Bearwald, 2011; Cordingley, 2005; Knight, 2011; L’Allier et al., 2010). It is important that these goals are collaboratively created with the teacher and not imposed on them by the coaches’ preconceived ideas (Knight, 2011). It is also emphasised that the goals which teachers set need to be based on evidence such as observation notes and arise from the work that teachers are doing with their current students and the immediate school culture (Bearwald, 2011).

A final theme that is evident in the literature which explores the principles at the core of teacher coaching programmes is the concept of positive relationships which promote safety and respect (Antsey & Clark, 2010; Bearwald, 2011; Bruce & Wellman, 2007; Cordingley, 2005; Knight, 2011; L’Allier et al., 2010). Knight (2011) simply summarises these ideas by stating teacher coaching activities need to be grounded in the philosophy “partnership for success - the partnership approach builds on an old
idea - that we should treat others the way that we would like to be treated” (p.22). However, there is little in Knight’s (2011) work to define what is actually meant by a partnership and how this might be achieved in schools which are traditionally structured using line managers and hierarchies of power. Nevertheless, the concept of partnership is also supported by L’Allier et al. (2010) and Cordingley (2005) who write about collaborative and thoughtful relationships being essential for teacher coaching to be effective. This kind of collaborative relationship is written about by Bruce and Wellman (2007) and Antsey and Clark (2010), who both describe peer coaches working one on one with teachers who have self-selected why they are to be coached. In contrast to the concept of teacher coaching as a peer partnership, the work of Tung et al. (2004) presents the challenges faced by teacher coaches who are not part of the staff of the school in which they coach. They describe facilitators working as teacher coaches at an administration level as system leaders within schools and describe them collaborating with the senior management team in order to create development plans. Tung et al. (2004) allude to the challenge for coaches in this position to develop positive relationships that promote safety and respect, when they state that coaches need to “find ways to get inside the school culture while remaining somewhat independent of it” (p.1). Consequently, the work of Tung et al. (2004) presents the complexity of teacher coaching and how different approaches or structures of teacher coaching programmes may influence the relationships that are established amongst the participants.

Overall, the literature presented above share similar foci, in that the researchers aim to draw out some of the fundamental principles that underpin coaching partnerships. Much of their findings are presented as ‘how to’ guidebooks about coaching, with titles such as “What good coaches do” (Knight, 2011) and “How to talk to make teachers listen” (Bruce & Wellman, 2007). Although, as has been pointed out above, several of the findings do highlight shared themes, it is also evident that the teacher coaching principles presented are drawn from a myriad of different contexts and programmes within individual schools, states and countries. Therefore, these findings are not necessarily as transferable to other coaches as maybe the titles of these articles and books suggest. For example, are the principles which underpin a coaching partnership within a programme aiming to raise the reading score of primary students in America, the same principles as those required to guide a coach working in an urban British
secondary school (Cordingley, 2005)? The answer to this question is unclear in the literature, which leaves school leaders with the challenge of how to make these decisions when establishing teacher coaching programmes in their schools. Therefore, In Phase 2 of this study the researcher aims to address this area of the literature by interviewing five different teacher coaches and investigating if they have guiding principles and if any of the guiding principles that they have established are common amongst the participants.

### 3.8.4 Strategies used by teacher coaches

Previous sections of this literature review have presented the relationship between coaching approaches, roles and principles within educational organisations. However, once a professional development programme has been established, the coaches identified and the principles and coaching approach agreed upon, what actually is it that the teacher coaches do? Furthermore, who in a school is allowed to make these important decisions?

The literature that explores how coaches spend their time includes descriptive case studies which report in detail upon the lives of a sample of coaches and coachees (DiMeglio & Mangin, 2010; Peterson, Taylor, Burnham & Shock, 2009) and studies that have used questionnaires in order to elicit which strategies are most commonly used by coaches in educational settings (Wise & Hammack, 2011). Within the findings of the research relating to strategies used by teacher coaches there are a number of shared strategies that are presented as those perceived by teacher coaches to be effective, these include: modelling of a particular activity; observation of teaching; collection and analysis of data; the holding of coaching conversations that use reflective questioning and active listening skills; planning alongside other teachers and the setting of goals (Deussen et al., 2007; DiMeglio & Mangin, 2010; Joyce & Showers, 2002; Knight, 2011; Peterson et al., 2009; Stover, Kissel, Haag & Shoniker, 2011; Wise & Hammack, 2011).

Effective teacher coaching is cyclical and involves some kind of observation or collection of evidence, reflection and goal setting (Joyce & Showers, 2002). It also requires a differentiated approach in which the facilitator or coach adapt their activities in order to accommodate the needs of the teacher (Bruce & Wellman, 2007). Similar
to students’ individual needs, teachers have a complex array of different knowledge, experience, emotions and goals that can be supported through teacher coaching (Bruce & Wellman, 2007; Stover, Kissel, Haag & Shoniker, 2011).

The role evidence plays within conversations between a teacher coach and a teacher is something that is emphasised within the literature, Bruce and Wellman (2007) state that:

Skilful facilitation of learning-focused conversations involves the thoughtful analysis of multiple sources of data...These data emerge from the process and products of student learning and include such items such as student work samples, assessment results, classroom observations, lesson plans and classroom artefacts. (p.31)

Further suggested sources of evidence that may be gathered as part of a teacher coaching partnership include; the use of student feedback, a learning journal maintained by the teacher, or video recordings of lessons (Stover et al., 2011). Teachers and their coaches use evidence of this nature to focus their attention upon crucial elements of their teaching in order to form the basis of a reflective conversation in which the coach uses questioning in order to elicit changes in practice by the teacher (Peterson, Taylor, Burnham & Schock, 2009). Like all of the strategies that will be presented in this section, there is little in the research to establish which forms of evidence are regarded as more beneficial to coachees, neither does there appear to be any literature that establishes if one form of evidence will better support the achievement of a particular coaching goal.

In relation to common strategies used within coaching conversations, two further strategies presented by the literature are physical actions used by coaches and their language. In some examples the actions and language of the coach are guided by a named coaching system such as ‘growth coaching’, however in other research it is not clear how coaches have come to use a certain approach or set of tools. Wise and Hammack (2011) and Bruce and Wellman (2007) present a number of physical actions carried out by coaches which they share as best practice, these include: focusing on a conversation fully, listening attentively, leaning towards the teacher, making eye contact and using non-verbal acknowledgements. These actions are presented as those that will create a safe, trusting and non-threatening working relationship which
links back to one of the key principles of coaching highlighted in this literature review above. Although, it should be noted that Wise and Hammack’s (2011) suggestions are limited specifically to physical actions of the coach and do not consider wider physical factors such as environment, timing and location of meetings. In terms of the language that coaches use, within the literature there are suggestions about the way that teacher coaches should talk within coaching conversations. It is suggested that effective coaches should focus on reflection in order to guide a teacher towards their own conclusions, rather than the giving of advice (Bruce & Wellman, 2007; Knight, 2011). The tools that coaches might employ to create this kind of coaching conversation may include: paraphrasing, the summarising of key points and the asking of open ended questions which help clarify a teachers’ thinking (Wise & Hammack, 2011). It was seen previously in this literature review, that the focus of coaching upon reflective questioning, in the minds of some researchers is what creates the difference between coaching and mentoring (Reardon, 2008).

A dichotomy in the literature exists around the coaching strategy of giving feedback. In Joyce and Showers’ early work in the 1980s there has been the suggestion that at some point a teacher coach will offer a teacher some sort of feedback, which suggests a more directive approach to coaching than the reflective questioning style discussed above. Often the style of feedback has been likened to that of a sports coach offering guidance to a team member (Cornett & Knight, 2009; Joyce & Showers, 1982). Joyce and Showers (1982) paper ‘The Coaching of Teaching’ included an interview with an American football coach Rich Brooks, as a method of using sports coaching to model the feedback strategies expected of teacher coaches. More recently Knight (2011) uses the metaphor of “a coach who gives an athlete feedback on how to hit the ball or jump a hurdle” (p.22) as a way of describing the approach teacher coaches should use when imparting feedback.

As Joyce and Showers’ (2002) work has developed and they have become focused on the collaborative nature of peer coaching they now suggest that feedback can be omitted from the coaching process and replaced with facilitated teacher reflection, using the actions and language of a coaching conversation described above in the work of Bruce and Wellman (2007) and Knight (2011). It is not clear in the literature of Joyce and Showers (2002) what, if any, evidence has led to their change in thinking.
regarding the giving of feedback in coaching conversations. However, this shift is not evident throughout the literature and there are still writers such as Fletcher and Mullen (2010) and Nolan (2008) who see a place in coaching conversations for a more directive approach that involves the giving of feedback. Subsequently, those that are establishing coaching programmes are presented with a complex range of literature that raises more questions than it answers. Is coaching the same as mentoring? Should coaches be providing any sort of feedback? Is feedback necessary to support teachers to change their practice or are reflective questions a more effective approach?

The strategy of goal setting is another theme that is prevalent in the literature which explores the tools and strategies that teacher coaches use in their daily practice (Fullan & Knight, 2011; Knight, 2011; Wise & Hammack, 2011). Wise and Hammack (2011) report that best practice for coaches who are developing teachers’ learning and performance should involve the coach helping teachers to: identify their goals; prioritise their goals; and set up a monitoring system to evaluate their goals. Similarly, Knight (2011) suggests that ineffective coaches “arrive in classrooms with a predetermined collection of strategies and see it as their job to convince the teacher to use them” (p.21). Whereas the actions of good coaches involve them working collaboratively with the teacher and the collected evidence in order to identify and prioritise the teacher’s goals (Knight, 2011). In this way, Knight (2011) highlights how the setting of goals can be influenced by the coach and the context of the coaching programme. Subsequently, this suggests that the socio-political context, the choice of coaching approach, the choice of coach and the characteristics of the coachee may influence if a coachee’s goals are created by them, co-constructed with their coach or directed by the school leadership team.

3.8.5 Teacher coach training and supervision

A final area that is relevant to a teacher coaches’ everyday practice is the topic of teacher coach training and supervision. This section of the literature review explores the research relating to the training of coaches, in order to consider what the current research concludes regarding the training of teacher coaches and how this might impact their effectiveness. Hobson, Ashby, Malderez and Tomlinson (2009) argue that coaching and mentoring courses which ensure participant’s development should be a
priority for school leaders. The Conceptual Framework Chapter of this study showed there are a number of practical training courses available to educators who wish to train to be coaches or mentors, although the literature regarding the training of teacher coaches is very limited (Aspfors & Fransson, 2015; Fransson, 2016). An extensive number of books and articles do exist in relation to the general training of coaches or mentors but they are not focused on any particular field or discipline. Within these articles and books there is some differentiation made between the concepts of initial coach training and continuing training or supervision. The overall focus of these publications are ‘how to’ guides based on opinions and practitioner experiences, rather than any kind of research. In terms of individual disciplines whose skills could be related to coaching, the field of psychology does have a more extensive literature base regarding mentor training (Accreditation Council for Graduate Medical Education, 1997; Jetse, Twamley, Cardenas, Lebowitz & Reynolds, 2009; McDaniel & Campbell, 1997; McDaniel, Belar, Schroeder, Hargrove & Freeman, 2002; Zilberg & Carmody, 1995).

Showers (1985) describes the process of training teachers to be peer coaches, they state that in an initial phase, “we instruct all teachers in the use of Clinical Assessment Forms and model how to give feedback in the training sessions…trainers monitor the teaching and feedback process during peer teaching and provide additional demonstrations”. As a peer coaching programme develops Showers (1985) suggests a second phase of training for the coaches that:

- Occurs during follow-up sessions, usually three to six weeks after introduction of a new teaching strategy. Teachers reassemble as a large group to discuss progress in their mastery of the moves of a model and any problems they are experiencing. (p.17)

Showers (1985) suggestions regarding the training of teacher coaches is specific to groups of staff who are attempting to develop a peer coaching model, it is not clear how Showers developed these training strategies and if there is any evidence to support these decisions.

Fransson (2016) presents some of the challenges of existing programmes that train mentors who work with newly qualified teachers. He suggests that not all mentors receive training and that existing courses vary in length and content, with some
focusing on teaching standards and organisational procedures rather than the complexities of learning and the mentoring process. In his own research Fransson (2016) describes the use of an online platform for delivering mentor training, which provided perceived benefits in terms of the possibility to watch the content again, however denied interpersonal access between participants or the opportunity to role play mentoring situations. In contrast to an online training format, Cushion, Armour and Jones (2003) argue that a coaches’ experience is the factor that has the greatest influence upon their effectiveness as a coach. Consequently, they suggest that coaches training needs to “situate the trainees’ learning in the practical experience of coaching in an appropriate supportive context” (p.225). Therefore, Cushion et al. (2003) suggests that teacher coach training programmes should include supervised field experiences in a range of different contexts, in order to provide “coaches with multiple opportunities to test and refine knowledge and skills, make coaching judgements that are meaningful within their particular situation, and understand the pragmatic constraints of coaching contexts” (p.226).

Outside of the discipline of teacher coaching in the field of medicine, that is a discipline further developed than coaching in terms of volume and depth of research, the literature presents a number of studies that explore the initial and continuing training of health professionals such as psychologists (Accreditation Council of Graduate Medical Education, 1997; Jetse et al., 2009; Mc Daniel & Campbell, 1997; McDaniel et al., 2002; Zilberg & Carmody, 1995). It is clear from this research that the initial training to become a psychologist is both rigorous, entails many years of study, has both an educational and practical element and also requires the student to gain a formal qualification. In contrast, a person who wishes to become a coach within education, or other fields of coaching such as business or life coaching, can be self-appointed without any training or qualifications. Furthermore, the literature regarding the continuing training of psychologists also offers some insight into how mentors in the field of medicine should be trained, Jetse et al. (2009) state “mentors can benefit from specific mentorship training, both in general and program-specific activities. Self-study resources on mentoring, such as Adviser, Teacher, Role Model: On being a Mentor to Students in Science and Engineering may be provided to Mentors” (p.31). Jetse et al. (2009) also suggest that “educational seminars with presentations devoted
to mentoring can be helpful, as can discussions of articles on mentoring and mentor training sessions with peers” (p.31).

The literature also presents studies and publications regarding coaching supervision. Coach supervision is a form of ongoing support and development for those operating as coaches in a multitude of different fields such as business, education, social work and medicine (Grant, 2012; Salter, 2008). Salter (2008) promotes the need for supervision of coaches, although she clarifies that this relationship should be supportive and not managerial and focused on the development of a coaches’ skills through the use of reflective conversations. Grant (2012) examined 174 Australian coaches’ views on their supervision. In Grant’s (2012) study he found that 82.7% were receiving some form of supervision, of which 70% were positive about their supervision experiences. 30% of respondents were not happy with their supervision due to the lack of skill possessed by their supervisor. Grant (2012) concludes that, “coach supervision was seen as a complex skill set that has significant value in terms of delivering an opportunity for reflective practice, the development of insights and new perspectives, and assuring the delivery of good quality coaching” (p.17). Furthermore, Grant’s (2012) research also offers a number of suggestions and recommendations for teaching, training and coaching practice. These included: a need for specific training and possibly certification in coaching supervision; to ensure that organisations endeavour to make their coach supervision of a high standard; and raising awareness that it is important to recognise there are a wide range of approaches to coach supervision and training.

Overall, the literature regarding initial teacher coach training and ongoing training or supervision is limited. The research that does exist draws on practitioners’ experiences and feedback on their training. Research could not be found completed in the New Zealand context. The literature on coach training and supervision offers a number of suggestions that include: all coaches need to be trained; initial training should be certified; coaches should receive ongoing supervision; coach supervision should be developmental and might use reflection activities, supervised field experiences, and online resources; and coach training needs to be differentiated and designed with an individual coach in mind.
3.8.6 The practice of teacher coaching conclusion

The literature explored above provides some insight into the tools, strategies and training used by teacher coaches. Together, they present a broad descriptive picture of the range of ways that teacher coaches spend their time. A strength of these papers is that they allow others to understand the strategies that teacher coaches use and perceive to be the most effective. These papers also allow others to understand what might be expected from working as or with a teacher coach. However, this area of the teacher coaching research lacks rigorous means of investigation, “few findings rest on experimental methodologies; too many rely on self-reported data or measures that have not been adequately validated” (Cornett & Knight, 2009, p.202). Subsequently, the research lacks understanding of which of the different teacher coaching strategies, or combination of strategies, are most effective and how impact is altered depending upon the context in which they are being used. Therefore, in order to go some way to exploring in greater depth these complex issues that are currently omitted from the current research base, this investigation intends to focus on why are teacher coaches operating in a particular manner and using a particular set of coaching tools?

3.9 The impact and evaluation of teacher coaching

There does not appear to be any literature that suggests how specifically teacher coaching programmes should or could be evaluated. However, Guskey (2000, 2003) suggests it is important to evaluate the success or otherwise of professional development programmes, of which coaching is an example. Historically evaluations of professional development activities and programmes have focused only on teachers’ satisfaction regarding the activity or resource they have experienced (Desimone, 2009; Guskey, 2000; Guskey, 2003). More recently, literature concerning the evaluation of professional development activities suggests that evaluations need in some way to analyse the link between the professional development activity, the change this had made upon teachers’ practice and the impact upon students’ learning (Desimone, 2009; Guskey, 2000; Penuel et al., 2007).

In terms of how evaluation of professional development activities such as teacher coaching should take place, Guskey (2000) suggests that the process should focus on the five key areas of: participants’ reactions; participants’ learning; change caused
within the organisation; how the participants have applied what they have learnt; and what was the impact on their students.

Good evaluations are the product of thoughtful planning, the ability to ask good questions, and a basic understanding about how to find valid answers. In many ways they are simply the refinement of everyday thinking. Good evaluations provide information that is sound, meaningful, and sufficiently reliable to use in making thoughtful and responsible decisions about professional development processes and effects. (Guskey, 2000, p.1)

This depth of analysis presents a challenge for those gathering evidence related to teacher coaching, owing to the fact that teacher coaching can be implemented using a wide variety of characteristics, approaches, activities and desired outcomes. However, Guskey (2003) offers an equally wide range of possible evidence that may be collected in order to measure if a professional development activity, such as coaching, has improved students' learning and achievement. He states:

Evidence might include a variety of indicators of student achievement, such as assessment or test results, portfolio evaluations, marks or grades, or scores from standardized examinations. It might also include affective and behavioural indicators, such as students’ attitudes, study habits, homework completion rates or classroom behaviours. School wide indicators such as attendance rates, drop out statistics, reductions in discipline problems, enrolments in advanced classes, memberships in honour societies, and participation in school-related activities might be considered as well. (Guskey, 2003, p.15)

This list only refers to evidence that may provide evaluative judgements regarding analysis of student learning outcomes. If evaluation of professional development activities intend to consider other kinds of impact such as participants’ reaction and participants’ learning, then other types of evidence may also be considered. These could include: questionnaires; reflections; school records; interviews; participant portfolios; observations; and video or audio recordings (Guskey, 2003). Overall, finding some way to combine a number of these strategies into an evaluative strategy is vital if both teachers and school leaders are going to be able to judge if the time and resources they have invested into teacher coaching programmes has been worthwhile and has led to improved outcomes.
In terms of the literature relating to teacher coaching the area of impact is one that has increased in popularity in the last 12 years, as those funding teacher coach programmes have attempted to discover if they are experiencing any return on their investment of time, resources and money. At its most basic level the literature asks does coaching work? However, exploring this simple question exposes several layers of complexity, challenge and further questions.

An investigation of the teacher coaching impact literature presents four foci which are identified through the focus of the impact that is being measured, these are: the impact on teachers changing their practice (Garet, Cronen, Eaton, Kurki, Ludwig, Jones & Sztejnberg, 2008; Hendrickson, Gardner, Kaiser & Riley, 1993; Neuberger, 2012); the impact on teachers’ implementation of an identified strategy (Bruce & Ross, 2008; Goker, 2006; Onchwari & Keengwe 2008); the impact on teachers’ efficacy (Cantrell & Hughes, 2008; Edwards & Newton, 1995, Shidler, 2009) and the impact on students’ achievement (Bossi, 2008; Cusumano et al., 2006; Matsumera et al., 2010; Murray et al., 2009; Pruitt & Wallace, 2012). It is not clear why these four foci have dominated teacher coaching impact research, as it is clear from the wider coaching literature that these four foci are not the only possible objectives of coaching programmes. Evaluations of coaching programmes outside of education have explored other objectives such as return on investment, well-being of employees and profits. Nevertheless, the four foci do signal what is currently important to those that implement and research teacher coaching.

3.9.1 The impact of teacher coaching on teachers changing their practice
Within the literature that explores the impact of coaching on teachers adapting or changing their practice there are a range of studies which use different methodological approaches in order to investigate how the work of teacher coaches can support teachers. One of the earliest pieces of teacher coaching literature was carried out in 1987 by Sparks and Bruder. They attempted to describe the impact of a peer coaching programme in two schools which was set up by an externally appointed facilitator who was employed by the administration of the Michigan Public Schools. Sparks and Bruder (1987) focused on whether peer coaching encouraged teachers to experiment with new practices and if peer coaching enhanced their teaching effectiveness. Alongside these two foci were also two further objectives
that were to examine teachers’ reaction to peer coaching and the perceived benefits of the process. In order to research these objectives all teachers involved in peer coaching in the two schools completed a rating-scale questionnaire before and after the project and 36 teachers were interviewed by an external evaluator after the coaching project had taken place. It was not explained how this sample was selected. Sparks and Bruder (1987) reported that “before the project 52 percent of the teachers in two schools rated the advice they received regarding instruction as very helpful and after peer coaching, 75 percent did so” (p.54). Their findings from the questionnaires and interviews also suggested that teachers in both schools were comfortable with the peer coaching process and found that it improved their experimentation with practice and student learning in their classes.

Twenty-five years after the Sparks and Bruder (1987) study, researchers are still investigating the impact of teacher coaching on teachers’ practices using similar methods. Neuberger (2012) recently described the case study of a mathematics teacher working with a teacher coach, using the guiding question “whether the coaching intervention had affected the teacher’s classroom practices and, if so, in what way?” (p.290). Similar to Sparks and Bruder (1987), Neuberger (2012) used pre and post coaching interviews with the teacher involved in order to ascertain the perceived impact of the coaching that had taken place. Neuberger (2012) reported that the teacher who had experienced teacher coaching had not only changed her classroom practices, but the coaching process had also caused a change in her beliefs towards the students and her approach to teaching them. However, it was not stated, how, if at all, they had isolated the impact of the coaching in order to determine if this was the factor that made the difference amongst the many influences evident in a typical school.

The work of Sparks and Bruder (1987) and Neuberger (2012) provide some insight into the effect that one style of coaching can have on teachers and how from their own perspective it is an intervention that can support them to change their beliefs and practice. However, by the researchers’ own admission these studies never intended to be representative of a broader picture of teacher coaching and instead looked to describe the cases in hand rather than to provide generalisable results (Neuberger, 2012). These descriptive approaches do provide some understanding of teachers’
perception within these coaching programmes, however in doing so they raise many further questions about the nature of coaching and how it may be evaluated. Neither study attempts to unpack what was it that the coaches working with these teachers actually did. Within both studies the coaching process falls into a black box which leaves the reader questioning how did these coaches make the impact happen? Nor does either study attempt to explain why or how teacher coaching was identified as the factor to which the changes in teachers’ practice had been attributed. Furthermore, even though both of these studies are descriptive in approach they both fail to describe fully the contextual environment of the two coaching programmes and any difference between the participants. As was seen in early sections of this literature review, there is a distinct relationship between who funds and instigates a coaching programme, the approach chosen, the role of the coach, the tools used by the coach and the impact created. Yet, neither Sparks and Bruder (1987) nor Neuberger (2012) provide the reader with sufficient description in order to understand the contextual environment of the teacher coaching programmes that they investigate.

Sparks and Bruder (1987) and Neuberger (2012) are representative of teacher coaching literature that “contains numerous and compelling descriptions of the perceived, positive effects” (Gibson, 2005, p.63). Nevertheless, these positive findings have been tempered more recently by calls for the development of empirical and independent investigations that can move the research regarding the impact of this intervention from an abstract level to an experimental level (Colley, 2002; Gibson, 2005; Wang & Odell, 2002). Four groups of researchers have attempted to fill this perceived gap in the literature regarding a lack of experimental research regarding the impact of coaching on the ability of teachers to change their practice (Garet et al., 2008; Grant et al., 2010; Kohler, McCullough et al., 1997; Teemant et al., 2011). These four groups have all approached a similar objective in different ways.

Garet et al. (2008) produced a 236 page report into a substantial government funded professional development programme that used teacher coaching in 90 schools. Their study developed a theory of action that described the relationship between coaching used to implement a literacy initiative and student achievement. The study was designed in order to support teachers to develop their classroom teaching practice and ultimately to improve students’ reading scores (Garet et al., 2008). After one year, the
study showed that the use of coaching increased teacher’s understanding of the literacy strategies, however there was no evidence to suggest that this raised the reading scores of their students.

Kohler et al. (1997) used a multiple-baseline design to focus on four teachers in order to examine a set of instructional activities, which included: their organisation and presentation of a mini-lesson; a reciprocal learning strategy; and a follow-up closure activity. The four teachers were asked to implement these specified instructional activities during an initial baseline phase. These tasks were then repeated with a peer coach in the second phase and then alone again in a final maintenance phase. A multiple-baseline single-case design was used to analyse the effects of the peer coaching on the teachers’ practice (Kohler et al., 1997). The study found that teachers did not adopt any of the instructional activities in the initial phase when working alone, however in the second phase whilst working with a teacher coach, considerable change in teachers’ practiced was observed. These changes were sustained in observations made in phase three.

Grant et al. (2010) used a randomised controlled design together with a quasi-experimental (pre-post) approach in order to explore the impact of coaching with 40 teachers in the same Sydney school. Their study focused on the ability of teachers to change their practice in relation to goal attainment, communication, anxiety, stress and depression, which suggests a wide range of factors that coaching could possibly influence. In comparison to participants randomly assigned to a control group, those teachers that received ten coaching sessions over a twenty week period reported perceived changes in their ability to obtain goals, reduce stress and to communicate with others. It was not made clear how or if these factors could have been influenced by other variables, other than the coaching intervention, within the study period. Nevertheless, Grant et al. (2010) believed that this study indicated that teacher coaching “had utility within education settings" (p.162) as a professional development intervention.

Teemant et al. (2011) evaluated an instructional coaching model that was intended to support teachers to change their pedagogy and their organisation of the classroom. Data analysis occurred using pre and post measures of teachers' ability against a
predetermined measurement criteria presented as the standards for effective pedagogy. Teemant et al. (2011) reported that the findings of this study "confirms performance-based instructional coaching as an effective professional development strategy for eliciting teacher change" (p.684).

Rush and Young (2011) were employed by the state of Wyoming in order to evaluate the effectiveness of a state-wide coaching programme that had been implemented for two years in 48 school districts across the state. A survey was used to examine teachers' perceptions regarding what they had focused on with their teaching coach and the perceived impact that had been achieved. The results of this study showed that teacher coaching held "great promise for impacting teachers' perceptions about their practice" (Rush & Young, 2011, p.21). However, it should be noted these researchers had been employed by the very administrators who had employed the teacher coaches that were being studied, therefore presenting a possible bias in the results.

Each of these studies present teacher coaching as an intervention that can positively support teachers to change their practice or their beliefs in some way. However, the diversity of these findings, in terms of the different foci and results that each coaching programme explored provides the reader with little insight into coaching per se, but rather an understanding of the impact of each individual programme reported upon by each of the respective researchers.

Within the research that focuses on coaching to support change of practice, it is clear that each studied programme has different objectives and different funding streams, with some being state-wide projects and others being localised examples of coaching implemented in a small group of schools. It is also worthy of note that some of those who have funded the state-wide coaching programmes are from the same government organisation which has funded the research to be carried out into the programme; which may be considered a conflict of interest in terms of the results reported by these research. Furthermore, although each study does provide some basic information regarding the type of coaching that took place and the number of coaching sessions that teachers took part in, there is little information provided about what occurred in these coaching sessions or how the coaching skills were isolated
so that the researchers were able to conclude that it was the teacher coaching which was causing the changes identified and not some other factor. Therefore, although these studies purport to provide greater depth to the descriptive research that had been done previously they are still of little use to those investigating whether teacher coaching makes an impact and how this impact is created.

3.9.2 The impact of teacher coaching on teachers’ efficacy

In the literature teacher coaching is linked with increased teacher efficacy (Bruce & Ross, 2008; Cantrell & Hughes, 2008; Edwards & Newton, 1995; Goker, 2006; Ross, 1992; Shidler, 2009; Tschannen-Moran & McMaster, 2009). This small body of research suggests that coaching appears to provide positive support for teachers as they develop their pedagogy or master new techniques (Cantrell & Hughes, 2008). In all cases the literature in this area investigates changes in teachers’ efficacy alongside at least one other factor. Both Ross (1992) and Shidler (2009) explore the relationship between increases in teacher efficacy and increases in student achievement or outcomes; Goker (2006) looks at improvement in efficacy and instructional skills in TEFL teacher education; Bruce and Ross (2008) examine teacher efficacy and effective mathematics strategies; and Cantrell and Hughes (2008) explore the link between teacher efficacy and the implementation of literacy strategies. All of the studies listed above share the same data collection method of pre and post coaching teacher questionnaires. In terms of study design, self-reporting questionnaires used to gather data on efficacy is a natural choice as efficacy is based on a teachers’ self-perception and feelings of confidence. However, there was no discussion in the studies of how the questionnaires were created or validated, nor why questionnaires were chosen over interviews or focus groups.

In contrast to the studies reviewed in the previous section, the literature that explores self-efficacy does not make use of control groups, but instead relies on base-line data as a starting point from which to measure changes in teachers’ efficacy. The literature that investigates the effect of coaching on teachers’ efficacy reports a positive correlation between implementation of teacher coaching and improvements in teacher’s efficacy in relation to the use of an identified pedagogical strategy (Bruce & Ross, 2008; Cantrell & Hughes, 2008; Edwards & Newton, 1995; Goker, 2006; Ross, 1992; Shidler, 2009; Tschannen-Moran & McMaster, 2009). Unfortunately,
the coding or statistical analysis used within these studies in order to unpack the
various questionnaires used to measure increases in teachers' efficacy are different,
as were the coaching approaches and programmes being examined. This negates
the reader from making comparisons between the different efficacy coaching
approaches. For example, is an externally employed teacher coach as described in
the work of Ross (1992), more or less effective at developing teachers' efficacy than
a peer coaching programme reported in the likes of studies by Bruce and Ross
(2008) or Goker (2006)? Furthermore, what influence does context have on how
efficacy develops and to what extent? Do the coaches working in a programme
training early childhood teachers as described by Shidler (2009) have more or less
opportunity to shift a teacher's self-perception than a coach working in a state funded
teacher training programme of the likes studied by Goker (2006)? Once again, these
questions remain unanswered by the literature that explores teachers' efficacy, which
provides a gap in the research that question four in this study aims to focus upon -
what are the features of teacher coaching programmes used in New Zealand
secondary schools that have the greatest perceived impact on developing teachers’
practice and improving student outcomes?

3.9.3 The impact of teacher coaching on teachers’ implementation of an
identified strategy

Within the teacher coaching literature which explores the impact a coaching
intervention can make, there are twelve studies that investigate the effect of using
teacher coaching in order to support individuals to implement a specified strategy
(Bruce & Ross, 2008; Bowman & McCormick, 2000; Duchaine, Jolivette & Frederick
2011; Goker, 2006; Harvey, 1999; Mallette, Maheady & Harper, 1999; Matsumera et
al., 2010; Morgan, Menlove, Salzberg & Hudson, 1994; Neuman & Cunningham,
2009; Onchwari & Keengwe, 2008; Sparks, 1986; Sugar, 2005). Amongst these
studies a range of strategies were observed being implemented by the teacher
participants, these included: language and literacy practices (Matsumera et al., 2010;
Neumann & Cunningham, 2009; Onchvari & Keengwe, 2008); direct instruction skills
(Morgan et al., 1994); mathematics teaching practices (Bruce & Ross, 2008);
instructional skills for TEFL (Goker, 2006); teaching clarity (Bowman & McCormick,
2000); the Stalling's teacher effectiveness strategies (Sparks, 1986); behaviour
specific-praise statements (Duchaine, et al., 2011); the Pearbody peer assisted
learning strategy for students with special learning needs (Malette et al., 1999); technology skills (Sugar, 2005); and greater clarity in planning (Harvey, 1999). The variety within this list exposes one of the strengths of teacher coaching which is the diversity of goals and topics that it can be used to support. However, the multitude of strategies that teacher coaching claims to be able to support, also highlights the challenge teacher coaching presents for a researcher when attempting to measure the impact of such a diverse group of foci that are influenced by a diverse group of approaches, contexts and personnel.

In order to measure the effect of teacher coaching on the implementation of these various teaching strategies this group of studies have tended to use a methodological approach in which a measure of a teacher’s use of a particular strategy is obtained as a base-line measure, coaching is provided to the teacher and a second measure is then made of the teacher’s use of the strategy. In these cases the studies focus on a single strategy and ignore any other effects of the coaching (Bowman & McCormick, 2000; Bruce & Ross, 2008; Duchaine et al., 2011; Goker, 2006; Harvey, 1999; Malette et al., 1999; Matsumera, 2010; Morgan et al., 1994; Neuman & Cunningham, 2009; Sparks, 1986). In studies, such as Neuman and Cunnigham’s (2009) and Bowman and McCormick’s (2000) the change in teachers’ use of the identified strategy was also measured against a control group of teachers who received no teacher coaching support. In studies such as that carried out by Duchaine et al. (2011) the change in teachers’ implementation of the identified strategy, in this case behaviour specific praise statements, was measured only against the base-line data collected previously for that particular participant. Further analysis was not considered regarding if the change was sustained.

In terms of the methods used in order to measure teachers' effectiveness both pre and post a coaching intervention, the range of tools used in these studies were as varied as the identified strategies themselves. Studies such as Sparks (1986) and Bowman and McCormick (2000) favoured previously established criterion such as the Stallings secondary observation instrument (Stallings & Stayrook, 1979). Alternatively, studies such as Duchaine et al. (2011) and Nueman and Cunningham, (2009) developed their own set of criteria, directly relevant to the coaching programme being implemented but lacking validation. Researchers such as Bruce
and Ross (2008); Harvey (1999); and Onchwari and Keengwe (2008) adopted more qualitative methods such as classroom observations, participant journals, teacher self-assessments, interviews and field notes in order to track teachers' development of particular strategies as they responded to teacher coaching support.

All 12 studies highlighted above present findings that suggest teacher coaching led those participants who experienced the coaching to increase their use of the specifically observed strategy. The studies did not present any other benefits or changes outside of the strategies specified. Once again, in what has become a recurring theme in this literature review, the essence of what happened in the coaching sessions was not described in the papers. Also, there were significant differences presented in the intensity of the coaching programme in terms of regularity of contact made, the length of the sessions and the training provided to coaches. Clearly the findings of these studies suggest that teacher coaching can have an impact, but how this impact is actually achieved is not evaluated and is therefore less clear.

3.9.4 The impact of teacher coaching on student achievement

The primary focus of professional development within schools needs to be improving outcomes for students, although in aiming to achieve this goal, professional development may also focus on developing teachers' practice (Timperley et al., 2007). However, what does that broad goal actually mean when translated into a professional development programme implemented within a school? The area of coaching literature that explores the relationship between teacher coaching and what should be the core business of any professional development intervention - raising student outcomes - presents the reader with a complex jumble of contrasting objectives, methodological approaches, findings and unanswered questions.

The literature that explores the relationship between teacher coaching and student outcomes is focused in its entirety on student academic achievement. However, student achievement is used by the researchers as a broad definition that encompasses a range of differing measures. The most popular measure of student achievement is students' literacy levels (Biancarosa, Bryk & Dexter, 2010; Carlisle & Berebitsky, 2011; Feighan & Heeren, 2009; Matsumera et al., 2010). It is not clear
from the literature why students’ literacy scores prove to be the most popular measure of student achievement favoured by researchers analysing the relationship between student achievement and teacher coaching. However, it could be the popularity of teacher coaching being used as an intervention to support literacy initiatives such as in the Reading First project in the USA, or that reading scores are one of the most prevalent and regular forms of student achievement measures collected worldwide.

The studies that combine measures of teachers’ attitudes, together with changes in their instructional practice and analysis of their students’ gains in achievement, offer an effective example of best practice when attempting to examine the effects of professional development (Carlisle & Berebitsky, 2011, Desimone, 2009). It is studies of this kind with multiple foci that form the majority of the literature that explores the relationship between teacher coaching and student outcomes (Carlisle & Berebitsky, 2011; Feighan & Heeren, 2009; Matsumera et al., 2010; Murray et al., 2009; Ross, 1992).

Carlisle & Berebitsky (2011), Feighan & Heeren, (2009) and Matsumera et al. (2010) all use quasi or field experiments in order to examine if teacher coaching affects students’ literacy skills, along with qualitative methods to explore if teachers’ perceptions of coaching change or their use of literacy strategies develop? Murray et al. (2009) report on a study that used an experimental design to determine if teacher coaching positively influences students’ academic mathematics achievement, together with qualitative approaches which were used to examine collaborative interactions between mathematics teachers. Ross (1992) analysed the effect of coaching on teachers’ efficacy, together with the subsequent influence upon their students' knowledge, comparative thinking and decision making skills.

The studies carried out by Carlisle & Berebitsky (2011); Matsumera et al. (2010); and Ross (1992) all present findings that teacher coaching does positively impact student achievement in some form, although the form of student achievement and the way that it is measured differs between these studies. Alternatively, Feighan and Heeran (2009) and Murray et al. (2009) present findings that suggest there is no connection between teacher coaching and an impact on student achievement. Owing to the fact,
that each of these studies are conducted differently and focus on different programmes and different coaching objectives, it is difficult to ascertain why the findings of these studies are in conflict. Yet interestingly, the qualitative findings of all six of these studies do present a positive impact created by teacher coaching on teachers’ implementation of new strategies or their perceptions of teacher coaching.

There also exists a small body of literature that places the relationship between teacher coaching and its impact on student outcomes at the heart of their studies (Biancarosa et al., 2010; Sumner, 2011). Biancarosa et al. (2010) presented findings from a four year quasi-experimental study that suggested teacher coaching directly impacts students’ reading assessment scores. Whilst, Sumner (2011) examined a range of activities that coaches perform and reported findings that suggested a link between the number of times coaches met with a school principal in their role and student achievement scores. Neither of these studies explain how coaching was identified as the activity which led to these changes, amongst a host of other variables at play within a typical school environment.

The multitude of approaches that have been taken in order to explore the impact of coaching on student achievement, together with the contrasting findings, once again exposes the complexity of attempting to evaluate the success of a diverse range of teacher coaching programmes and approaches (Sumner, 2011).

Overall, the literature that investigates the link between teacher coaching and student achievement creates more questions than it solves, particularly regarding the socio-political environment in which teacher coaching operates. Typically, the literature in this area begins by stating the purpose of the study and then only briefly describes the context in which a coaching programme operates. From a coaching practitioner’s perspective the reader is left wondering why were these coaching programmes set up, what were they trying to achieve and what is it that these coaches have done that actually makes the difference to these students? From a researcher’s perspective the reader is left to consider how can we most effectively evaluate the impact of teacher coaching? Is it possible for the impact of coaching to be isolated and how can we look to minimise potential bias? All questions that the objectives of this study intend to further explore in order to examine the
interconnected relationship between teacher coaching approaches, principles and roles. Three foci that form the basis of Research Question 4 in this study - What are the tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in New Zealand secondary schools?

3.10 Literature review conclusion

Overall, the objective of this literature review was to contextualise this study within the current body of knowledge relating to teacher coaching. Furthermore, the aim was also to explore how the current literature offers evidence to answer this study’s five research questions? The five research questions of this study are:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?

2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?

3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?

4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?

5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

The literature has shown that although teacher coaching is being used in a large number of New Zealand schools, there is a paucity of research regarding teacher coaching in the New Zealand context. However, the literature review has also shown there is a wealth of research spanning forty years regarding coaching in the business and sports arenas and that internationally, specifically in the United States and the United Kingdom, there is a growing body of knowledge related to coaching in
education. Internationally, the literature explored in this review has shown that coaching does not have a widely shared definition. At times the concept of coaching relates to a skill that involves reflective questioning in order to encourage a participant to develop their own solutions. In other contexts, coaching shares a definition with mentoring and is defined as a relationship that both supports a mentee and directs them how to develop. The lack of a definition challenges both the practitioner and the researcher of teacher coaching as comparisons between studies are difficult when they can be exploring a concept with the same name but different characteristics.

In the United States and the United Kingdom coaching is being used in schools in a plethora of different ways, including: to support new teachers; as a tool of professional development; to raise students’ achievement grades; and to develop teachers’ efficacy. There are studies which purport to show that each of these factors can be positively impacted by teacher coaching. However, there are also studies that suggest teacher coaching does not impact student achievement. Many of the studies relating to teacher coaching draw their findings from the perceptions of a small sample of participants.

It is rare in the research regarding teacher coaching to find a study that explains how the impact of teacher coaching was isolated from the many other variables evident in a typical school. It is also rare in the teaching coaching literature to find a study that attempts to explain how the impact claimed by the findings was achieved. However, some recent studies of coaching across multiple disciplines have begun to explore these connections (Ditzig, 2016). Consequently, this literature review has presented teacher coaching as a complex concept that is poorly defined, yet holds promise for educators wanting to develop teachers’ practice and improve outcomes for students. The current research has been shown to have many gaps particularly regarding teacher coaching in New Zealand and therefore further questions have been raised by this review, these are: Does a lack of definition matter - in the field of coaching, for schools, or for individual stakeholders? Is coaching a distinct intervention? Does the interplay between mentoring and coaching matter for stakeholders involved? How does the context in which coaching programmes operate in NZ schools support or hinder the impact of teacher coaching? Why have school leaders chosen coaching? Why is coaching being used for different purposes? Do stakeholders perceive some
strategies used by teacher coaches as having greater impact compared to others? Are these strategies influenced by the coaching context, approach, and characteristics of the coach or coachee? How is this impact created and evaluated? Is the impact influenced by the coaching context, approach, and characteristics of the coach or coachee? These are all questions that will now form the basis of the questions to be asked in the questionnaire and interviews planned as part of the methodological design of this study.
CHAPTER FOUR: METHODOLOGY AND METHOD

4.1 Introduction

The purpose of a research inquiry and the research questions are interlinked in order to guide and justify the choice of research methodology and methods (Plano Clark & Baidee, 2010). The purpose of this study is to fill the knowledge gap identified in the Conceptual Framework and Literature Review chapters, between the promotion and use of teacher coaching throughout New Zealand secondary schools and the lack of informed evidence regarding teacher coaching in New Zealand. Subsequently, the Conceptual Framework and Literature Review have confirmed the relevance of the five research questions that form the basis of this study, which is to be focused on exploring the practical use of teacher coaching in New Zealand secondary schools:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?
3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?
4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?
5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

The pragmatic mixed methods approach chosen for this study was one informed by the exploratory problem solving intent of the study’s research questions. A dominant qualitative approach, using a sequential design, incorporating triangulation of methods, perspectives and across time, provides an appropriate research design framework in order to investigate the research questions.

The subsequent sections in this chapter will provide a rationale for each of these research design decisions and will justify why this overall design provides the most robust and valid approach to investigate the research questions. The chapter is divided into thirteen sections and each of these sections will provide a justification for
the choices made regarding the philosophical stance, research approach, methods and data analysis tools adopted in order to complete this thesis. After this chapter introduction, the following sections explain why the exploratory approach, pragmatic paradigm stance, mixed-method methodology, multi-phase and triangulation models were best suited to investigate the research questions. The final sections will present the approaches to sampling and methods used, explain the tools engaged to complete data analysis and will also deal with inference quality and ethical considerations.

4.2 Exploratory approach
Exploratory research is conducted in order to investigate the nature of an issue and often will focus on issues for which little or no literature exists (Brown, 2006; Saunders, Lewis & Thornhill, 2007). Therefore, the investigative nature of the five research questions which focused on an issue for which little literature existed, provided an exploratory rationale for this thesis and led to the philosophical grounding of this study within a pragmatic paradigm (Reiter, 2013).

4.3 The Pragmatic paradigm
The theoretical framework that underpins this thesis is pragmatism. The concept of the pragmatic paradigm has challenged the perception of paradigms “as monolithic interlocking sets of philosophical assumptions and instead presented a movement towards a more practical orientation that emphasises individual components of philosophy and theory as guiding research activities” (Teddlie & Tashakkori, 2009, p.13). In this manner, paradigms are viewed less as epistemological stances linking ontology, epistemology and methodology and more as shared beliefs amongst a community of scholars (Creswell & Plano Clark, 2011; Denscombe, 2008; Morgan 2007; Tashakkori & Creswell, 2007). In terms of this study, which was driven by an exploratory purpose, it was appropriate to adopt a definition of paradigms that emphasised a more practical orientation in order to best serve this study’s practical intent and research questions.

A number of single paradigm stances were originally developed in order to provide a philosophical argument for research that does not fit the traditional paradigms of positivism and post-positivism (Teddle & Tashakkori, 2010). These philosophical stances were cultivated and renamed as alternative paradigm stances (Greene, 2007).
Pragmatism is the most popular of these alternative paradigms for practitioners who require a practical approach to research that demands the need to mix both quantitative and qualitative data (Teddlie & Tashakkori, 2010). Pragmatism “offers an immediate and useful middle position philosophically and methodologically; it offers a practical and outcome-orientated method of inquiry that is based on action” (Johnson & Onwuegbuzie, 2004, p.15).

Pragmatic philosophy is more of an anti-philosophy in that it moves the focus from epistemological and ontological issues to those of interactions between people and their environmental context (Greene & Hall, 2010). There are multiple versions of pragmatism. However, the major principles of the pragmatic philosophical framework have been identified, these include: a rejection of traditional mind and matter dualism; a view of knowledge as both constructed and as a function of contextual transactions; a recognition that knowledge is fallible; a belief that truth comes from experience; an advancement of the term warranted assertions; and a problem solving, action-focused inquiry process that endorses a strong and practical empiricism as the path to determine what works (Greene & Hall, 2010; Johnson & Onewuegbuzie, 2010).

Choosing a definition of paradigms as the practical shared beliefs of scholars and choosing pragmatism to philosophically underpin this study can be attributed to the alignment between the exploratory and practical research questions driving this thesis and the practical, constructivist, action-focused characteristics of the pragmatic paradigm outlined above. Greene and Hall (2010) state that “the pragmatic inquirer is especially attentive to the actionable value of the different data sets, privileging inquiry results of direct practical application in addressing important problems in the world” (p.138). In this way, the purpose and research questions of this study were created in order to fill a gap between the current educational practice of using teacher coaching throughout New Zealand secondary schools and the current lack of literature explaining why teacher coaching is being used, how is it being used and what is the outcome of its use?

4.4 Mixed methods methodology
The methodological position for the pragmatic paradigm is that researchers use a range of research methods that collect both quantitative and qualitative data, which
has come to be known in the literature as a mixed methods approach (Bryman, 2008; Cohen, Manion & Morrison, 2011; Tashakkori & Creswell, 2007). Mixed methods research recognises that qualitative or quantitative approaches to inquiry unnecessarily restrict the researcher in their search for reaching a study’s objectives (Gorard & Smith, 2006). Polarising research into objective and subjective world views is neither meaningful nor productive and instead there is a need for less confrontational approaches to research to be adopted (Ercikan & Roth, 2006). Mixed methods research allows this less confrontational approach by integrating the strengths of both quantitative and qualitative data collection methods in order to create results that present a more complete picture of the phenomenon that is being explored (Cohen et al., 2011; Denscombe, 2008). By adopting methodological pluralism the researcher is provided with the means to gather richer data, corroborate and triangulate findings from different data sets and allow new modes of thinking to emerge from paradoxes between data sources (Cohen et al., 2011).

A valid mixed method study begins with strong mixed method research questions that in their nature require qualitative and quantitative data to be collected (Tashakkori & Creswell, 2007). A mixed method research design is most relevant in studies whose purpose and research questions cannot be answered sufficiently by drawing on only quantitative or only qualitative methods (Bryman, 2008; Cohen et al., 2011). Although it would have been possible in this study to collect only quantitative data in the form of a questionnaire or only qualitative data in the form of semi-structured interviews, neither of these methods alone would have fully answered the five research questions, nor met the study’s purpose and therefore would not have provided a full picture of the phenomenon being explored – the use of teacher coaches in New Zealand secondary schools.

Once the purpose and research questions for this study had been established it was clear that because of their nature a mixed methods approach was going to be the most effective in order to provide both data relating to the use of teacher coaching in secondary schools on a national scale; whilst also painting a picture of individual perceptions, contexts and challenges within teacher coaching partnerships. The foci of each research question provided a rationale as to why the collection of either qualitative or quantitative data would be most appropriate. Questions one and two
inquired into teacher coaching on a national scale, thus demanding the collection of quantitative data that led to statistical analysis:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?

Whilst, questions three and four focused on the perceptions of fourteen individuals involved with five coaching partnerships and therefore lent itself to the collection of qualitative data:

3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?
4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?

It was anticipated that both sets of data together would present results that painted a more complete picture of the phenomenon of teacher coaching in New Zealand secondary schools.

4.5 Sequential four phase approach

There is wide consensus that mixing different types of data method and data can strengthen the validity of a study (Greene & Ceracelli, 1997) However, there is a need when creating a research design to identify the rationale for the sequence in which data will be collected and the priority or weight given to each form of data (Morgan, 1998). Tashakkori and Teddlie (1998) suggest that in order for a researcher to complete a robust study they must be clear what is the purpose of mixing qualitative and quantitative data and at what stages of the research design will integration occur.

In this study the qualitative and quantitative data were collected in four phases that spanned 18 months. The sequential nature of these phases permitted the researcher to look for emerging findings from both the quantitative questionnaire data collected in Phase 1 and from qualitative data collected in Phase 2 of the study. These emerging
findings could then be explored in more depth in the interviews carried out in Phases 3 and 4. In order to allow data from Phases 1 and 2 to assist in creating questions used in later phases then this required the data to be analysed separately at the end of each phase. The final integration of the qualitative and quantitative findings only happened after Phase 4, when the quantitative and statistical results were compared and contrasted with the qualitative thematic findings. Phase 1 focused on Research Questions 1 and 2 and involved the creation and completion of a national questionnaire distributed to school leaders in charge of professional development in every secondary school in the country. The questionnaire was devised and implemented over a period of six months. The questionnaire concurrently collected quantitative and qualitative data. The quantitative data was collected using a series of sixteen multiple choice questions that required participants to check boxes next to a number of statements provided for each question. The quantitative data was analysed using the Microsoft SPSS programme so that the study could manage data from a potential sample of 334 school leaders. The SPSS programme also provided the opportunity to carry out statistical analysis to investigate if relationships existed between different variables relating to teacher coaching in New Zealand secondary schools. All the qualitative data was collected from the same professional development leaders using three open ended questions positioned at the end of the questionnaire.

It was decided to collect and analyse predominantly quantitative data first in Phase 1, owing to the fact that so little research existed regarding teacher coaching in New Zealand secondary schools. By using the questionnaire to approach every secondary school in the country, the study was able to gain an overview of the phenomenon countrywide and to test if or how relationships existed between different variables relating to the current use of teacher coaching in New Zealand. In subsequent phases the findings from Phase 1 were used to influence the questions being asked in the qualitative data collection in Phases 2, 3 and 4.

Phases 2 and 3 collected only qualitative data and were focused on Research Questions 3 and 4 that investigated the perceptions and actions of coaches and coachees. The interview questions in Phases 2 and 3 were also influenced by themes presented in the findings of the Phase 1 questionnaire. These phases were carried out over one year and involved interviews with five coaches and five coachees. Phase
2 interviews happened at the start of the five coaching partnerships and Phase 3 interviews were conducted near the end of the year. The coaching partnerships were located at four different schools. In Phases 2 and 3 the coach and the coachee from each partnership were interviewed separately. Data from each phase was analysed separately at the end of the phase using a thematic coding process, consequently findings could be used to influence the interview questions to be asked of the coaching programme leaders in Phase 4.

Phase 4 was also focused on investigating Research Questions 3 and 4 and collected only qualitative data. In this phase the researcher returned to the same schools and coaching partnerships from Phases 2 and 3 and interviewed the coaching programme leaders. These interviews provided another level, or set of perceptions, relating to the coaching partnerships explored in the earlier two phases. By organising the data collection using the four phases described above this allowed three forms of data triangulation to occur which strengthened the overall validity of the research design.

4.6 Triangulation
Within the context of research in the social sciences triangulation is understood to play a major role in increasing the validity and confirmability of findings. Erzberger and Kelle (2003) describe “triangulation by some authors as an attempt at mutual validation, while it is seen by others as a means to combine different theoretical perspectives on a phenomenon under investigation” (p.458). Due to the exploratory approach of this research, into a topic for which little research exists, the second of these definitions, labelled the ‘complementarity model’ (Erzberger & Kelle, 2003) is the triangulation best suited to this study. In this way, the purpose of the triangulation design is to gather different but complementary evidence in order to gain the fullest understanding possible about teacher coaching in New Zealand secondary schools (Morse, 1991). A complementarity model of triangulation is used when a study needs to enhance the reliability of the findings by deepening the understanding of the phenomenon in an attempt to capture and compare the perspectives of all key stakeholders (Bamberger, 2012). The multi-phase design of this study allowed complementarity triangulation to occur in three ways: triangulation of methods; triangulation of perspectives or levels; and triangulation sources at different points in time.
4.6.1 Triangulation of methods

A single data collection method cannot shed light adequately on a phenomenon, using more than one data collection method can help lead to deeper understanding of a problem (Denzin, 1978). As in this study, by using two different data collection methods that collected qualitative and quantitative data, this presented multiple perceptions of the same topic, allowing the researcher to compare and contrast these factors. The quantitative data collected across New Zealand provided the study with large scale data that created an understanding of how and why teacher coaching is being used in New Zealand secondary schools. Complementing these findings was the qualitative data that provided socially constructed and subjective data from those stakeholders experiencing coaching partnerships. Together these two sets of data from the two different data collection methods provided a comprehensive and well-developed investigation into the topic of teacher coaching in New Zealand secondary schools.

4.6.2 Multi-level or multi-perspective triangulation

Denzin (1978) identified ‘data triangulation’ that could triangulate data across time, space or persons. A form of triangulation of individual’s perspectives has been further categorised by Creswell and Plano Clark (2011) who stated that “in a multilevel model, different methods (quantitative and qualitative) are used to address different levels within a system. The findings from each level are merged together into one overall interpretation” (p.65). In terms of this study, the system being investigated was teacher coaching in New Zealand secondary schools and the different ‘levels’ or perspectives within this system related to the stakeholders involved in the coaching partnerships. The stakeholders included: the professional development leaders, the programme leaders, the coaches and the coachees. Owing to the design collecting the data in four phases it allowed the data to be analysed at each phase and also across the different ‘levels’ of perspective. This depth of analysis provided multiple perspectives and deepened the overall understanding of the phenomenon of teacher coaching in New Zealand secondary schools.

4.6.3 Triangulation of source at different points in time

Under Denzin’s (1978) umbrella term ‘data triangulation’ was also the concept of triangulating data across time. In this study this involved the analysis of data from
Phases 2 and 3. In Phase 2 coaches and coachees were interviewed at the commencement of their coaching partnership, a year later they were all interviewed again nearing the end of their partnership. Consequently, the data from all of the coaches and the coachees could be compared and contrasted across the two phases, thus allowing for any changes or consequences of the coaching to be explored.

4.7 Dominant qualitative approach
In terms of weighting in relation to this mixed methods study, only one of the four phases of research demanded the collection of quantitative data and three phases demanded the collection of qualitative data, subsequently the research was designed as a mixed methods design with a dominant qualitative approach. The sections above have provided a rationale for why this study adopted an exploratory approach underpinned by a pragmatic theoretical framework, together with a mixed methods methodology that was dominantly qualitative and used a sequential design, incorporating triangulation of method, perspectives and time. Figure 4.1 overleaf presents a graphic illustration of this research design.

4.8 Research methods and sampling introduction
The overall purpose of this research was to investigate teacher coaching approaches used by secondary schools in New Zealand. The nature of this problem suggested that the study needed to focus the data collection on secondary schools in New Zealand who use teacher coaches. The study’s purpose also suggested that the research methods chosen to meet this goal needed to engage with teachers, coaches and programme leaders, in order to explore multiple perspectives regarding the use of teacher coaches. This led to the choice of questionnaires and semi-structured interviews as the two data collection methods used for this study.
Phase 1: QUANTITATIVE and QUALITATIVE collected concurrently: Focused on Research Questions 1 + 2

Collection of QUANTITATIVE data using 16 multiple choice questions as section 1 of a questionnaire
Sample: 334 PD leaders in NZ secondary schools
Data analysis: Microsoft SPSS

Collection of QUALITATIVE data using 3 comment questions as section 2 of a questionnaire
Sample 334 PD leaders in NZ secondary schools
Data analysis: Thematic coding

Figure 4.1: A mixed method design giving priority to qualitative research and incorporating sequential phases together with triangulation of method, perspective and time

Data analysed from all 5 coaches interviews collected in both Phases 2 and 3

Phase 2: QUALITATIVE: Research Questions 3 + 4
Semi-structured interviews: Start of 5 coaching partnerships
Sample: 5 coaches and 5 coachees in 4 schools
Data analysis, thematic coding: Individual, across partnerships, grouping coach data and coachee data

Data analysed from all 5 coachees interviews collected in both Phases 2 and 3

Phase 3: QUALITATIVE: Research Questions 3 + 4
Semi-structured interviews: End of 5 coaching partnerships
Sample: 5 coaches and 5 coachees in 4 schools
Data analysis, thematic coding: Individual, across partnerships, grouping coach data and coachee data

Phase 4: QUALITATIVE: Research Questions 3 + 4
Semi-structured interviews
Sample: 4 coaching programme leaders in charge of 5 coaching partnerships from Phases 2 and 3
Data analysis, thematic coding: Individual, grouping data across each partnership and grouping data from all programme leaders

Overall interpretation using thematic data analysis

Exploratory approach underpinned by a pragmatic theoretical framework
By choosing two different forms of data collection method it allowed access to the experiences of a large number of senior managers drawn from secondary schools across New Zealand, together with in-depth data collection from a smaller group of programme leaders, teacher coaches and coachees. Consequently, because two data collection methods were used a large amount of data was generated. This led to the use of a general inductive approach to data analysis in order to draw key themes from all of the data and to cross reference the responses of the three different groups from five different organisations. The next sub-section will provide a rationale for these choices regarding approaches to sampling, data collection and data analysis.

4.8.1 School Sampling

It is important to design a well defined sampling approach in order to lead to unbiased results that could be of use to a broad spectrum of the population (Trochin, 2000; Wilmot, 2005). Purposive sampling was used in all four phases of this study in order to select the participating schools. Wilmot (2005) describes purposive sampling as a:

Technique often employed in qualitative investigation. With a purposive non-random sample the number of people interviewed is less important than the criteria used to select them. The characteristics of individuals are used as the basis of selection, most often chosen to reflect the diversity and breadth of the sample population. (p.1)

Purposive sampling was used in this study because the research questions necessitated that the sample drew participants from a particular group of the education population. The criterion that the research objective dictated was that of all secondary schools in New Zealand for Phase 1 and a selection of secondary schools in New Zealand that use teacher coaching for Phases 2, 3 and 4.

In Phase 1 of this study, the most reliable data in order to fulfill the research questions necessitated that every secondary school in New Zealand was contacted in order to share their experience and opinions regarding the use of teacher coaching. The ‘Education Counts’ website was used in order to obtain a list and contact details of every secondary school in New Zealand, this listed 334 secondary schools nationwide, which became the whole population sample for Phase 1 of this study. In Phases 2, 3 and 4 the researcher’s available time, resources and access to participants restricted
the possibility to interview participants in every secondary school in New Zealand. Nevertheless, there was a need to collect data from more than one school to ensure sufficient depth to the results and allow for the ability to cross reference data in order to strengthen the validity of the research. Therefore, to gain a balance between the available time and sufficient depth of data, five coaching partners, located at four different schools were invited to take part in Phases 2, 3 and 4 of the study.

A purposive sampling criterion was used in order to select schools that were invited to take part in Phase 1 of the study. However, in Phases 2, 3 and 4 of the study, by applying this same criterion of secondary schools in New Zealand, the researcher was faced with a possible sample of 334 schools. All of these schools uniformly met the purposive sampling criterion, however it was not deemed necessary to send an invitation to all 334 schools, because the researcher did not want to waste the time of so many school principals when only five coaching partnerships were required to take part in Phases 2, 3 and 4. Therefore, a combined purposive and convenience sampling approach was used to decide which schools would be invited first. In Phases 2, 3 and 4 the element of purposive sampling that required was a range of different teacher coaches working within different coaching roles, as this would give the broadest data regarding how teacher coaching was being used. In this way when schools were invited to take part in Phases 2, 3 and 4 they were asked to identify what form of teacher coaches were being used in their organisation, for example: peer coaches, literacy coaches, appraisers, Specialist Classroom Teachers, Board of Trustees funded or external facilitators.

Bryman (2008) explains that “a convenience sample is one that is simply available to the researcher by virtue of its accessibility” (p.183). In this way, state secondary schools in the South and Central Auckland area were selected as these were closest to the researcher’s place of work. Initially all 18 schools in these two areas were contacted by email and invited to take part in the study. Those who responded were followed up with a further email or a phone call, in which they were asked about the coaching programmes taking place in their school. At the end of this process there were only five partnerships within the convenience sample area that were operating different coaching programmes and who also had the available time to take part in the data collection. Subsequently these defined the five partnerships which would
become the sample for Phases 2, 3 and 4. The five types of coach selected to provide a broad range of coaching experiences and contexts were: a literacy coach in a low decile co-ed school; a Teach First coach in a single sex religious school; an external coach in a different single sex religious school; a Board of Trustees funded coach; and a Specialist Classroom Teacher in a mid decile co-ed school. By choosing two different partnerships operating in the same school, this also allowed the study to investigate if different partnerships in the same school operated in different ways.

4.9 The questionnaire data collection tool

This section will examine the reasons for adopting the questionnaire as a data collection method used in this study. It will also examine the literature pertaining to questionnaires and explain how this literature has influenced the creation and implementation of the national teacher coach questionnaire that was developed for the quantitative phase of this study.

The research questions of this study intended to go some way towards unpacking the role that teacher coaches are adopting in secondary schools in New Zealand. Questions one and two referred to the situation within New Zealand secondary schools as a whole. Subsequently, this led the study to adopt a questionnaire as one of the most relevant methods for a single researcher to explore questions on a national scale.

Using questionnaires as a research tool is a low cost research method which has significant rewards in terms of delivering the best or most significant feedback about an identified topic (Bradburn, Seymour & Wansink, 2004). Questionnaires are used to collect data in situations in which the data is not directly observable and there is a need to gather data in order to describe the nature of existing conditions at a particular point in time (Cohen et al., 2011; Gall, Borg & Gall, 1986). This description defines the conditions in relation to this study, as research questions one and two created the need for data that described the current use of teacher coaching and with only one researcher the ability to interview teacher coaches in all of New Zealand’s secondary schools was not practical. Subsequently, the ability of questionnaires to gather data from a wide geographical area and a large number of participants, both quickly and cheaply, provides four relevant reasons why the questionnaire was adopted as a data collection tool for this study (Morrison, 1993).
In terms of the data itself, questionnaires are characterised by a structured approach that allows the researcher to collect data regarding the same variables from multiple cases (DeVaus, 1995). Furthermore, questionnaires can deliver descriptive, inferential and explanatory feedback in a standardised format from a large scale sample. In this way, the use of a questionnaire can allow a researcher:

- To say with a measure of statistical confidence that certain observed characteristics occur with a degree of regularity, or that certain factors cluster together or that they correlate with each other or that they change over time and location. (Cohen et al., 2001, p.257)

It is these characteristics of the questionnaire that provided the researcher in the case of this study with further reasons for adopting this data collection tool. These factors also provided the rationale for designing a questionnaire that collected both quantitative and qualitative data. With a possible sample of 334 secondary schools in New Zealand, the questionnaire provided the researcher with the ability to collect quantitative data and statistically analyse for shared relationships or correlations amongst feedback from a large number of school leaders, whilst at the same time collecting comment based qualitative data that investigated general themes and opinions that this group shared.

When creating a questionnaire a number of principles support a researcher to create a tool that is both user friendly and useful to their own data collection. DeVaus (1995) presented a broad range of questions in order to support researchers to create valid and useful questionnaires. These questions included considerations of time frame, geographical location, purpose, focus and aspect of the topic to be studied. Furthermore, recently, Saris and Gallhofer (2014) have presented a number of decisions that a researcher must face when considering to use a questionnaire as a research tool, these include: the choice of topic; choice of the most important variables; choice of the data collection method; choice of operationalisation; choice of how to test the quality of the questionnaire; choice of how to formulate the final document; choice of population and sample design; and finally choice of how the field work will be carried out. Together, the work of DeVaus (1995) and Saris and Gallhofer (2014) provided a framework that guided the construction of a national questionnaire for Phase 1 of this study using the factors of time frame, geographical location, focus...
of the study, aspect of the topic, abstractness of interest, questions and format and design and distribution.

In terms of time frame the research questions demanded that the time frame of interest should be leaders’ and teachers’ currently involved in teacher coaching. In relation to geographical location, the research questions identified the sample to be secondary schools in New Zealand. The focus of research questions one and two on coaching across New Zealand secondary schools required the questionnaire to treat all 334 secondary schools as one sample. The aspects of the topic to be focused upon by the questionnaire were clearly identified by research questions one and two that presented the elements of teacher coaching which the questionnaire needed to explore, these were: If teacher coaching is being used, how is it being used, why it is being used and if its impact is being measured? In order to motivate busy teachers and school leaders to complete the questionnaire the questions were designed to be short and clear, with the option of providing more descriptive answers in subsequent comment boxes. A web based design was used in order to reduce the time and cost of administering the questionnaire. See Appendix One for the questionnaire that was designed using these factors and principles.

A number of elements have been reported to affect how respondents react to a questionnaire, in terms of their motivation to complete a document and their decision making whilst answering the questions, these factors include: if the correct person physically receives the questionnaire; if the questionnaire is relevant to their role; how they understand and are influenced by the language of the questionnaire; and how the layout and format of the questionnaire is constructed (Couper, 2001; Jenkins & Dillman, 1995; Roberson & Sundstrom, 1990). In the context of this study, it was important to adopt these factors when distributing the questionnaire so that the professional development leaders would be motivated to complete the document (Couper, 2001; Jenkins & Dillman, 1995; Roberson & Sundstrom, 1990).

There are 334 secondary schools in New Zealand listed on the Ministry of Education database, with a sample this large and the resources of only one researcher then a web based questionnaire was the most suitable data collection tool. Baruch (1999) completed a study involving 141 different papers, in order to identify what could and
should be a reasonable response rate for questionnaires in academic study. As part of Baruch’s work she identified “two principal reasons why people do not return web based questionnaires: At the first instance, they simply did not receive the questionnaire, and in the second, they did not wish to respond” (Baruch, 1999, p.423).

Questionnaires that are addressed to representatives of organisations such as the Chief Executive Officer, or The Principal, typically experience a lower return rate compared to samples of named individuals (Baruch, 1999; Henderson, 1990). “However, with careful planning of the research, this source for possible nonresponse can be reduced significantly” (Baruch, 1999, p.423). One of the key strategies for improving the response rate to questionnaires submitted to organisations is to personalise the email address and the salutation on the cover letter (Boyd, 2002; Cook, Heath & Thompson, 2000). Furthermore, the relevance of the questionnaire content to the respondents, in terms of how prominent a concern may be to their current role, can have an effect on the rate of return and the accuracy of a person’s response (Gall et al., 1996). In order to address these two issues in terms of the questionnaire created for this study, there was a need to identify who in each secondary school in the country was managing any teacher coaching programmes that a school was implementing. This led to the researcher calling each secondary school in the country in order to identify the name and the email of the senior leader in charge of teacher coaching programmes. In this way when the questionnaires were sent then it was likely that they would reach the named recipient, that the person who received the questionnaire in their inbox would find the document relevant to their current role in their school and that the invitation message to complete the questionnaire greeted the person using their first name.

Berdie, Niebuhr and Anderson (1986) also highlighted the importance of ensuring that the relevance of a questionnaire to the person who received it was incorporated early in the introduction to the document so that those reading it can quickly identify with its objectives and the aims of the overall study. In the terms of the introduction for the questionnaire designed for this study, the introduction began with the lines “This questionnaire is an opportunity to take part in a national survey about your experiences leading teacher coaching programmes in New Zealand schools”. Overall, this meant that in order to improve the return rate of the questionnaire for this study, the most
relevant participant in each secondary school had been identified, their email address had been obtained and it was clearly communicated to them in the first lines of the questionnaire introduction how this document is relevant to their current role within their school.

The format of a questionnaire has also been found to influence participants’ motivation to complete the document (Couper, 2001; Jenkins & Dillman, 1995; Roberson & Sundstrom, 1990). Making the questionnaire attractive and easy to read is a simple method for drawing participants into completing the questionnaire (Berdie et al., 1986). In order to maximize participant return, questionnaires need to be clearly laid out and created with suitable questions. The format and question structure need to avoid confusion and be easy to comprehend (Fallowfield, 1995).

In terms of the questions developed in the questionnaire created for Phase 1 of this study, all of the considerations outlined by the literature above were considered when developing the concepts, language and indicators. The first four questions collected simple data relating to participants’ school. The concepts used were simple and did not require any definition, such as “how many students attend your school?” Care was taken when deciding on the spread of indicators in each category in order to avoid proliferation of indicators. These questions allowed respondents to answer simple questions first in order to engage them with the questionnaire. The data from these questions, when coupled with more exploratory questions later in the document, also allowed comparisons between similar or different schools to be made, for example: is there a relationship between the number of students in a school and the number of teacher coaches employed?

To meet the objectives of the overall research questions, questions five to seventeen in the questionnaire were required to be exploratory in order to investigate if, how and why teacher coaching is being used in New Zealand secondary schools. Rather than providing lengthy definitions to the concepts explored in these twelve questions a range of concepts were provided as indicators, from which participants could choose their answer. For example: question six asked “For what reason is teacher coaching most commonly used in your school? This was followed by seven choices:
- Specialist classroom teacher role
- Te Kotahitanga project
- Appraisal process
- Competency process
- School-wide professional development
- Faculty based professional development
- Other ............................

These choices had been drawn from the research regarding teacher coaching that was explored in the literature review for this study. However, it was also possible that not all the uses for teacher coaching had been included so an ‘other’ option was incorporated, together with space to explain what ‘other’ meant.

In order to further meet the need of research question two in this study, “why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?”. The final three questions in the questionnaire used an open ended format and language in order to provide participants with the opportunity to share their opinions regarding the benefits and challenges of implementing teacher coach programmes in their schools. Overall, the questions incorporated in the questionnaire used in Phase 1 of this study drew on the recent literature regarding question format, language and indicators in order to create questions which were engaging and simple to understand. The content of the questions were focused directly on the overall study needs. The indicators within each question provided definitions of particular concepts and also allowed ideas outside of the current teacher coach literature to be explored by providing ‘other’ as an option. Three open ended questions at the end of the document also allowed participants to express their opinions.

Even though questionnaires can offer researchers the opportunity to reach a large sample size, they also can present some challenges (Wilson, 2013). The challenges related to designing and using questionnaires can be reduced through effective planning and thought when designing the questionnaire (Brace, 2013). In all types of questionnaires there are generally two types of error which can be characterised as sampling and non-sampling errors. Sampling errors are identifiable and often can be alleviated by increasing the size of the sample. Whereas non-sampling errors such
as over complex questions, a low return rate, data entry mistakes, analysis or coding issues are not always obvious, their impact is harder to measure and at times they cannot be fixed (Brace, 2013). To counter these limitations, the questionnaire used in this study was piloted using four programme leaders, one from each participating school in Phase 2 of the study. These programme leaders were asked to focus particularly on the format of the questionnaire and the language used in the questions. Three issues were raised in relation to the order of questions and the explanation used in the introduction to the questionnaire. In response to these comments changes were made and the programme leaders then confirmed that the format of the questionnaire was acceptable and the questions could be read and understood by the participants. Furthermore, in order to meet the objectives of research question one there was not a need to probe participants to gain further information as the more detailed information would be gathered in the interviews. In terms of low return rate, as was presented in an earlier section, a large amount of effort was made to ensure the questionnaire was emailed to a named school leader in charge of professional development and further reminder emails were sent. Together these interventions led to a 28% return rate for the questionnaire.

4.10 Semi-structured interviews
The semi-structured interviews were conducted to explore research questions three and four:

3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?

4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?

These questions necessitated in-depth questioning of those people in each organisation who had experienced being a programme leader, a teacher coach or being coached themselves. Subsequently, this became the purposive sampling criterion used to select the participants of the semi-structured interviews that were carried out in relation to the five coaching partnerships. It was initially established if participants
met this criterion through emails sent to schools who operated teacher coaching programmes.

The format of the semi-structured interview is one in which the researcher has a list of specific topics to be covered, however the interviewee has a great deal of leeway on how to reply (Bryman, 2008). In this way, the semi-structured interviews allowed the researcher to focus on the topic of teacher coaching yet at the same time allowed some flexibility to discover different strategies that different coaches may have used. Furthermore, this style of interview allowed themes uncovered in Phase 2 interviews to be unpacked in greater depth in Phase 3 and 4 interviews. Bryman (2008) explains, “questions may not follow on exactly in the way outlined in the schedule. Questions that are not included in the guide may be asked as the interviewer picks up on things said by the interviewees” (p. 438).

Semi-structured individual interviews took place over a period of a year and in three phases. This allowed five different coaching partnerships to be tracked from their fruition at the beginning of the year, Phase 2, to their conclusion in term four, Phase 3. It also allowed a fourth phase to take place in term four which investigated the opinions of coaching programme leaders related to the five coaching partnerships. Interviews were held in the school of each participant at a time that was suitably convenient for each individual. All the interviews were recorded and transcribed and in order to maintain confidentiality pseudonyms were used throughout the transcription, data analysis and reporting process. Participants of the semi-structured interviews were asked questions that were focused on a range of topics regarding teacher coaching in their organisation, see the interview schedules for each phase in the Appendices 2-6. Overall the focus of the questions were associated with the implementation of teacher coaching programmes. A balance of fact, opinion and behaviour questions were used in order to focus the participants’ answers on the topic of teacher coaching that they had experienced, whilst at the same time allowing some openness so that they could describe any issues that they felt were relevant (Gillham, 2000).

Initially Phase 2 questions were influenced by the relevant research questions, the conceptual framework, key themes identified by the literature review and also data
analysed from the qualitative and quantitative aspects of the Phase 1 questionnaire. In later phases questions used in the interviews also drew on the data that had been collected and analysed from interviews carried out in earlier phases. In practice, the response of the participants confirmed that the choice of the semi-structured interview was the most suitable for the purpose, because it focused their answers on the core research topics but also allowed the participants enough flexibility to describe their approach to teacher coaching support which was unique in each school.

4.11 Data analysis introduction
As has been described above, this study adopted a mixed method sequential phase approach to data collection. Owing to the lack of current evidence regarding teacher coaching in New Zealand, it was deemed most appropriate to analyse each data set separately at the end of each interview and each phase, in order that preliminary findings could be used to influence the questions to be asked of participants in later phases. In this way statistical findings presented by the quantitative data could be explored in more detail and from a range of perspectives in Phases 2, 3 and 4, or themes raised by the coaches in Phases 2 and 3 could be explored with the coaching programme leaders in Phase 4.

Analysis of the quantitative data was carried out using a computer based analysis programme IBM Statistical Package for the Social Sciences (SPSS) version 16.0. Analysis of the qualitative data was carried out using a general inductive approach (Thomas, 2006) which provided a structured method for analysing qualitative data that is based on Strauss and Corbin’s (1998) description of inductive analysis that states “the researcher begins with an area of study and allows the theory to emerge from the data” (p.12). Finally, results from both the quantitative data and the qualitative data were analysed together in order to ascertain what could be inductively inferred from the relationship between the different data in order to create logical inferences in relation to each of the research questions. This section will describe the methods used to analyse both the qualitative and quantitative data collected across four phases of data collection and analysed across five stages of data analysis.
4.11.1 Analysis of the quantitative questionnaire data

The three research questions that the quantitative data collection section of the questionnaire focused on were one, two and five:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?
5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

The focus of the questions was to gain an understanding of how teacher coaching is being currently used in New Zealand secondary schools and to provide any insight into connections between who is choosing to use coaching, what is their intentions and are their objectives being met? Overall, to paint a broad picture of the current state of affairs regarding teacher coaching and its use in New Zealand schools.

After the initial distribution of the questionnaire and two follow up mail outs to all of the schools, there were 94 responses received from a sample of 334 professional development leaders. Analysis of this quantitative data from the 94 respondents was completed using computer programme SPSS (Statistical Package for the Social Sciences). Even though other statistical analysis programmes exist, SPSS is the most common, was available to the researcher and is a reliable and suitable tool for analysing questionnaire data in order to provide descriptions, relationships and comparisons (Fink, 1995; Muenchen, 2015).

The raw quantitative data was exported from Google Docs into SPSS. Each question or variable was identified using an abbreviated label and each possible response to a variable provided with a value. Each unit of analysis or case, which in this study was school leaders in charge of professional development, was identified with a unique ID number. Owing to the fact that the 16 questions collecting quantitative data in the questionnaire were multiple choice questions that presented statements from which participants could choose responses, this produced only nominal variables for which values in the data set could be assigned arbitrary codes that were used only to label different responses.
Connolly (2007) suggests that nominal variables are categorical variables and therefore they consist of a specific number of distinct categories and in order to best display how a given sample of cases is distributed across the categories a researcher should use a frequency table or bar chart. Subsequently, SPSS was used to generate a frequency table and a bar chart for each of the 16 questions in section one of the questionnaire. The frequency tables provided an effective overview of certain elements of teacher coaching in New Zealand, such as from the 94 respondents which was the most popular teacher coaching approach being used. However, the data also provided the opportunity to explore significant relationships between the different variables in order to examine in greater depth the phenomena of coaching in New Zealand secondary schools.

Connolly (2007) states that “when dealing with two nominal variables, the only real option is to examine the data through a contingency table” (p.77). Therefore, the researcher first identified any possible relationships that could exist between the 16 different variables that would potentially provide some further insight into how and why teacher coaching is being used in New Zealand secondary schools. Twenty-five relationships were identified from the variables that existed in section one of the questionnaire. Each of these possible relationships were examined by creating a contingency table. Each table was able to display the frequencies from each category of one variable across the categories of another variable. In this way, it was possible to examine such hypothesis as: does a relationship exist between who chose to use teacher coaching as a professional development strategy and how teachers are chosen to be coached, or does a relationship exist between who chose to use teacher coaching as a method of professional development and how the impact of teacher coaching is being evaluated? Owing to the fact that in the questionnaire many of the variables allowed respondents to tick more than one box. This meant that each possible answer from each variable provided a possible significant relationship. In this way each pair of identified variables generated over twenty possible significant relationships. Therefore, rather than presenting the results of hundreds of contingency tables, only those variables which reported a significant relationship were reported in the findings chapter of this study.
Once the contingency tables had been created and analysed, one further test was completed only on variables which appeared from the contingency tables to display some relationship or contingency. Each of these possible relationships were tested using a Pearson’s chi-squared test in order to assess the significance of the relationships between the two proportions. The results of the chi-squared tests that were completed are also reported upon in the findings section of this study. Overall, by using SPSS the quantitative data collected in Phase 1 of this study was statistically analysed in order to create a broad description of how teacher coaching is being used across New Zealand secondary schools and to inform the interview phases of this study.

4.11.2 Analysis of the qualitative data

In order to carry out the practical analysis of the qualitative data collected from section two of the questionnaire and all of the qualitative data from the three phases of interview, a general inductive approach was used (Krueger, 1994; Rabiee, 2004; Thomas, 2006). This was most suitable for this study because it provided a transparent and structured method for dealing with large amounts of qualitative data collected using a number of different sources (Rabiee, 2004; Thomas, 2006). Within the practical application of this approach this study also made use of Krueger’s (1994) framework analysis. The overall objective of the inductive approach to data analysis is to allow findings to be uncovered from the significant themes that are prevalent in the raw data. Thomas (2006) describes the key purposes of general inductive analysis:

1. to condense extensive and varied raw text data into a brief, summary format;
2. to establish clear links between the research objectives and the summary findings derived from the raw data and to ensure that these links are transparent (able to be demonstrated to others) and defensible (justifiable given the objectives of the research);
3. to develop a model or theory about the underlying structure of experiences or processes that are evident in the text data. (p.238)

There were five key steps to framework analysis that the analysis of the interview data followed. These five steps were designed by Thomas (2006) and based on Kreuger’s (1994) framework analysis. This approach was most relevant because they provided
an organised, transparent and structured method for dealing with data from multiple sources and gathered using two different methods. The five steps were:

1. Familiarisation with the data - rereading and repeatedly listening to all of the data material several times
2. Identifying a thematic framework – annotating data with memos regarding ideas, concepts and categories arising from the data
3. Indexing – sifting the data and highlighting quotes that present links both within data and between different data
4. Sorting individual comments into groups that answer the questions from either the questionnaire, focus group or interview or into a group of irrelevant comments
5. Interpretation – Make sense of the data through analysing individual quotes and observing the relationship between different quotes and groups of quotes.

In the first instance, the data from each of the three questionnaire comment questions were analysed separately. These five steps were then used to analyse each data set as each phase of the interviews were completed. Each set of interview data was analysed in several different ways. Initially, data was analysed from each individual participant. Then data was analysed from a coach and coachee in the same partnership. Finally, data was analysed across a group of participants, for example all of the coaches or all of the coachees. In later stages it was also possible to analyse data collected across two different phases, for example analysing the coaches’ comments in Phase 2 together with the coaches comments in Phase 3.

4.11.3 Overall analysis of all data sets

In the final stage of data analysis both the results of the qualitative data and the quantitative data were related to each other as a means to answer the research questions and to provide a fuller and more complete picture of the phenomenon of teacher coaching in New Zealand secondary schools.

There are few suggestions in the literature regarding how qualitative and quantitative results can be integrated in mixed method designs, Erzberger and Kelle (2003) state “it is still difficult to obtain methodological advice on how qualitative and quantitative findings can be related to each other so as to allow valid inference” (p.458). However,
it is clear that whatever approach is designed in order to integrate results then this is a matter to be decided according to the requirements of the research purpose and questions (Brannen, 1992; Bryman, 1988, Creswell, 1994). In this way, this study placed the research questions at the centre of this final stage of data analysis.

Each research question was used as a starting point for analysis of the qualitative and the quantitative data together. The question was asked: What data has been collected that provides a finding that helps to answer this research question? Once all data results had been identified that provided some insight into the selected research question, then two further question were asked: Do these data results converge, supplement or contradict each other? What can be inductively inferred from the relationship between this data in relation to the research question? Subsequently, this form of logical inference was used to explore the relationship between each of the research questions and the different forms of data. In this way the different quantitative and qualitative pieces of the jigsaw came together to produce meta-inferences that provided a fuller picture of the phenomena of teacher coaching than either set of data could have produced on their own.

4.12 Quality assurance and inference quality
Within traditional single paradigm studies focused on collecting quantitative data issues of quality assurance are focused on reliability and validity. Reliability questions whether the results of a study are repeatable and whether the measures that are created for concepts in the social sciences are consistent (Bryman, 2008). Validity is focused on the integrity of the conclusions that are produced from a piece of research. Therefore, it explores if a research study explains or measures that which is presented in the original objective (Bryman, 2008). Both of the definitions of reliability and validity outlined above might be considered focused on concepts of measurement and testing and subsequently are more relevant to quantitative rather than qualitative studies. Lincoln and Guba (1985) suggest that reliability and validity are not relevant for evaluating the soundness of qualitative research and alternative criteria should be used. They suggest that qualitative studies should be evaluated by analysing trustworthiness and authenticity (Denzin & Lincoln, 1994; Lincoln & Guba, 1985). Trustworthiness is measured by considering: credibility; transferability; dependability; and confirmability, whilst authenticity uses a criteria of: fairness; ontological
authenticity; educative authenticity; and catalytic authenticity (Denzin & Lincoln, 1994; Lincoln & Guba, 1985).

Initially when mixed method approaches to research were presented they drew on the methods of maintaining quality assurance that are described above and had been previously designed for evaluating either quantitative or qualitative data. More recently, it has been suggested that studies using a mixed methods approach need to consider their own approaches to ensure that processes are systematic and rigorous and take into account the unique context, design features and possible threats to the quality of mixed methods research (Heyvaert, Hannes, Maes & Onghena, 2013; Ivankova, 2014; Teddlie & Tashakkori, 2009). Teddlie and Tashakkori (2009) proposed the term ‘inference quality’ to describe validity in the context of mixed methods research. Heyvaert et al. (2013) state that “inference quality in mixed methods research refers to the accuracy of inductively and deductively derived conclusions in a study or research inquiry” (p.302). Owing to the sequential and multi-phase design of this study, which drew on both qualitative and quantitative data findings in order to produce meta-inferences, it was appropriate to adopt the term inference quality in relation to evaluating the rigor of processes and conclusions presented by this research.

In order to develop a logical and robust approach to inference quality, this study drew on previous critical appraisal frameworks that have been developed to evaluate the methodological quality of primary mixed method research (Heyvaert et al., 2013). Heyvaert et al. (2013) identified a number of previous studies that have presented criterion for evaluating the quality of mixed methods research (Alborz & McNally, 2004; Bryman, Becker & Sempik, 2008; Caracelli & Riggin, 1994; Creswell, 1994; Dellinger & Leech, 2007; Dybå, Dingsøyr & Hanssen, 2007; O’Cathain, Murphy & Nicholl, 2008; Pluye, Gagnon, Griffiths & Johnson-Lafleur, 2009; Sale & Brazil, 2004, Teddlie & Tashakkori, 2009). From these studies Heyvart et al. (2013) drew a range of criterion that should be used when considering inference quality in mixed methods research, these were: the theoretical framework; the research aims and questions; rationale for mixed methods; criteria for the quantitative part of the study; criteria for the qualitative part of the study; sampling and data collection; data analysis; context; impact of the investigator; and transparency. Table 4.1 overleaf shows how the research design of
this study has met the criterion presented by Heyvart et al. (2013) in order to ensure systematic and rigorous processes. Descriptions of the four remaining criteria and how quality was maintained in these stages of research are described in further detail beneath the table.

**Table 4.1** Criterion relating to inference quality in mixed method research studies  
(Adapted from Heyvaert et al., 2013)

<table>
<thead>
<tr>
<th>Criterion for ‘inference quality’ in mixed methods research and references for which literature supports each individual criteria</th>
<th>Questions related to each individual criteria in order to explore the validity of this study</th>
<th>How this study has met each individual criteria and has achieved inference quality</th>
</tr>
</thead>
</table>
| Theoretical framework  
(Caracelli & Riggin, 1994; Creswell & Plano Clark, 2007; Dellinger & Leech, 2007) | Is an appropriate theoretical framework presented that supports mixed methods described?  
Does the conceptual framework guide the selection of quantitative and qualitative methods? | The theoretical framework underpinning this thesis is pragmatism. A pragmatic approach is justified by the exploratory problem solving nature of the study, its practical intent and the research questions. The pragmatic approach guides the selection of both quantitative and qualitative methods that best explore the phenomena of teacher coaching. |
| The research aims and questions  
(Bryman et al., 2008; Caracelli & Riggin, 1994; Creswell Plano Clark, 2007) | Is the mixed methods approach relevant to the research questions?  
Does the use of mixed methods match the stated purpose for combining the method types?  
Are questions identified as requiring mixed methods? | The research questions demand investigation of teacher coaching at both a national and local level. By selecting methods that can collect quantitative data from 334 schools and alternative methods that can collect rich qualitative data from a small selection of individual coaches the research questions are most effectively answered. |
| Rationale for mixed methods  
(Bryman et al., 2008; Caracelli & Riggin, 1994; Dybå et al., 2007; O’Cathain et al., 2008) | Is a rationale for combing methods provided? | The selection of methods that collect both qualitative and quantitative data best answer the research questions and provide a deeper understanding of teacher coaching than a single method would allow. |
| Sampling and data collection  
(Alborz & Mc Nally; Creswell & Plano Clark, 2007; Dybå et al., 2007) | Is it clear that the researcher knows the reasons that both types of data are needed and these reasons are clearly stated? | The research questions demand data collected at a national level from 334 schools and also the opinions of individual coaches. These requirements drive the need for both types of data. |
Data analysis
(Alborz & McNally; Caracelli & Riggin, 1994; Creswell & Plano Clark, 2007; Dellinger & Leech, 2007; Dybå et al., 2007, Teddlie & Tashakkori, 2009)

Was analysis of data from different method types conducted systematically?
Were techniques used to analyse data collected from the different method types appropriate?
Were techniques used to produce meta-inferences appropriate?
Analysis of the quantitative data was completed using computer programme SPSS which is a reliable tool for analysing questionnaire data. A general inductive approach was used to analyse the data from the interviews. A form of logical inference was used to explore the relationship between each of the research questions and the different forms of data, so that meta-inferences were created.

Transparency
(Bryman et al., 2008; Creswell & Plano Clark, 2007)

Is transparency provided about the nature and content of the employed procedures?
Is a visual diagram provided of the research design?
One visual diagrams is provided that presents the phases and methods of the research design. Throughout the methodology chapter detailed descriptions and justifications are provided regarding the reasons for employing a mixed methods design.

4.12.1 Criteria for the quantitative part of the study

In relation to inference quality, the focus for collection of the quantitative data was the quality of section one of the questionnaire – was it designed and administered using robust processes and therefore did it yield results that were valid and reliable? In terms of this study the issue of sample representativeness was not an issue, owing to the fact that the research questions demanded a sample of all secondary schools in New Zealand and all 334 secondary schools were sent the questionnaire. Therefore, validity in relation to the collection of quantitative data in this study focused on questionnaire design and if the questions in section one of the questionnaire measured what they were supposed to be measuring. In this way, internal validity, external validity and reliability were all considered in relation to section one of the questionnaire.

Internal validity is described by Bryman (2008) as a “concern with the question of whether a finding that incorporates a causal relationship between two or more variables is sound” (p.694). Whereas external validity is concerned with if the results of a study can be generalised beyond a specific sample and reliability focuses on the degree to which a measure of a concept, such as a questionnaire, is stable (Bryman, 2008). In order to achieve high levels of internal validity, external validity and reliability in this study, five processes were put in place. In terms of question design a detailed literature review was carried out, so that concepts relating to teacher coaching used in the questionnaire were relevant to recent discussions regarding teacher coaching.
in education. Furthermore, the format of the questionnaire was indicative of rigorous design features described in the literature. Once a draft of the questionnaire was created it was piloted with four programme leaders who had been selected as the Phase 4 sample, which allowed any confusing questions or inconsistencies to be changed. By sending the questionnaire to all secondary schools in the country this strengthened the external validity and the possibility of generalising Phase 1 findings. However, it should be noted that just under a third of secondary schools replied. The use of Google Forms to create and distribute the questionnaire meant that each respondent received and completed the questionnaire in exactly the same manner. Finally, all the quantitative data input and statistical analysis was checked by a statistician who was experienced in carrying out statistical analysis using SPSS. In this way, the five processes outlined above allowed this study to achieve rigorous processes when collecting and analysing the quantitative data from the questionnaire.

4.12.2 Criteria for the qualitative part of the study

The evaluation of the quality of the research focused on collecting qualitative data was based on Lincoln and Guba’s (1985) criteria for measuring trustworthiness, which is seen as an alternative method of establishing and evaluating validity and reliability (Bryman, 2008). Bryman (2008) explains that the criteria of credibility, as a measure of a study’s trustworthiness, is concerned with the “several possible accounts of an aspect of social reality” (p. 377) and how credible is the account of a social situation offered by a researcher. One of the key approaches used in order to achieve trustworthiness when collecting qualitative data for this study was triangulation.

The research design of this study allowed for the data collected to be analysed through three different types of triangulation that included two methods, multiple participant perspectives and two different periods of time (Stake, 1995). The quantitative findings collected by the closed questions presented in the national questionnaire were compared with opinions garnered from the open questions in the same questionnaire. Both of these sets of data were also compared with the aggregated opinions of the programme leaders, teacher coaches and coachees provided in the Phase 2, 3 and 4 interviews, thus allowing for methodological triangulation to occur. Furthermore, the data collected from the interviews gathered from each individual coaching partnership in Phases 2, 3 and 4 allowed multiple opportunities for cross data analysis to occur. In
this way, conclusions drawn from different coaching partnerships could be compared and contrasted with each other. With interviews being conducted with programme leaders, coaches and coachees this also allowed for opportunities of cross case analysis of different groups, for example only the perceptions of programme leaders or only the perceptions of coachees (Stake, 1995).

A further focus of inference quality regarding the qualitative data collection in this study related to the concept of transferability. Subsequently, in this study the possibility of transferability has been enhanced by providing throughout chapters three, four and five a detailed description of the research context and the “assumptions that were central to the research” (Trochin, 2000, p. 1). This then provides others who may be interested in transferring the findings to different contexts with adequate information to make this transfer possible (Bryman, 2008; Lincoln & Guba, 1985; Trochin, 2000).

A final technique was employed in order to support rigorous processes in the collection and analysis of qualitative data. This involved a structured attempt to remove any source of bias from the questions used in the interviews by employing a strategy of respondent validation. This was carried out by clarifying with the participants at the interview if they understood each question and afterwards providing them with an electronic copy of the transcript to offer them the opportunity to comment on any inaccuracies. This process did not identify any significant inaccuracies in the data.

4.12.3 Transparency
Baskin (2015) describes the concept of transparency as the premise “that research is meticulous and objective so the results are valid and credible” (p. 1). In order to ensure that transparency has been adhered to researchers should adopt a descriptive and detailed approach to documenting all the relevant steps, decisions and strategies used for checking the data collected throughout the research study (Lincoln & Guba, 1985; Trochin, 2000). Accordingly, in this study, throughout each chapter the trustworthiness criteria of transparency was strengthened by clearly outlining all stages of the research process. In each section there is a clear explanation of how and why decisions were made, thus ensuring that the data collected and each of the meta-inferences produced can be tracked in a transparent way back through the findings, data analysis and data
collection in order to clearly show a conceptual pathway of logical inference from the research questions through to the final conclusions.

4.12.4 Impact of the researcher

It is necessary to talk about ourselves as the researcher in a suitably transparent way so that others are able to understand the influence that our presuppositions and experiences have had on the choices we have made in the research process (Mruck & Breuer, 2003). Bryman (2008) describes the term of reflexivity as the method that researchers use in order to reflect upon the implications of their own knowledge, values and bias on the subjects and situations which they investigate. Lincoln and Guber (2000) support Bryman (2008) when they suggest that reflexivity is a conscious acceptance of our self as both researcher and respondent, they state:

Reflexivity forces us to come to terms not only with our choice of research problem and with those with whom we engage in the research process, but with ourselves and the multiple identities that represent the fluid self within the process of research itself. (p.183)

Three tools were used in this study in order to allow the reader to engage with the impact of the researcher on the topic of study and choices made throughout the research process. Firstly, the researcher engaged in regular supervision meetings that included reflective conversations. Secondly, detailed descriptions were provided in each part of the thesis explaining why choices were made and providing an explanation of how logical inferences were arrived at. Finally, the researcher maintained a research journal in which choices were recorded so that inferences, meta-inferences and conclusions could be tracked backed to raw data. The researcher also used the journal as a space for the reflexive use of self-interviews as a means to become aware of their own interests and presuppositions in the research process and to avoid systematic errors (Bolam, Gleeson & Murphy, 2003; Mruck & Breur, 2003).

4.13 Ethical issues

Typically, ethical issues can be viewed through both a philosophical and a practical lens. Philosophically the debate explores the issue of personal sacrifice, versus benefits for the greater community (Wilkinson, 2001), whilst practically concerns focus on protecting people and as a result minimising the harm to participants. Therefore,
in this study it was not acceptable to place an unnecessary burden on any staff member in one of the participating schools, even though the researcher may have believed that the benefits for the educational community were of greater importance.

Protecting the rights of individual participants is at the core of ethical issues in educational research. In terms of ethical considerations relating to studies in which human participants are used, it is important to look after people’s welfare, maintain confidentiality, protect their safety and observe any social sensitivities (Irvine & Gaffikin, 2006). Regarding qualitative research, Halai (2006) states that there are five key ethical principles that are common across the board. These include: “a) informed and voluntary consent; b) confidentiality of information shared; c) anonymity of research participants d) beneficence or no harm to participants; and e) reciprocity” (p.5). From a practical perspective, these key principles can be met by ensuring that participants in the study have been given as much information as possible in relation to what taking part will involve and that their anonymity is preserved throughout the research (Gibbs, 1999).

Before commencing this study the researcher submitted and gained ethics approval from the relevant committee at Unitec. In order to address the ethical issues of consent and preservation of individuals’ rights in this study, participants were provided with information sheets, see Appendix 7 and consent forms, see Appendix 8, that outlined the details of the study and what their taking part would involve. In these documents the key elements of the research were presented, including: purpose; procedures; time period; risks; benefits; and a statement that participation was voluntary and participants had the right to withdraw from the study (Halai, 2006). Participants were also provided with the opportunity to ask questions regarding the study, before signed consent was obtained from those taking part and from the Principal and BOT chairperson of each of the four schools involved in the interview stages. By providing participants with as much information as possible regarding the study this reduced any possibility of deception and minimised the harm of the research.

Psychosocial harm of the study was minimised by making sure that the privacy of participants was protected and their school name or personal details were not revealed
in the findings, thus using pseudonyms throughout the work. It was also ensured that information collected in the semi-structured interviews was made available for the participants to review, change or detract if they so wished and any information collected in the course of the study was secured safely.

Overall, this chapter has presented the theoretical rationale, the research design and implementation of methods used in this study. In the next chapter the findings that were produced by these research methods will be presented.
CHAPTER FIVE: FINDINGS

5.1 Introduction

Chapter Five presents the findings of this study. The exploratory nature of the five research questions provided the driving force of this thesis and led to the philosophical grounding of this study within a pragmatic paradigm. Subsequently, this study has investigated practical problems and endeavours to reach conclusions that will offer solutions to the research questions and further the understanding of teacher coaching in New Zealand secondary schools. In this manner, the research questions form the core foci of this study and provide a valid structure in order to present the findings chapter.

The findings chapter of this study has been organised using research questions one to four. Research question five has not been used in the structure of the findings chapter because it enquires into how this study can contribute to building a theory of teacher coaching and therefore will be explored in the later discussion chapter. By using research questions one to four to structure the findings chapter this provides four sections:

The ways that school leaders are using teacher coaching in New Zealand secondary schools.

The reasons why school leaders are adopting teacher coaching as a method of professional development in New Zealand secondary schools.

The features of teacher coaching programmes which have the greatest impact on developing teachers’ practice and improving student outcomes.

The tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in New Zealand secondary schools.

Under each of these four headings the findings have been organised using themes created when carrying out the data analysis. Therefore, under the heading ‘The
reasons why school leaders are adopting teacher coaching as a method of professional development in New Zealand secondary schools', findings relevant to this topic have been presented in thematic subsections such as ‘to develop all teacher’s practice’ or ‘to support newly qualified teachers’. In the first instance these themes were created using statements provided by the national questionnaire, which in turn had been established from the original review of the teacher coaching literature. However, as the analysis process of the data took place, further groups were created and added to the structure of the findings chapter. In this way, the final structure of the findings chapter was provided by the research questions and the themes established by the data analysis process.

In order to maximise the benefits of a mixed-methods approach, within each of the sub-themes presented in the findings chapter the quantitative data collected by the questionnaire and the qualitative data collected in section two of the questionnaire and the interviews have been presented together. Tables presenting the results of Chi-Square Tests for variables showing significant relationships were placed in the appendices. Triangulation of methods, perspectives and time were used in a complementarity model of triangulation in order to enhance the reliability of the study. Each research question was used as a starting point for analysis of the qualitative and the quantitative data together. The question was asked: What data has been collected that provides a finding that helps to answer this research question? Once all the data results had been identified that provided some insight into the selected research question and the findings had been organised into themes, then two further questions were asked: Do these data results converge, supplement or contradict each other? What can be inductively inferred from the relationship between this data in relation to the research question and the themes? Subsequently, this form of logical inference was used to explore the relationship between each of the research questions, the themes and the different forms of data. In this way the different quantitative and qualitative pieces of the jigsaw came together to produce meta-inferences that provided the richest picture possible of teacher coaching.

Within the findings structure described above there are comments presented from the interviews conducted with participants in Phases 2, 3 and 4 of the data collection.
As described in the methodology chapter of this study these participants were selected using both purposive and convenience sampling in order to select a broad range of different teacher coaches and their corresponding coachees and programme leaders. Table 5.1 below presents the interview participants and the coding label used to identify them in this findings chapter. The five types of coach selected were: a literacy coach in a low decile co-ed school; an external coach in a different single sex religious school; a Teach First coach in a single sex religious school; a Board of Trustees funded coach; and a Specialist Classroom Teacher in a mid-decile co-ed school. By choosing two different partnerships operating in the same school, this also allowed the study to investigate if different partnerships in the same location operated in different ways. Subsequently, the coding label ‘Programme Leader 2’ was not used in order to maintain consistency between the numerical coding labels given to the programme leader, coach and coachee from the same organisation.

Table 5.1. Interview participants and coding labels used to identify participants in the findings chapter

<table>
<thead>
<tr>
<th>Programme Leader 1</th>
<th>Coach 1</th>
<th>Coachee 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy Principal in a co-ed, high decile school</td>
<td>A BOT funded coach</td>
<td>An early twenties teacher in their second year of teaching</td>
</tr>
<tr>
<td>Coach 2</td>
<td>A Specialist Classroom Teacher</td>
<td>Coachee 2</td>
</tr>
<tr>
<td>Programme Leader 3</td>
<td>Coach 3</td>
<td>Coachee 3</td>
</tr>
<tr>
<td>Principal in a mid-decile, single sex, special character school</td>
<td>A Teach First NZ coach</td>
<td>An early thirties recent graduate who had previously worked in commerce and was training to teach through the Teach First NZ programme</td>
</tr>
<tr>
<td>Programme Leader 4</td>
<td>Coach 4</td>
<td>Coachee 4</td>
</tr>
<tr>
<td>Deputy Principal in a low decile, single sex, special character school</td>
<td>An external coach, with their own business</td>
<td>A late thirties recent graduate who was in their second year of teaching</td>
</tr>
</tbody>
</table>
5.2 Research question one: The ways that school leaders are using teacher coaching in New Zealand secondary schools

In this section the findings data is presented in relation to research question one ‘In what ways are school leaders using teacher coaching in New Zealand secondary schools?’ Data are presented from both the national questionnaire and the Phase 2 and 3 interviews with coachees and coaches, and the Phase 4 interviews with programme leaders.

5.2.1 The overall use of teacher coaching in New Zealand secondary schools

Of the 94 professional development leaders who responded to the national questionnaire, 93% perceived that they were using some form of teacher coaching in their secondary school and 7% replied that teacher coaching is not used in their school. However, one of the issues regarding collecting data about teacher coaching was raised immediately after the questionnaire had been distributed when two respondents replied to the questionnaire email ‘what is your definition of teacher coaching?’ Although this reply was provided by only two professional development leaders out of 334 secondary schools in the country it did raise the issue of the challenges of defining teacher coaching.

5.2.2 Making the choice to use teacher coaching

The data from the national questionnaire showed that 81% of respondents perceived it to be the senior leaders in their schools who had chosen to adopt teacher coaching as a form of support. Senior leaders were also tasked with choosing personnel to be teacher coaches, with 64% of respondents suggesting that the most common method used to choose teacher coaches was ‘teachers identified as being effective being asked by senior management’. Only 20% of respondents believed that teacher coaches were chosen through a process of advertising for the role and interviews being held, which would be a requirement of the Ministry of Education for any teacher coaching role with remuneration attached.
The relationship between the two variables of ‘senior leaders choosing to use teacher coaching as a form of teacher support in a school’ and ‘senior leaders identifying effective teachers to become teacher coaches’ was identified as being statistically significant (Chi-Square=15.533, p-value=0.000), suggesting that in schools where senior leaders are choosing to adopt teacher coaching they are also then choosing who should become the teacher coaches. This relationship suggests a high level of senior management control over the teacher coaching programmes operating in these schools. In contrast, only 17% of professional development leaders identified teachers as the people who chose to implement teacher coaching as a form of teacher support in their school. A statistically significant relationship (Chi-Square =9.050, p-value=0.03) was identified between the variables of ‘schools in which teachers chose teacher coaching as a form of teacher support’ and those that chose ‘all staff to be trained as teacher coaches’, suggesting that in schools where teachers made the initial decision to adopt a programme of teacher coaching then it was most common for these schools to train all staff as ‘peer’ coaches.

The Phase 4 interviews with all four of the programme leaders reflected the findings of the questionnaire, in that in each of the four schools it had been the senior leaders who had made the initial decision to adopt teacher coaching as a form of professional development. Like 20% of respondents in the questionnaire, the four programme leaders interviewed in Phase 4 of the study suggested that they had chosen the teachers to become expert teacher coaches through a process of internal advertising and interview. It was not clear in the programme leader interviews why they had adopted teacher coaching over other forms of professional development.

5.2.3 The number of teacher coaches in an organisation

In the national questionnaire there was a wide range of responses regarding how many teacher coaches operate in each New Zealand secondary school, 8% of respondents stated they had one teacher coach operating, in contrast 13% of schools were using all teachers in a teacher coach capacity. There was a statistically significant relationship established between the two variables of ‘how many teaching staff (including part-time) work at your school?’ and ‘how many teaching staff operate
as teacher coaches in your school?’ (Chi-Square=44.776, p-value=0.040), suggesting that there is a link between the number of teaching staff working in a school and the number of coaches that operate.

The relationship between school size and the number of teacher coaches employed was also reflected in the findings provided by the Phase 4 interviews, as the two smaller schools, 600-900 students, employed 1-3 teacher coaches; whilst the larger schools of 1900+ students each employed more than ten teacher coaches. Programme Leader B explained how lack of funding at their low decile school had influenced their ability to fund more coaches and therefore their programme design, they stated, “this is a decile 1 school. It’s all about resources and money, it’s the same thing for schools like this, you just cannot afford to appoint two of them”.

5.2.4 The forms of teacher coaches used in New Zealand secondary schools

The national questionnaire asked participants to identify the most common form of teacher coaches used in their schools. Three forms of teacher coaching approach were presented in the question:

- Expert coaches - staff from within a school who hold an identified teacher coach position
- Peer coaches – colleagues coaching each other
- External coaches - facilitators from external agencies coming into a school to coach

The definitions of expert, peer and external were drawn from the literature in order to provide professional development leaders with common labels that for the purpose of the questionnaire would allow them to identify the form of teacher coaching most prevalent in their school. However, it was acknowledged that other definitions do exist and an ‘other (please comment)’ option was provided in order to accommodate schools that may have perceived that they use different forms of coaching than the three presented.

Respondents showed that a range of different kinds of coaches were being used in New Zealand secondary schools. The two most popular types of teacher coaches used in schools were ‘expert coaches’ - staff from within the school that hold an identified teacher coach position, 82% and ‘peer coaching’ – colleagues coaching...
each other, 62%. Much less popular were ‘external coaches’ - facilitators from external agencies coming into the school to coach, with only 26% of respondents using this form of teacher coaching. 57% of the professional development leaders stated that ‘expert coaches’ were the most common form of teacher coaches used in their school. ‘Peer coaching’ was stated to be the most common form of coaching used in 36% of respondent’s schools. Combinations of different coach types used in the same secondary school were also common with 38% of schools using a combination of peer and expert coaches; 17% using a combination of peer, expert and external; and 6% using a combination of expert and external. There was no statistically significant relationships established between the number of teachers operating in a school as teacher coaches and the most common forms of teacher coaching used in a school.

The descriptions provided by the four programme leaders in the Phase 4 interviews supported the results of the national questionnaire, in that all four programme leaders favored expert coaches drawn from the current teaching staff as the most common approach to implementing teacher coaching in their schools. All of the programme leaders cited positive reasons why they favored coaches drawn from the current teaching staff compared to external coaches brought into their organisations. Programme Leader 1 described the benefits as, “creating a sense of ownership. In terms of the whole school culture, our school is different because we have the teacher coaches in place”. Programme Leader 4 used current middle managers as teacher coaches which they saw as beneficial “because we wanted to build coaching and mentoring and leadership capacity within the school”. Programme Leader 3 also talked about the benefits of developing coaching capacity by using expert coaches from their current staff, they explained:

It’s about having someone on the ground every day, an external person’s not here all the time, so they’re just picking their luck when they come in. This guy is around the place all the time, he’s available to teachers, to comment, to ask a quick question, to do a random visit, for them to ask ‘can you come and see what I’m doing?’ So I think it’s crucial that there’s someone on the ground. (Programme Leader 3. Phase 4 interview)
Even though using expert coaches was the most popular teacher coaching approach amongst the respondents from New Zealand secondary schools, Programme Leader 1 also presented some of the challenges of using teachers from the current staff to become teacher coaches, they explained, “sometimes working with your colleagues is really hard, just with the power dynamics. I know Coach 1 has experienced some quite – not nastiness - but quite confrontational situations which they had to work through”.

Despite expert coaches being the programme leaders’ preferred choice of teacher coach, like 17% of the respondents in the national questionnaire all four of the programme leaders did not only rely on an expert coaching approach to fulfil all of the teacher coaching needs in their schools. Instead, at different times and for different reasons they all drew on external coaches or had peer coaching programmes running alongside their expert coaches, Programme Leader 4 explained, “having both insiders and outsiders is crucial, for some it’s much better to have the outside, for others it’s much better to have the inside, both of them work”. In relation to bringing expert coaches into their schools, Programme Leaders 1, 2 and 3 explained they had done this “to train others how to coach” or to “teach a particular strategy”. Whereas Programme Leader 4 discussed using external teacher coaches in situations where individual coachees were perceived to be “challenging”, either because they were involved in a competency process, or expert coaches had tried coaching a particular teacher and it was perceived that their teaching had not developed, they said, “both are good, you need both because you get situations where you get people on site who won’t listen to anyone who is here because they’ve lost perspective”. Surprisingly, Coach 4, who was operating as an external coach, perceived situations in which schools employ external coaches to work with individual teachers as “ambulance at the bottom of the cliff stuff” and that “the ideal is to upskill the people in the school to be coaches, to create an independent staff, grow capacity”. Three coachees also communicated both the benefits and the drawbacks of expert and external approaches in relation to the teacher coaching that they had experienced. Coachee 4 who had been supported by an external coach stated:

It was totally positive that she was an external coach. It was nice with Coach 4 because you knew it was her job and they took it
seriously, because that is their job and because you knew that they were a professional and in that respect you could talk about things from the point of view that they were there to support you and that was great. So I did not feel that I had to worry about if I said something wrong, you know there was no agenda. (Coachee 4. Phase 3 interview)

However, in contrast, Coachee 5 had appreciated having the support of an expert coach drawn from the current teaching staff because they knew each other and had worked together before, they said, “It’s just like a flow on from my practicum. At the very beginning when we sat down to have our first meeting, it was like well you know how I work and I said yeah I do and she said well I haven’t changed”. Coachee 3 had experienced both expert and external coaches, they appreciated that expert coaches were “always around”, however they also appreciated how external coaches could offer an “outside perspective” as long as they “had an understanding of the school environment and culture”.

Alongside expert coaching initiatives, Programme Leaders 1, 3 and 5 had also implemented peer coaching programmes in their schools as part of professional learning groups which occurred at weekly professional development sessions. All three schools used these school-wide professional development times to allow teachers to inquire into their own practice. In these programmes teachers were organised into pairs or small groups and were expected to play the role of ‘critical friend’ in order to support their colleague’s inquiry by asking reflective questions. It was common in these situations for staff to have had a limited amount of professional development time devoted to training in coaching skills such as active listening and reflective questioning. Coach 3 discussed the benefits of the peer programme that Programme Leader 3 had implemented, they stated “by promoting peer observations this year we have got cross curricular links going, and previously no one has actually gone into their classes with frequency and now these isolated people are encouraged to participate in these learning conversations”. However, in contrast, Programme Leader 5 presented some of the limitations of using all teaching staff as teacher coaches, they said, “half the teachers don’t even get it, they say why are we just
having a conversation and watching videos of other people having a conversation? They don’t actually get the concept of coaching”.

Overall, although training current staff to be teacher coaches is the most popular form of teacher coaching used in New Zealand secondary schools, all three approaches – expert, external and peer are commonly used. The findings show that programme leaders draw on different approaches of teacher coaching depending on the objectives of different coaching programmes, or the needs of individual staff members. There were benefits and drawbacks presented in the findings of the different coaching approaches, however all the coachees were appreciative of the coaching they had experienced and they could see the benefits of all the approaches. It was not evident in the interviews with programme leaders that they had investigated if a particular approach was more likely to meet a programme’s objectives compared to a different coaching approach.

5.2.5 The reasons why teacher coaching is most commonly used in New Zealand secondary schools
The Specialist Classroom teacher (SCT) was seen as the most popular use of teacher coaching in New Zealand secondary schools, with 90% of respondents using teacher coaching through this role. 50% of respondents suggested that the Specialist Classroom Teacher role was the most common reason teacher coaching was used in their school. Having 7% of respondents suggest that teacher coaching is not used in their school, was surprising when all secondary schools in the country are funded by the Ministry of Education to have a Specialist Classroom Teacher operating in their school.

School-wide professional development was also a popular way of using teacher coaching in New Zealand secondary schools, with 74% of respondents suggesting that they use teacher coaching in this way and 43% perceiving this to be the reason that teacher coaching was most commonly used in their secondary school. Using teacher coaching as part of a faculty based professional development initiative was seen as less common with only 54% of respondents using teacher coaching in this
way and only 29% seeing this as the most common reason for using teacher coaching in their schools.

Appraisal also featured as a common use of teacher coaching with 72% of professional development leaders suggesting that they used teacher coaching as part of their school’s appraisal process and 38% stating that this was the most common reason they use teacher coaching in their school.

23% of respondents used teacher coaching within the competency process and 5% believed this was the reason that teacher coaching was most commonly used in their school. As part of the competency process in schools it is a mandatory Ministry of Education requirement that teachers receive 10 weeks of support and guidance, so it is surprising that 77% of respondents do not perceive the competency process as one in which they use teacher coaching. There were also a small number of respondents who used teacher coaching within specific school based initiatives. These included the Te Kotahitanga Project, 10% of respondents, and Kia Eke Panuku, 3% of respondents, both of which are professional development school reform initiatives focused on supporting Maori students to pursue their potential.

It was also common for schools to state that they used teacher coaching in a multitude of different ways within the same organisation. 19% of respondents suggested that in their school they used teacher coaching as part of the SCT role, within the appraisal process, as part of the competency process and in both school-wide and faculty based professional development initiatives. Similarly, 11% of respondents used teacher coaching as part of the SCT role, within the appraisal process and for school-wide professional development purposes, in the same school.

The Phase 4 interviews with programme leaders and the Phase 2 and 3 interviews with coaches suggested the way that teacher coaching was being used in New Zealand secondary schools was possibly less structured and compartmentalised than the questionnaire findings suggested. Programme Leaders 1, 3 and 4 talked about teacher coaching being used in a range of different ways, for a range of different purposes and in a variety of different programmes. In this way the use of teacher
coaching in their schools reflected the 19% of respondents in the questionnaire who suggested that in their school they used teacher coaching as part of the SCT role, within the appraisal process, as part of the competency process and in both school-wide and faculty based professional development initiatives. Subsequently, the programme leaders did not know and were not concerned about which reason teacher coaching was most commonly used in their school, as the questionnaire had requested, but instead saw coaching as an approach that could be drawn upon if and when needed, be it through the Specialist Classroom Teacher role, their appraisal process, an external teacher training contract such as Teach First NZ, or for faculty and school-wide professional development. This viewpoint was also supported by Coaches 1, 2 and 3, who all coached teachers in a variety of different contexts, such as supporting beginning teachers, competency support or professional learning groups, however they did not see these different roles as separate nor in conflict. Coach 1 explained that they did not see their multitude of coaching roles as a problem “as long as you approach each coaching role with an element of consistency and professionalism. They have to believe in you, to want to listen to you and to want to respond to you”. There was no evidence provided by the programme leaders nor the coaches to suggest that they had considered the effects of running multiple coaching programmes within one school. It was not a subject that had been discussed amongst participants.

5.2.6 Key Findings: The ways that school leaders are using teacher coaching in New Zealand secondary schools

- 93% of professional leaders perceived that they were using some form of teacher coaching in their New Zealand secondary school.
- Predominantly senior leadership teams were shown to have chosen to implement teacher coaching in their schools and in many cases had also chosen how coaching was to be implemented and who would be selected to be the teacher coaches.
- It was not clear why senior leaders had chosen to implement coaching over other forms of professional development.
• There were a wide range of responses regarding how many teacher coaches operate in each New Zealand secondary school from one coach to the whole staff operating as coaches.
• Training current staff to be teacher coaches is the most popular form of teacher coaching used in New Zealand secondary schools.
• Senior leaders had not considered how choosing different coaching objectives may affect the impact of their programmes.
• The Specialist Classroom Teacher (SCT) was seen as the most popular use of teacher coaching in New Zealand secondary schools.
• It was common for schools to use teacher coaching in a multitude of different ways within the same organisation.
• Senior leaders had not considered the impact of operating a variety of different coaching programmes in the same school.

Overall, the findings above have shown that teacher coaching is used in some way in the majority of New Zealand secondary schools that responded to the national questionnaire. In some organisations it may only involve one coach operating to support provisionally certified teachers, whereas in other schools a plethora of teacher coaches are employed to implement new strategies, to support teacher inquiries, to implement the appraisal system and to provide guidance in cases of teacher competency. The next section of the findings will present why school leaders have chosen teacher coaching as a professional development strategy in their schools.

5.3 Research question two: The reasons why school leaders are adopting teacher coaching as a method of professional development in New Zealand secondary schools
In this section of the findings data will be presented in relation to research question two ‘why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?’ Data are presented from both the national questionnaire and the Phase 2 and 3 interviews with coachees and coaches, and the Phase 4 interviews with programme leaders.
Data from the national questionnaire relating to research question two was collected primarily from question nine in the questionnaire which asked: ‘What are the objectives of teacher coaching initiatives operating in your school?’ Respondents were then asked to tick all that applied from these possible objectives: to support newly qualified teachers; to support teachers identified as needing assistance; to implement a particular strategy, resource or programme; to work with those who have requested to work with a teacher coach; to develop all teachers’ practice; not sure; and other (please comment). These objectives had been identified from the literature as to why organisations have been using teacher coaching and were reviewed by those professional development leaders who had piloted the questionnaire. However, by providing the possibility of ticking ‘other (please comment)’ this allowed respondents to share other objectives of their teacher coaching initiatives than those presented by the current literature.

5.3.1 To support provisionally certified teachers
76% of professional development leaders indicated that the objective of the teacher coaching initiatives operating in their school was to support new teachers, which was by far the most common objective chosen by the respondents. There was a statistically significant relationship established between the two variables of ‘teacher coaches are seen as the most effective strategy to meet our development objectives’ and ‘to support newly qualified teachers’ (Chi-Square=10.910, p-value=0.0). This relationship suggests those schools which are choosing to use teacher coaching to meet their development objectives, perceive supporting newly qualified teachers as a development objective which is important. Prioritising the support of newly qualified teachers within schools’ development objectives, together with three quarters of respondents using teacher coaches to support newly qualified teachers suggests that throughout New Zealand teacher coaches are playing a significant supporting role in the support, guidance and development of provisionally certified teachers.

The important role that teacher coaches were playing in the support of provisionally certified teachers, which was confirmed by the questionnaire results, was also reflected in the comments provided by the teacher coach programme leaders interviewed in Phase 4. All four of the programme leaders indicated that one of the
many reasons that they used teacher coaches in their schools was to provide support and guidance to provisionally certified teachers who had either recently graduated from New Zealand universities or more experienced teachers recently arrived from abroad. There was no evidence to suggest that these two groups of provisionally certified teachers were treated differently. In all four organisations the Specialist Classroom Teacher was used to provide support and guidance for provisionally certified teachers, together with a faculty ‘buddy’. In these three way relationships the buddy was drawn from the same subject area as the provisionally certified teacher and their role was one of a mentor; whereas the Specialist Classroom Teachers were developing a coaching relationship supporting coachees to develop their pedagogical skills. Programme Leader 1 described the difference between these two roles, they explained that the faculty based buddy is a “mentoring relationship that lasts for two years and it’s ongoing, a really hands-on relationship and it’s about getting the person to reflect, but it’s also about giving advice and it’s also about the nuts and bolts”. Whereas they described the coaching role provided by the Specialist Classroom Teacher as focusing more on, “a collegial questioning model, where the coach or the person questioning is asking questions that causes the coachee or respondent to be reflecting about their practice and come to decisions”. These comments from Programme Leader 1 were indicative of all four programme leaders, who perceived the work of teacher coaches to be that of using lesson observations and reflective questioning to improve the pedagogical knowledge and skills of newly qualified teachers.

In Phases 2 and 3 all of the teacher coaches interviewed were supporting at least one provisionally certified teacher, alongside a wide range of other teacher coaching and leadership responsibilities. All five of the teacher coaches spoke positively about their experiences of coaching newly certified teachers. They all perceived the support and guidance that these new teachers were receiving as crucial in the development of their careers, Coach 1 stated, “I want them to be brilliant and I want them to enjoy their teaching. Coach 2 said, “it’s a huge commitment to start or to change a career and you think about how you can make that the best possible for a new teacher”. Coach 4 summarised the dual foci of support and encouraging reflection when working with a teacher new to the profession, they explained:
I think the biggest impact is teaching people to reflect and making people feel good about the fact that they can do it, so I think giving positive feedback, or giving them the feedback that keeps people going. I think that people see that there is light at the end of the tunnel, that they can do it. (Coach 4. Phase 2 interview)

In their Phase 3 interview, Coach 2 presented how over two years working with a provisionally certified teacher the focus of their coaching had changed from primarily supporting the new teacher, to later developing their teaching practice, they explained:

Initially it was very much about supporting and the induction of new teachers into the school, it moved way past that in the second half of the year...that was when the conversation began to change. They would ask things like – could I look at the clarity of their instructions, the way they’re teaching? Could I look at the equity of their relationship with their students? Really quite specific things. (Coach 2. Phase 3 interview)

Overall, it was clear from the Phase 2 and 3 interviews with all five coaches that they perceived one of the most important objectives of their teacher coaching role was to support provisionally certified teachers. As can be seen from comments such as those made by Coach 2 above, the nature of their coaching was not only to support the new teachers as they found their way in a new school, but more importantly to develop their teaching skills and confidence.

The results of the national questionnaire and the opinions of the programme leaders and teacher coaches regarding the use of teacher coaching to support newly qualified teachers were affirmed in the Phase 3 interviews with the coachees. All five coachees stated the teacher coaching they had received provided them with support and had improved their teaching ability. Coachee 4 stated, “if I didn’t have Coach 4 working with me last year I would have quit half way through the year, probably sooner, Coach 4 kept me in the game”. Similarly, Coachee 5 said, “It’s gone great. I honestly could not have done half of what I’ve done without their support”. However, there was some evidence to suggest that some coachees believed that they were spending too much time with their coach. Coachee 1 perceived that the requirement
to meet weekly, that was specified by their school in order to complete their provisionally certified support and guidance programme, was too much, they said, “you have to meet once every week for a whole term, I reckon that is way too much, I would probably half it”.

It is evident from the findings that using teacher coaching to support newly qualified teachers in New Zealand schools is a common motivation for school leaders to adopt teacher coaching as a method of professional development in their organisations. Overall, the perceptions of programme leaders, coaches and coachees shows that the support teacher coaches provide is highly appreciated and is perceived to be making a significant difference to the ability of new teachers to teach effectively.

5.3.2 To develop all teachers’ practice
In the findings of the national questionnaire, 69% of respondents indicated that one of the objectives of teacher coaching initiatives operating in their school was to develop the practice of all teachers. Owing to the fact that respondents could select more than one reason for choosing to use teacher coaching in their school, it could also be seen from the results that only 11% of respondents perceived developing all teachers’ practice as being the only reason that they have implemented teacher coaching in their organisation. The other 89% of respondents had implemented teacher coaching in order to develop the practice of all teachers alongside other objectives, most commonly to support newly qualified teachers and to support teachers identified as needing assistance.

There was a statistically significant relationship established between the two variables of ‘teacher coaches are seen as the most effective strategy to meet our development objectives’ and ‘to develop all teachers practice’ (Chi-Square=20.230, p-value=0.000). This relationship suggested those schools that are choosing to implement teacher coaching in order to support their development objectives perceive the development of all teachers’ practice as one of their salient goals. With 69% of respondents indicating they had implemented teacher coaching in order to develop all teacher’s practice and 51% of respondents implementing teacher coaching because it is perceived to be the most effective strategy to meet their
development objectives, then it is evident that teacher coaching is perceived by professional development leaders in New Zealand secondary schools to be playing a significant role in developing the practice of all teachers.

Further comments were provided by the professional development leaders who responded to the national questionnaire in response to one of the open ended questions that inquired into the benefits of teacher coaching programmes operating in their schools. Seven respondents provided answers that identified one of the benefits of teacher coaching programmes running in their schools to be an improvement in teaching practice. It was not clear from these seven respondents whose teacher practice was improved in terms of the coaches’, the coachees’ or both of these groups. Representative statements of this group of respondents included “the benefits of implementing teacher coaching in our school has been an improvement in teaching practice” or “It is a positive way of helping teachers to develop their practice”. One respondent unpacked in greater detail how this improvement occurs, they wrote:

The only way to shift teachers’ performance is through constant close observation and feedback with a respectful and trusting coach relationship. The coach must be a current classroom teacher with cross curricular schoolwide mana and be acknowledged for their excellence in classroom teaching. (Questionnaire respondent)

One professional development leader also highlighted the benefits for the coaches when they wrote, “coaching is also great professional and leadership growth for the coaches”. Both these comments from professional development leaders and the statistical findings of the questionnaire, show that teacher coaching is perceived by a range of secondary school leaders to be an effective method of developing all teachers’ practice in their school.

Two teacher coach programme leaders interviewed in Phase 4 also had adopted teacher coaching as a form of teacher professional development to develop the practice of all teachers working at their schools. Descriptions provided by the coaches and programme leaders in these two organisations provided insight into how schools were structuring teacher coaching programmes in order to develop all of their
teachers’ practice. In both organisations, the teacher coach programmes that aimed to develop all teachers’ practice were focusing on using peer coaches. Both schools were also using peer lesson observations and coaching conversations in a similar way. All staff had been given basic training in coaching conversations and then were paired together to support each other to carry out an inquiry into an element of their teaching practice. Coach 3 described the teacher coaching programme implemented in their school that was intended to develop all teacher’s practice, they explained:

What we do on our scheduled time on Wednesday morning in PLG, is we get into our Ako groups. There is a brief on what needs to be done in that 55 minute session and then they go through it. It involves teachers presenting what they have done so far, where are we up to with regards to our inquiry. (Coach 3. Phase 2 interview)

The peer teacher coaching programme structure described by Coach 3 presented how both Programme Leaders 1 and 3 had developed the coaching skills of all of their teaching staff so that peer coaching and an inquiry model could be used in order to develop the practice of all teachers. Coach 3 believed this model had led to “huge benefits in terms of teacher improvement”. Programme Leaders 1 and 3 both also perceived these peer coaching models to have been a success. Programme Leader 1 described a “culture of coaching and learning” had been created and Programme Leader 3 stated, “there has been a huge move from two years ago when staff would probably have struggled to talk to each other professionally, and at the same time the results have gone up”.

Together, the findings of both the national questionnaire and the programme leader and coach interviews suggest that teacher coaching has been established in a high percentage of secondary schools that participated in the research, as a form of professional development with the objective of developing all teacher’s practice.

5.3.3 To support teachers identified as needing assistance

Using teacher coaching to support the teachers identified as needing assistance was selected by 64% of professional development leaders as one of the reasons they had implemented teacher coaching in their organisations. No respondents identified supporting teachers who needed assistance as the only reason for adopting teacher
coaching as a professional development approach. Most commonly, respondents suggested they had implemented teacher coaching in order to support teachers identified as needing assistance, alongside teach coaching that supported implementation of a particular, strategy resource or programme, or teacher coaching used to support newly qualified teachers. There were no statistically significant relationships identified between this variable and any other variable presented in the national questionnaire.

All four programme leaders interviewed in Phase 4 discussed the concept of teacher coaching being used in order to support teachers who were perceived to be “struggling”. For a small minority of teachers this was due to formal complaints being laid by other staff, students or parents. In these cases the reasons why teacher coaches were needing to work with a staff member were evident in the details of the complaint which was written down and discussed by the teacher concerned and senior leaders. Teachers who were involved in a competency process of this nature were required by the Ministry of Education to have support and guidance for a specified period of time. Coach 4 described the challenge of working in these kinds of situations:

You get people entrenched in behavior, sometimes I get called in to do pre-competency and those are very challenging because the reality is people live off their memories, and the school is trying to get rid of those teachers, but they’ve left it too long and the teacher is trying to stay, that’s actually when it becomes challenging – because really you are meant to create a miracle. (Coach 4. Phase 2 interview)

Both the programme leaders and the coaches also discussed situations in which teacher coaches were required to coach teachers who had been identified by their colleagues as needing assistance and had been recommended to the teacher coaches, Coach 3 explained:

These interventions arise through various needs, that is where communication comes in, you could be alerted by the Principal, newly formed Directors of Learning or any teacher could come to me.

(Coach 3. Phase 2 interview)
In these situations it was less evident how those staff who had identified a need for another teacher to be coached were reaching these conclusions and if any structured evaluation method was being used. Coach 4, who was an external coach employed by schools in order to work with teachers identified as needing assistance, discussed the challenges of working with schools in this way, they explained:

Every school has got its own idea and what they mean is just fix that person, that’s the definition, that’s what they see as coaching. In some schools I never know what I am going into, they want you to fix this person and then next time it is someone different and you get half way through and it changes. (Coach 4. Phase 2 interview)

Coaches 1, 2, 3 and 4 all highlighted the challenges of working with experienced teachers who had been identified by other staff as needing coaching support, Coach 1 explained:

There is a big difference between teachers that have invited you in and those that haven’t. Those that have invited you in have got an investment in the idea of the project, they want strategies, they want to know what’s going on in the room and the others kinda of feel that it is a bit of an imposition. (Coach 1. Phase 3 interview)

A final context in which teacher coaches were used to support teachers identified as needing assistance was described by Programme Leader 1. In their school they had developed a ‘Year 10 project’ in order to “get coaches into teachers’ classes”. In this project, identified Year 10 students were observed by teacher coaches who then provided coaching support to their teachers. Programme Leader 1 perceived this project had worked in terms of allowing teacher coaches into a wide range of teachers’ classes. However, Coach 1 raised the issue that when working with teachers who had been directed to be part of this project then the teacher coach had a time allowance allocated to the them, whereas the teachers had not been given time to be coached.

The findings of this study have shown a significant number of school leaders in New Zealand secondary schools are employing ‘expert’ coaches from their own staff, or
‘external’ coaches in order to support teachers identified as needing assistance. It is
evident from the data collected that a range of staff may recommend their colleagues
to receive teacher coaching. It is less clear from the data how staff are reaching these
conclusions. Feedback from the coaches suggests that situations with teachers
involved in a competency process or those recommended by other staff create
greater challenges for coaches to engage with the teachers concerned, compared to
teacher coaching contexts that involve newly qualified teachers, or those in which
teachers have requested teacher coaching support.

5.3.4 To implement a particular strategy, resource or programme
In New Zealand, the national questionnaire showed 53% of respondents had adopted
teacher coaching in their school with the intention of implementing a particular
strategy, resource or programme. Only one respondent indicated this was their only
reason for choosing to adopt teacher coaching. Typically, professional development
leaders stated they had chosen to adopt teacher coaching in order to develop all
teachers’ practice at the same time as implementing a particular strategy, resource
or programme. The combination of these two objectives possibly suggests that
school leaders are using teacher coaching to support school-wide professional
development initiatives that involve the implementation of school-wide principles or
strategies.

A statistically significant relationship was identified between the variables of ‘teacher
coaches are seen as the most effective strategy to meet our development objectives’
and ‘to implement a particular strategy’ (Chi-Square=16.971, p-value=0.000). This
relationship suggests that schools which have a development objective that involves
the implementation of a particular strategy are drawing upon teacher coaching as a
professional development tool in order to support the implementation.

A statistically significant relationship was also identified between the two variables of
‘due to the research regarding professional development and teacher coaching’ and
‘to implement a particular strategy’ (Chi-Square=4.485, p-value=0.032). The
relationship between these two variables suggests that school leaders who have
adopted teacher coaching in their organisations, owing to the literature, have done so in order to support the implementation of a particular strategy.

The majority of the teacher coaches interviewed in Phases 2 and 3 and the programme leaders interviewed in Phase 4 of this study, did not perceive the explicit implementation of particular strategies, resources or programmes as one of the key reasons they had adopted teacher coaching programmes. However, they did all acknowledge that one of the roles of their teacher coaches was to share best practice which they had observed. However, Coach 5 had been employed specifically to be a literacy coach and subsequently perceived their role as implementing particular literacy strategies. Owing to the focus of Coach 5’s work being literacy strategies, the goals their coachee set were also focused on measures of the literacy levels of their students, they explained:

> Our goal is using the e-asTTle results and we have a look at all our below level for OTJs. I say that our goal is by midyear we need all these 2As to be at 3B, then we need to take a look at specific strategies that will push their literacy skills and levels up. (Coachee 5. Phase 3 interview)

If the coaching had been a success was evaluated through a process of speaking with the students about their reading and writing. The coaching was deemed successful if the students were able to “instantly recall a specific strategy for a specific reading passage and for solo that they were able to self-assess their own learning and reflect on what went well and what did not go well”. The respondents to the questionnaire and interviews with programme leaders showed that implementing particular strategies had been a less common reason for adopting teacher coaching in New Zealand secondary schools. However, Coach 5 showed that there were benefits to implementing teacher coaching for this purpose.

5.3.5 To work with those teachers that have requested to work with a teacher coach

Of the possible teacher coaching programme objectives presented in the questionnaire, the statement ‘to work with those that have requested to work with a teacher coach’ was selected the least. These findings suggest that those school
leaders who are implementing teacher coach programmes are placing greater emphasis on teacher coaching initiatives which direct teachers to be coached, rather than programmes that allowed teachers to self-select, or request teacher coaching support. 33% of professional development leaders perceived that one of the reasons for implementing teacher coaching in their school was to work with those who have requested to work with a teacher coach, of these respondents only one indicated that this was the only reason teacher coaching was used in their school. Typically the professional development leaders indicated that to work with those that have requested to work with a teacher coach was an objective that was worked upon alongside other objectives, most commonly to support newly qualified teachers. However, 19% of respondents indicated their teacher coaching objectives entertained all five of the statements offered by question nine of the questionnaire – to support provisionally certified teachers; to develop all teacher’s practice; to support teachers needing assistance, to implement a particular strategy and to work with those that have requested to work with a teacher coach. Evidently, in these schools the professional development leaders believed teacher coaching was a suitable strategy to support a wide range of teacher coaching objectives.

There was a statistically significant relationship established between the two variables of ‘teacher coaches are seen as the most effective strategy to meet our development objectives’ and ‘to work with those that have requested to work with a teacher coach’ (Chi-Square=4.149, p-value=0.042). This relationship appears to suggest that in schools where the professional development leader has implemented coaching programmes in order to meet their development objectives, then these school leaders are more likely to design less directive coaching programmes.

Another statistically significant relationship was also observed between the variables of ‘teacher coaches were provided by an external source such as the Ministry of Education’ and ‘to work with those that have requested to work with a teacher coach’ (Chi-Square=4.453, p-value=0.035). The relationship between these two variables appears to suggest that schools which have implemented teacher coaching due to the engagement of an external agency are more likely to allow teachers to choose to work with the coaches rather than be directed to do so.
A final statistical relationship was presented between the variables of ‘research regarding teacher coaching’ and ‘to work with those that have requested to work with a teacher coach’ (Chi-Square=3.976, p-value=0.046). This relationship suggests that those schools which opted to implement teacher coaching owing to the influence of the teacher coaching literature, are more likely to have created teacher coaching programmes that allowed teachers to choose if they should be involved or not.

Interestingly, all of the programme leaders and teacher coaches who were interviewed in Phases 2, 3 and 4 had not created teacher programmes that presented the main objective as allowing teachers to self-select if they worked with a teacher coach or not. This finding supports the results of the national questionnaire that saw the objective of ‘to work with those who have requested to work with a teacher coach’ as the least likely reason that professional development leaders would adopt teacher coaching programmes in their school. Like the questionnaire results, the interview findings showed the programme leaders and coaches were more likely to create a coaching programme structure which directed all staff to be peer coached as part of their weekly professional development, or directed all new staff to receive expert coaching as part of an induction programme.

All five coaches, when questioned, were enthusiastic about working with teachers who had approached them for support, however four of the coaches had experienced this only on “one or two occasions”. Coach 3 was the only one of the coaches who perceived this to be a regular occurrence which they described as “I am welcome in every class I’ve got individual teachers coming my way ‘Coach 3 would you mind coming in, you know I am trying something new’ and that’s really good”. Together, the results of the national questionnaire and the interviews show that adopting teacher coaching in order to support teachers who request support is less common, however comments such as those provided by Coach 3 show that opportunities do still exist for teachers who desire teacher coaching support.

5.3.6 To support teacher appraisal or competency processes
Implementing teacher coach programmes in order to support a competency or appraisal process was not presented as one of the statements available in the national questionnaire, as this was not a topic commonly explored in the teacher coaching
literature. However, one respondent to the questionnaire did write that their reason for using teacher coaching in their school was to “support our appraisal programme” and all four of the programme leaders and all five coaches did allude in their Phase 2, 3 and 4 interviews to using teacher coaching to support either appraisal or competency processes.

Programme Leaders 1, 3 and 5 all had designed appraisal processes that made use of teacher coaching in some form. Programme Leader 1 perceived the skill of coaching to be central to their appraisal process, they said, “I think if you get rid of the word appraisal and call it inquiry, then the inquiry facilitative questioning technique is central to what we do in appraisal”. In this context, the coaching was not necessarily being carried out by the schools’ identified expert coaches, instead coaching was being used as a skill that was adopted by appraisers in order to provide support to teachers who were following an inquiry process. Programme leaders 3 and 5 both had developed similar appraisal processes in which the evaluative or appraising aspect of their process was performed by senior leaders and the coaching element was effected by subject leaders who had been trained as teacher coaches. A recurrent theme in these interviews was that teacher coaching in the context of appraisal was not necessarily a role that was held and effectuated by an identified person, but more of a skill or approach that appraisers might use with their appraisees.

The competency process, used to support and evaluate teachers not meeting the Practising Teacher Criteria, was another context within which all the programme leaders and coaches discussed using coaching in their organisations. Coach 4 described a situation in which they were employed in this way:

There are some teachers that I am working with at the moment for example, who literally, I say to them you have got ten days and they are going to sack you so I am going to tell you what to do, I don’t normally do this but this is what we are going to do. (Coach 4. Phase 3 interview)

In regard to engaging teacher coaches to provide support in competency or appraisal processes, two divergent discourses emerged from the programme leader interviews. Programme Leader 5 identified a challenge created by using the Heads of Faculty as coaches within their appraisal process, they explained:
Yes, there is a bit of a conflict of interest sometimes, when you think about it... Usually it is the same person that is their teacher coach that is their appraiser, which is something which was brought up at the professional learning I went to, which is something we need to consider for next year. (Programme Leader 5. Phase 4 interview)

In contrast, when Programme Leader 3 was asked if they perceive any tensions between the same coach doing appraisal or competency support and implementing professional development in the school, they stated:

No, absolutely not. There’s a strong link and I think it’s time the profession got out of that attitude. At the end of the day Coach 3 is the first one to establish where we’ve got potential teaching issues and they lead a lot of our professional development around where identified people needed it. They don’t end up at the sharp end of anything, but at the end of the day people know that Coach 3 is in some classrooms because they need to improve what they’re doing. (Programme Leader 3. Phase 4 interview)

Furthermore, Programme Leader 3 did not believe Coach 3 had to maintain strict confidentiality within their coaching programmes. They explained that although ninety percent of the time they would not share individual coaching conversations, that participants did have to accept “it’s a profession, so these are children’s lives. There are kids at stake here. So this idea that you can be absolutely appalling and Coach 3 would not alert me to that is a nonsense really”. However, Programme Leader 3 reported that this approach had not been a problem for staff, which they believed was because Coach 3 was “well respected and staff know that they are trying to help them in the first instance”.

Overall, although the use of teacher coaching in order to support competency or appraisal processes was not overt in the teaching coaching literature, it was a theme that emerged from the qualitative data collected by this study. All four schools were in some way implementing teacher coaching in order to support teachers experiencing a competency process or to support their appraisal system. However, the approaches used by the different schools varied from coaching being used as a skill by colleagues to encourage inquiry by their peers, to experienced external coaches being employed
by schools to support teachers facing issues regarding the effectiveness of their practice.

5.3.7 An effective professional development model
Teacher coaching being perceived as an effective professional development approach was another theme that was not presented as an option choice in the national questionnaire. However, in the comments section of the questionnaire one of the reasons professional development leaders identified why they had implemented teacher coaching in their organisations was because they perceived it to be a “more meaningful” and a “better quality” approach compared to other professional development models. Eleven professional development leaders provided feedback which suggested they believed teacher coaching to be a superior approach to teacher professional development, these comments included statements such as, “we are continuing to learn as a whole staff and it is much more meaningful than one off professional learning days run for a few by an external professional”. Professional development leaders also appreciated that teacher coaching was a model of professional development that could be “personalised to individuals’ needs” and allowed teachers themselves “to identify where they have a need”. Furthermore, teacher coaching was also presented as a professional development model that had allowed schools to “develop school-wide strategies and help teachers implement these new initiatives”.

5.3.8 Cost effective
Cost effectiveness in relation to teacher coaching was not a topic explored in the coaching literature and therefore did not feature in the questionnaire statements enquiring into why school leaders opted to use teacher coaching in their schools. Nevertheless, five professional development leaders suggested in the comments section of the national questionnaire that they perceived teacher coaching to be a “cost effective” approach to professional development. These comments ranged from the simple “cheaper” to “it does not cost the school any extra money to implement”. One respondent also stated that it was “economic” and “targeted”. The link between long-term goals and cost was also highlighted by another professional development leader who commented that teacher coaching is a “cost effective way of delivering key goals of the strategic plan”. What is interesting about these responses are that they are in
direct contrast to comments made by Programme Leaders 3 and 4 who when interviewed both expressed the opinion that the high cost of employing teacher coaches was the only factor prohibiting them from scaling up their teacher coaching programmes. Programme Leader 3 stated, “this is a decile 1 school. It’s all about resources and money. I’d have more coaches if I could”. These contrasting perceptions suggest that the cost to schools of teacher coaches will be influenced by the overall funding the schools receive and may also be determined by the nature of the teacher coaching approach used. It was clear from the interviews with programme leaders that they were funding their teacher coach programmes in a multitude of different ways, for example: using professional development budgets, accessing Ministry of Education initiatives, being involved in the Teach First NZ teacher training programme, requesting funding from their Board of Trustees, or using funding provided for the Specialist Teacher role. However, it was explained by Programme Leader 4 that some of these funding pathways necessitate certain implementation requirements such as the number of hours each week spent coaching with a particular coachee or whole staff involvement in a particular project.

5.3.9 Improved outcomes for students
The final two sub-themes relating to why school leaders are adopting teacher coaching in their schools were both discussed in the teacher coaching literature, however they were often presented as an outcome of teacher coaching programmes rather than an objective in their own right. Thus, the connection between factors such as developing a teacher’s practice and improved outcomes for students was explored extensively in the teacher coaching literature. However in these contexts the change in a teacher’s practice was seen as the focus of the teacher coaching initiative and increased student achievement was presented as the targeted outcome of the intervention. Nevertheless, there were five professional development leaders, who in the comments section of the national questionnaire of this study, made a direct link between teacher coaching and improved outcomes for students. Two of these respondents specified that teacher coaching had led to an increase in “student achievement”, whilst other respondents provided less focused benefits which they characterised as “ultimately the students benefit” and “teachers have begun to link the effectiveness of their practice to student outcomes”. Two professional development leaders suggested
teacher coaching had created other benefits for students, which were “increased engagement” and “developed student agency”.

5.3.10 Developed a positive school culture
The ability of teacher coaching programmes to create a positive school culture and positive relationships between staff was discussed in the literature. However, developing a positive school culture was perceived to be less of an objective of those creating teacher coaching programmes and more a byproduct of initiatives implemented for other reasons such as to support provisionally certified teachers.

In the comments section of the national questionnaire, twelve professional development leaders reported that teacher coaching had benefited their school by creating a positive culture. Within these comments there were five sub-themes relating to the focus of the culture created by the teacher coaching. Three respondents believed teacher coaching had led to the creation of a “learning community” amongst staff. One person perceived teacher coaching had created a culture of “openness to self-review and change”. Two professional development leaders felt that teacher coaching had created a “culture of self-review” and yet two more respondents believed that teacher coaching had created a “culture of implementing best evidence” and “development of a risk taking environment”.

A further eleven professional development leaders around New Zealand perceived teacher coaching to be an approach that developed positive relationships between staff. Their comments were characterised by statements such as, “a coaching approach builds a more collaborative community” and “promotes positive professional relationships between staff”. Others attested to the fact that teacher coaching had led to increased professional conversations in the staffroom and that it was a process in which “teachers felt included” and “relational trust is higher than in other methods of professional development”.

In all three levels of interviews with programme leaders, coaches and coachees the participants concurred with the results of the questionnaire because they perceived that two of the unintended consequences of implementing teacher coaching programmes in their organisations were the development of a positive school culture
and positive relationships between staff. The coaches all talked of the positive
relationships that they had developed with their coachees, their comments were
characterised by Coach 1 who saw the most important part of a coaching partnership
to be “building up a trusting relationship”. How these positive intentions of the coaches
were then experienced by their coachees was clear throughout the five interviews with
the coachees, all of whom expressed their appreciation for the positive working
relationship that had been established with their coach, for example Coachee 5 said,
“I honestly feel that I can tell them anything, I have trust in them that I can talk about
anything”. Comments of this nature from professional development leaders, coaching
programme leaders, coaches and coachees suggest that although creating a positive
relationship amongst staff is not one of the initial objectives of teacher coaching
programmes implemented in New Zealand secondary schools it is an unintended
consequence of these teacher coaching initiatives.

5.3.11 Key findings: The reasons why school leaders are adopting teacher
coaching as a method of professional development in New Zealand secondary
schools

- Teacher coaches are being used for a host of different reasons in New Zealand
  secondary schools:
  - To support new teachers
  - To develop all teachers’ practice
  - To support teachers needing assistance
  - To implement a particular strategy, resource or programme
  - To work with those teachers who have requested to work with a teacher
    coach
  - To support teacher appraisal or competency processes
  - To develop a positive school culture
  - It is an effective professional development model
  - It is cost effective
  - It improves outcomes for students
- 76% of professional development leaders indicated that the objective of the
teacher was to support new teachers, which was the most common objective
chosen by the respondents.
There was no evidence to suggest teacher coaches were approaching provisionally certified teachers with different years of teaching experience in different ways.

Some newly certified teachers felt the number of hours that they were being coached was too much.

The objective of ‘to work with those that have requested to work with a teacher coach’ was the least likely reason that professional development leaders would adopt teacher coaching programmes in their schools.

Teacher coaching is being funded in a multitude of different ways, for example:

- Using professional development budgets
- Ministry of Education initiatives
- The Teach First NZ teacher training programme
- Requesting funding from their Board of Trustees
- Using funding provided for the Specialist Teacher role

Some of these funding pathways influence programme design decisions, such as how many hours a coach must spend with a particular coachee.

5.4 Research question three: The features of teacher coaching programmes which have the greatest impact on developing teachers' practice and improving student outcomes

In this section of the findings data is presented in relation to research question three ‘what are the features of teacher programmes, implemented in a sample of New Zealand secondary schools, that have the greatest impact on developing teachers’ practice and improving student outcomes?’ Due to the focus of this research question on a sample of schools, the majority of findings presented in this section were from the Phase 2 and 3 interviews with coachees and coaches, and the Phase 4 interviews with programme leaders. However limited findings are also presented from the national questionnaire in order to provide a national comparison and context for the findings collated from the selected sample of schools. The sub-themes which are used to organise this section were drawn from the interview questions, which in turn were created in response to the literature regarding teacher coaching and findings presented by the questionnaire.
5.4.1 The principles underlying teacher coaching partnerships

The principles underlying coaching partnerships was a sub-theme that was explored in the interviews with coaches and coachees in the Phase 4 interviews. The coaches were asked what, if any, were the principles underlying the coaching partnerships that they were operating within. Questions to the coachees focused on if they perceived that their coaches had explicitly outlined the principles of the partnership at the start or were the principles something that were implicit in the way that the coaches had engaged with the coachees.

In terms of having a structured approach to presenting their principles to a coachee at the start of a partnership, only Coach 4 believed this was a process they regularly used, they explained how they would start an initial coaching meeting “by putting some parameters around what’s this going to be, what’s this relationship mean, what’s my role, what’s their role”. However, Coachee 4 had not remembered or experienced this kind of introduction, when questioned regarding if the principles of the partnership had been outlined in the first meeting they said, “not really, all of a sudden they just showed up and started observing me, it may not have been as structured as other people liked but it worked out fine for me, it was good”. This was the experience of all five coachees who perceived that the start of their coaching partnership to be informal, each one commented in a similar way to Coachee 1 who said, “we just met up and they started talking to me”. Nevertheless, like Coachee 4, none of the coachees perceived that the lack of explicit rules or principles communicated at the start of their partnerships was an issue. Instead, it was clear from talking with all five of the coachees that positive relationships had developed organically with their coaches and any principles had been implicitly communicated through the actions of the coaches. All five coachees believed the partnerships with their coaches were trusting and positive, although these perceptions were not explicitly stated, they were implied in comments such as when Coachee 5 said, “they are just really easy to talk to, I can run any ideas past them” and Coachee 4 explained, “the benefits were mostly not feeling alone, and having someone that you knew was there to support you”. Coachee 5 also stated:

You’ve got to be able to allow your coach to see the worst of you and the best of you so that they can help you. You shouldn’t go into it thinking oh I’ve got to be so professional about all of this or what are they going to think of me, so relationship and trust – trusting that your
coach has got your back – that they want you to succeed as well. And I’ve really felt that. (Coachee 5. Phase 3 interview)

Although the coachees did not perceive that the coaches had clearly communicated core principles at the start of their partnerships, conversations with the coaches did present three principles upon which they founded their coaching partnerships, these were, trust, confidentiality and reflection. All five coaches communicated that trust and confidentiality were the principles that they believed were the foundation of all their coaching partnerships, Coach 3 stated “confidentiality is number one, often what they tell me I need to keep to myself”. Coach 2 agreed that initially when developing a coaching partnership with provisionally certified teachers “it was about building trust and building working relationships and advocacy for first year teachers”. However, the principle of confidentiality was not maintained in all coaching partnerships at all times, both Coach 1 and Coach 3 discussed situations involving safety, or competency that may lead to them discussing the content of coaching meetings with a senior leader, Coach 3 explained, “sometimes it’s a personal thing, curriculum needs, classroom management needs, so depending on that I do keep confidentiality but I pass on what I need to with the Principal and the Director of School in our meetings”.

The principle of trust and how it was developed and managed within coaching programmes was also a sub-theme that was discussed at the programme level by four professional development leaders who offered comments regarding trust in the comments section of the national questionnaire. One respondent wrote that teacher coaching programmes “require careful management to build trust”. This was supported by another leader who wrote how earlier attempts at setting up teacher coaching programmes had failed because “prior coaching had been perceived as judgement calls”. A third leader explained how by building trust they had established their coaching programme, they stated “we are early on this journey. Some resistance from those new to teacher coaching through concern over its usage. This is reducing as we improve relational trust”. Finally, another professional development leader concurred that creating a trusting culture was important, they stated, “we have devoted considerable time to developing an environment of trust”.

A third principle shared by all the coaches was their desire to use a reflective questioning approach that allowed the coachees to reach their own conclusions rather than be told what to do by the coach. This style of reflective questioning is also explored in the coaching strategies of this findings section, however underlying the
practical technique was a principle expressed by Coaches 1, 2, 3 and 4 that they wanted their coachees to think for themselves and to design their own solutions. Coach 1 described this principle as “promoting active reflection”, they said, “I try and get them to think how could you go about it differently or was that the right way to do it?”. Similarly, Coach 4 stated, “It’s not about me creating a helpless teacher, it’s about me creating a reflective and independent teacher, that’s the most important thing”. Coachees 1, 2 and 3 had all become aware that their coaches had typically used reflective questioning in order to challenge them to uncover their own solutions rather than telling them what to do, their comments were characterised by Coachee 2 who said, “there’s an idea there that they are not there to tell me what to do, there’s an idea there that she’s a guide to get me through the process and also like we can speak confidentially and there’s no value judgements”.

The findings show both those managing coaching programmes and the personnel who are engaging in coaching partnerships perceive the principle of trust as an important feature of effective teacher coaching partnerships. Amongst the coaches interviewed it was not common to present these principles explicitly to their coachees, however this was not perceived as a problem for the coachees who had implicitly understood coaches’ intentions and appreciated the positive and trusting relationships which had developed.

**5.4.2 Strategies used by teacher coaches**

This section of the findings focuses on strategies that teacher coaches used in their coaching partnerships. This sub-theme was developed from the coaching literature which shared a plethora of different strategies that coaches use in education worldwide. This study was particularly interested in features that participants believed had the greatest impact on developing teachers’ practice and improving student outcomes. Therefore the findings were collected from the interviews with coaches and coachees as their perspectives were most relevant to this sub-theme. All the coaches were asked ‘what are the coaching strategies that they use, which they perceive to be the most effective at supporting other staff to develop their practice and to positively influence student outcomes?’ Four key strategies were discussed by the coaches and coachees, these were observation, reflection, goal setting and record keeping.
All five coaches had founded their coaching partnerships on a series of classroom observations and subsequent coaching discussions. For Coaches 1 and 2 this involved timetabled 45 minute to one hour sessions each week. Coaches 3 and 5 used regular time slots, but also discussed how their observations could be impromptu when they just “dropped into” a coachee’s lesson. Being an external coach Coach 4 would visit Coachee 4 for two days each term and spend a day observing and conducting coaching conversations. All five coaches made some kind of notes when observing a class, which ranged from Coach 4 taking brief notes on a 20 minute segment of a lesson, to Coach 5 writing transcripts of a whole lesson. Coaches 3, 4 and 5 all made use of video recordings, Coach 3 said, “I constantly use my phone within the classrooms, so the students are used to that with a camera in their face”. Coach 4 explained the benefits of using video over simple observation:

We don’t use a lot of video clips in New Zealand but I think they’re the best because if I do an observation, which I do in New Zealand, it’s my word, ‘I saw you do this when you did this’ and they say ‘I didn’t, I don’t remember’. If you’ve got a video and we are watching it for the first time together they can see a lot of what they did so it takes away that oh yes she did or you interpreted it incorrectly. (Coach 4. Phase 4 interview)

All five coachees appreciated the observations and subsequent coaching conversations they had experienced with their coaches and they perceived that this process had improved their teaching, Coachee 2 stated, “every Thursday we’ve met, we’ve had lesson observations from different classes and we’ve got feedback on that…and I get the sense that I am developing as a teacher”. Similarly, Coachee 1 believed that Coach 1’s observations and feedback had improved the effectiveness of their teaching:

Coach 1 was telling me when he observed me there were certain areas of the class that I was missing out on, like I would focus on one side of the class and then I was leaving some people out, forgetting, just because there was a small number of students on one side so I was missing them out, they made me realise that, now I always teach to both sides of the class. So I thought that was real helpful. (Coachee 1. Phase 3 interview)
Two further benefits of classroom observations were also raised by Coach 5 and Coachee 2. Coach 5 discussed the opportunity when observing in Coachee 5’s class to gather “student feedback” as another form of evidence to help them reflect on their practice. Coachee 2 suggested another benefit of classroom observations was that it allowed Coach 2 to share examples of effective teaching amongst the staff, they said, “things that they’re seeing with others they are passing it on, so in a way disseminating what they believe is good practice”. Overall, either in person or recorded on a device, the use of regular lesson observations was a common strategy used by all of the teacher coaches and appreciated by the coachees who were able to articulate examples of how observations had led to improvements in their teaching practice.

As was discussed in the principles section of this findings chapter, the concept of self-reflection was discussed by both programme leaders, coaches and coachees as something that was important in order to encourage coachees to develop their own solutions and to allow them to own their pedagogical development. In a practical sense the principle of self-reflection translated into the coaches using reflective questioning in their coaching partnerships, which was a strategy that all of the coaches discussed. Coach 1 stated, “the idea of building teaching capacity is at the core of the teacher coaching role and part of that is reflective practice, you’ve got to ask questions and when you think you’ve got the solution you know you don’t necessarily bring that to the table”. As part of this process Coach 1 shared some of the questions they had used with Coachee 1, such as, “how could you go about that differently?” or “did you capture everyone by doing that?“. Coach 4 also described some of the reflective questions that they had used, “so you might ask, what does it mean if you did this? What did it mean when that happened?”. In this way Coach 4 explained that they “used questioning to edge them towards the bit I want to discuss rather than telling them I want to discuss this”. All of the coachees were aware that the coaches used a questioning technique in order to encourage self-reflection and they appreciated this approach, Coachee 2 said, “there’s an idea that they’re not there to tell me what to do” and Coachee 1 stated, “they plan basic questions but they relate to me, they relate to pedagogy and relationships with students and all that kind of stuff and then we just discuss in a really friendly environment how things are going”. Like classroom visits, regular coaching meetings were also a strategy used by all five coaches. The core of these meetings were using evidence collected from the observations and reflective
questioning techniques in order to guide the coachees to develop solutions to their teaching challenges.

Within the cycle of classroom observations and subsequent reflective questioning, all five coaches also talked about identifying with their coachees “focus areas” “work ons” or “goals”. In the Phase 3 interviews each of the coaches were asked if they believed there were any common themes shared by the different coachees that they had worked with throughout the year. All of the coaches expressed the opinion that each of their coachees were unique, Coach 1’s comment was representative of how all five coaches felt when they said, “No there’s been a variety of goals, people have different needs, so I need to investigate those needs and then respond probably a little bit differently to each one”. Similarly, Coach 3 stated, “I find it individual, individual needs are totally different. Coach 4 focused on the process of how they identify a focus area for different individuals in order to provide clarity, they explained:

  The ones that are really struggling you could come out with a list of 100 things that they’re not doing right, but how do you actually, I mean the job of the mentor or coach I guess is to think what’s the one thing if they change this to these two things they’ll get an enormous change.
  (Coach 4. Phase 3 interview)

Coach 2 provided an example of the kinds of foci they work together with their coachees to identify, they stated, “a big one has been focusing on the relationship between the teacher and the kids, so that it is a learning focused relationship”.

The coachees were all able to communicate the goals or focus areas they had identified with their coaches. Coachee 1 said, “the main thing for me was my management, like my time management and all that in the class, knowing when to set specific time limits on activities, and knowing when to stop and go onto the next activity”. Coachee 3 also was able to talk with clarity about their focus identified together with their coach, they explained:

  My goal with my junior class was doing RT (Reciprocal teaching) which was a school wide focus and I hadn’t done RT before so that was good…It was helping comprehension by breaking reading text down into steps and getting them to think. For the seniors I just
changed the way that I was teaching and assessing one of the NCEA units. (Coachee 3. Phase 3 interview)

Coachee 3 believed that by focusing on these goals there had been significant benefits for their students, particularly in the NCEA class in which they believed that the students had “understood the assessment more” which had improved their overall assessment grades.

A final strategy common to all of the coaching partnerships which were the focus of this study was the recording of discussions that had taken place as part of the coaching conversations. For those teachers that were provisionally certified there was a requirement as part of their registration process to record their actions and experiences as part of a two year support and guidance process. Each of the four schools had developed their own process for maintaining a record of coaching conversations which included either using a paper booklet or digital records shared as Google Docs or in the Microsoft OneNote programme. Across the five coaching partnerships explored as part of this study the four strategies of observation, reflective questioning, goal identification and record keeping were communicated to be the most effective and commonly used by coaches and experienced by coachees. It was not evident in the findings how coaches had chosen these strategies in the first instance, nor if coaches had considered the relationship between any of these strategies and the impact of their coaching.

5.4.3 Evaluation and impact of teacher coaching

The national questionnaire showed that gathering feedback from the coaches, 56% of respondents; and the coachees, 66% of respondents, was the most common form of evaluating if a coaching programme was having any impact. Student feedback, 47%, and student achievement data, 39%, were also popular methods used by professional development leaders to evaluate if teacher coaching programmes implemented in their schools were having any impact. The quantitative data from the national questionnaire was also accompanied by four comments from professional development leaders regarding the evaluation of the impact of teacher coaching. One respondent commented, “it’s too early to tell, we’ve just started doing this”. Another respondent wrote, “usually through self-review, SLT conversations and team leader meetings”,
two professional development leaders commented that they use “data” and “appraisal reflections” as strategies to evaluate coaching impact.

The range of methods communicated by professional development leaders that they used to evaluate the success or otherwise of teacher coaching programmes was also reflected in the interviews with programme leaders. All four programme leaders used a number of different evaluation methods to assess if teacher coaching in their schools was making a difference. However, typically the methods relied on participant’s perceptions. One of the objectives all four programme leaders shared was to support provisionally certified teachers to improve their confidence, pedagogy and teaching effectiveness. In order to measure this objective, the programme leaders collected feedback from their coaches and the provisionally certified teachers in the form of short interviews or questionnaires. Programme Leader 5 stated that, “I ask the beginning teachers when I do have conversations one on one how that support is going with their coach”, similarly, Programme Leader 1 explained:

We get feedback from the year 1 and 2 teachers about the usefulness of their coach and we tweak every year. They’re pretty frank when they’ve found someone who’s a more effective coach than another and they’ll talk about structure and nuts and bolts things as well as the quality of the conversations. (Programme Leader 1. Phase 4 interview)

A further evaluation strategy employed by all four programme leaders in order to evaluate developments in the effectiveness of provisionally certified teachers was through observations made by programme leaders either within lessons or in meetings. Programme Leader 3 said, “I think you have to use a bit of intuition, so an anecdotal group, listening to Ako groups talk. The learning conversations show understanding now and that’s a huge move from two years ago”. Programme Leader 5 explained:

I think that you can see that teacher coaching is working with what’s happening in the classroom. If you’ve got for example a beginning teacher who’s really thriving, really doing well with the kids, connecting with them, confident, happy in what they’re doing, then obviously you know that they’re getting what they need. (Programme Leader 5. Phase 4 interview)
Observing the positive changes in teachers’ practice was also commented upon by Coach 3 who said:

I walk in the classroom and you can actually see it happening, things are working in the classroom. The teacher’s demeanor has changed, they become lighter, they become more conversant with people around them, they start to come up to the staffroom. (Coach 3. Phase 2 interview)

In terms of evaluating the impact of teacher coaching programmes that did not only service provisionally certified teachers, Programme Leaders 1 and 3 discussed collecting a range of different sources of evidence in order to evaluate changes in a teacher’s practice and any consequential improvement in student outcomes. Programme Leader 3 said, “I would use a range of data and evidence, results have gone up steadily since Coach 3 has been in the job. Externally, ERO were absolutely raving about our process, so that was a great measurement, and staff feedback”. Furthermore, Coach 3 concurred with their programme leader’s perception when they explained how the school had changed due to the impact of their teacher coaching programmes, they explained, “across the school there have been huge benefits in terms of teacher improvement, in terms of aligned PD, in terms of results and data”. It was not evident in these conversations how programme leaders had isolated the effects of teacher coaching from other influences that typically exist within secondary schools.

The findings of the national questionnaire and the Phase 2, 3 and 4 interviews supported each other in that they showed schools were using a range of different strategies in order to evaluate the impact of their teaching coaching programmes. Most commonly schools are relying on feedback collected from coaches and their coachees. The majority of the evidence presented by programme leaders and coaches was anecdotal and was collected through informal observations or conversations.

5.4.4 Training of teacher coaches

Two Professional Development Leaders responded to one of the open questions in the national questionnaire that their greatest challenge in terms of implementing
teacher coaching in their schools was to provide suitable training. One respondent suggested that the challenge was “delivering effective PD for coaches to ensure they are suitably skilled to meet the demands of the role”. Whilst another leader who inferred they were aiming to get all staff to be coaches, was finding upscaling the training to be an issue, they wrote, “the challenge is to get all staff trained. We have a core group trained, but need to get all staff trained”. Once the issue of teacher coach training had been raised in the national questionnaire, then this topic was explored in the interviews with programme leaders and teacher coaches.

All four of the programme leaders acknowledged that in order to be effective there was a need for teacher coaches to be trained when they first gained a coaching position as well as ongoing training when in their role. Programme Leader 5 believed that there were three key areas effective training for teacher coaches should include, “reading about what is coaching, dealing with difficult situations and having open-to-learning conversations”. However, none of the programme leaders had developed specific teacher coaching training and instead had relied on the coaches themselves to organise their own training using external agencies. Programme Leader 3 explained that the training of Coach 3 had happened “by accident to start with, they went on a lot of professional development, with facilitators like Margaret Ross doing courses on motivational interviewing techniques”. Further external coaching training had been provided by the Ministry of Education for Coaches 1, 3 and 4 because they were also mentor teachers for the Teach First NZ programme, which involved specific training for those staff implementing this role in schools. Another aspect of externally provided teacher coach training was discussed by Programme Leader 1 who had encouraged their teacher coaches to enroll in an Auckland University paper which focused on mentoring and coaching skills, they said, “It is not a prerequisite, but I really encourage people to do that paper because it makes them far more effective and knowledgeable about the job that they are doing”. There was no evidence in the findings that programme leaders had considered the relationship between the impact of their teacher coaching programmes and the training of their coaches.

All five coaches concurred with each other and with the programme leaders that training for teacher coaches was necessary and appreciated. In their interviews coaches were asked if they had experienced any effective training and what should
best practice training for coaches include. Coach 4 was the only coach that had experienced what they perceived to be effective coach training, they explained:

In Norway they have workshops that the coaches go to so the basic education is the same and then it’s practice from there, practicing in the school and I’m certainly seeing a huge difference there because you are not undoing bad habits. The course runs for six days and they get to practice, so it's not just do it once. There are things that they have to take away and do between the sessions. That seems to work and they are doing that over a year, and they are using that approach more and more. (Coach 4. Phase 3 interview)

Of all the responses from the programme leaders and coaches the coach training described by Coach 4 above was the most structured and explicitly focused on developing teacher coaching skills and capabilities. However, Coaches 1, 2 and 3 also had a number of further suggestions that they perceived would be useful for coaches to experience as part of a teacher coaching programme, Coach 1 stated, “the art of open to learning conversations, that idea of a hunch or a hypothesis that can be challenged just using a conversation”. Coach 2 believed that exploring the literature should be an important part of a coach’s training, they said, “some really good readings for coaching in a booklet”. Coach 3 felt that meeting other coaches was important, they explained:

I would say to get out and observe other schools too. You could then gauge how well you’re doing as a coach by going into another school and see how teachers there are teaching with a coach. And more communication with people outside of the school and maybe if I was designing PD I’d say more liaising with people such as me, more SCTs, more networking between other teachers in similar roles. (Coach 3. Phase 3 interview)

In this way, it was clear from the findings that programme leaders and teacher coaches all believed some kind of training was necessary and appropriate for those fulfilling a teacher coaching role in New Zealand secondary schools. However, it was also evident from the findings that programme leaders had not developed training for their coaches and instead had relied on coaches to organise their own training by drawing on courses offered by external agencies. Subsequently, all five coaches had experienced very different coach training that drew on a wide range of facilitators, skills
and topics. Coach 4 was the only individual who had experienced explicit training specifically designed for teacher coaches, although this had been developed in Norway rather than New Zealand.

5.4.5 Key findings: The features of teacher coaching programmes which have the greatest impact on developing teachers’ practice and improving student outcomes

- Trust, confidentiality and reflection were perceived by participating coaches to be the foundation principles of their coaching.
- The four coaching strategies that were perceived by participants to have the greatest impact on developing teachers’ practice and improving student outcomes were:
  - Lesson observations
  - Reflection
  - Goal setting
  - Record keeping
- It was not evident how coaches had chosen these strategies or if they had considered the link between these strategies and the impact of their coaching.
- A range of strategies and indicators are being used to evaluate the impact of teacher coaching programmes, these include:
  - Feedback from participants
  - Student feedback
  - Student achievement data
  - Observation of participants
  - ERO feedback

Evaluation strategies are typically relying on participant feedback.

- Initial training for teacher coaches is typically organised by coaches who draw on a range of short courses, university papers or conferences. On going structured supervision of teacher coaches is not happening for the participants of this study.
5.5 Research question four: The tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in New Zealand secondary schools

In this section of the findings data will be presented in relation to research question four ‘what are the tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in New Zealand secondary schools?’ Due to the focus of this research question on a sample of schools, the majority of findings presented in this section are from the phase 2 and 3 interviews with coachees and coaches, and the phase 4 interviews with programme leaders, however limited findings are also presented from responses to the open questions in the national questionnaire. The sub-themes which are used to organise this section were drawn from the interview questions, which in turn were created in response to either comments provided by respondents to the questionnaire or the literature regarding teacher coaching.

5.5.1 The challenge of defining teacher coaching

Throughout the literature there was substantial discussion regarding defining the concept of coaching in education. Furthermore, there was also wide ranging discussion regarding the connection between the concepts of coaching and mentoring. The conceptual framework showed that different organisations in New Zealand are promoting coaching to fulfil different objectives and a national framework of coaching does not exist. Subsequently, when the national questionnaire was designed for this study, the researcher discussed with those participants who completed the pilot questionnaire if a definition should be included as part of the questionnaire instructions. However, feedback from the pilot participants suggested that by selecting one of many possible definitions this may cause those responding to the questionnaire to provide answers in a particular way. Consequently, the questionnaire was distributed without any definition included and immediately two respondents replied by email “what is your definition of teacher coaching?”. Furthermore, a respondent also replied in the comments section of questions 13 and 14 that their answer was dependent upon a definition of coaching, they wrote “again, depends on definitions”. These responses showed that for some of those involved in teacher coaching having a definition that is shared was important in order to further discuss, analyse or explore
the concept. Therefore, it was decided that due to the many different and subjective possible definitions relating to teacher coaching provided in the literature and the responses of those replying to the national questionnaire, that this was a topic which would benefit from being explored in the Phase 2, 3 and 4 interviews.

All three levels of interview participants were asked how they would define the teacher coaching which they had implemented or experienced. Each of the four programme leaders stated that they did not have a definition which they used school-wide or when discussing teacher coaching with staff. Nevertheless, each of the programme leaders did have a personal comprehension of the concept of teacher coaching that had influenced their understanding when designing and implementing teacher coaching programmes in their schools. Programme Leader 1 perceived coaching as both a relationship and also a set of skills, they explained:

I guess we don’t have a set definition, so the way that I think of teacher coaching is about relationships and a collegial questioning model, where the coach or the person questioning is asking questions that causes the coachee or respondent to be reflecting about their practice and come to some decisions. (Programme Leader 1. Phase 4 interview)

Programme Leader 3 understood teacher coaching in terms of the role that the teacher coach performs in their organisation, they stated, “I do not have a strict definition, probably someone who mentors and upskills teachers, does a lot of work around new teachers”. Programme Leader 4 believed that teacher coaching “provided accountability and it is an approach that is more likely to lead to a high quality discussion about teaching. It cuts out all the deficit stuff and just leads to people meeting each other more”. Similar to Programme Leader 1, Programme Leader 5 also perceived teacher coaching to be focused on reflection and the strategy of asking questions, they said:

In my own head teacher coaching is about asking the person the right questions, so that they can reflect on their own practice and the areas that they need to work on and learn from them, so it’s an inquiry cycle. (Programme Leader 5. Phase 4 interview)

All of the programme leaders perceived the concept of mentoring to be different to that of coaching. Overall, they believed that coaching involved a more specific skill set
than mentoring which they considered was more holistic and involved a teaching ‘buddy’ type of relationship. Programme Leader 1 explained:

In our school the mentoring relationship lasts for two years and it’s an ongoing, really hands on relationship and it’s about coaching and getting the person to reflect, but it’s also about giving advice and it’s also about the nuts and bolts. So I see mentoring as holistic, the whole package, whereas the coaching or the collegial questioning is something which is not an inclusive package, but a skill we want all teachers to have. (Programme Leader 1. Phase 4 interview)

Programme Leader 3 expressed that they perceived mentoring to be a “lower level of coaching” and a relationship in which the mentor “is a buddy that advises and gives advice”, in contrast to a coach who is “there to provide skills and improve people”. Programme Leader 5 concurred with the concept of the mentor as someone who fulfils the buddy role when they stated, “I think I see the mentor as being more alongside and supporting that person”, whereas they perceived the role of teacher coach to be more goal focused and as having a “specific end point”.

The strategy of using reflective questioning, which was presented by Programme Leaders 1 and 5 in their personal definitions of teacher coaching, was also a fundamental theme expressed in the coaching definitions provided by the teacher coaches. Coach 1 talked about coaching being an approach in which “you’re not really suggesting, you’re not coming up with solutions, you’re not the solutions person, you’re more the sounding board”. Likewise, Coach 2 characterised coaching as a critical friend role and Coach 3 described the coaching process as “facilitating without actually giving all the answers to the mentee”. Coach 4, the external coach employed by a variety of schools, agreed with the other coaches but also expressed an opinion about the importance of school leaders having a shared definition, they said, “not having a shared definition of coaching is a huge problem actually, I mean in my job not being part of the school, because every school has got its own idea and what they mean is just fix that person, that’s the definition, that’s what they see as coaching”.

When questioned, all of the coaches perceived the role of mentor to be a “buddy” role, often faculty based and somebody that walked alongside teachers to provide guidance and ideas. All of the coaches did not feel there were significant differences between
coaches and mentors and they moved between the role of coach and mentor as part of the different roles that they executed in their schools. Coach 1 characterised the way the coaches described moving between the role of coach and mentor when they said, “the way that I go about it I see it as quite similar. I spend no time thinking about dividing the role I’m in because I employ the same techniques with whomever I’m working with”.

The programme leaders and coaches construed teacher coaching to be a skill which supported teachers to reflect upon and improve their practice, whereas the coachees’ definitions of teacher coaching focused primarily on the concept of a trusting relationship in which they were supported, but also encouraged to improve. Coachee 3 defined teacher coaching as “warm, but supportive”, Coach 4 described the concept as, “patient wisdom directly applied” and Coachee 5 said, “I would define it as a relationship. The conversations that you have with your coach need to be straight off your sleeve. You’ve got to allow your coach to see the worst of you and the best of you so that they can help you”.

Overall, the findings show that respondents to the questionnaire agreed with Coach 4, in that they believed having a shared definition of the concept of teacher coaching was important for those who were involved in the implementation, research and discussion of this topic. It was clear from the findings that although programme leaders, coaches and coachees all had their own definitions they were all slightly different and were focused on different areas of the coaching discipline. It was evident from the comments made by programme leaders, coaches and coachees working in the same organisation that they did not necessarily share the same definition - with the programme leaders focusing on teacher change, the coaches on reflective questioning and the coachees on relationships and support.

5.5.2 The challenges of time and workload for teacher coaches

In response to question eighteen in the national questionnaire, which asked about any challenges associated with implementing teacher coaching programmes, ten professional development leaders wrote that a lack of time or the money to release teachers to be involved in teacher coaching programmes, were the greatest challenges of implementing teacher coaching in their schools, one respondent wrote,
“poverty of time is always a challenge”. Why more time was needed for teacher coaching programmes was different depending on the respondents’ needs. One leader faced the challenge of finding the time so that coaches could respond to “rising requests for coaching”, another was challenged to find time in order “to free up staff to be observed and conduct feedback sessions” and a third was challenged by balancing a Specialist Classroom Teacher’s coaching time with their teaching load. Within the time related comments one solution was offered to alleviate the challenge of time when implementing teacher coaching programmes, a respondent commented, “this has been recently partly addressed by our Board of Trustees providing additional non-contact time to staff to assist with professional learning”.

Once the issue of time allowance had been raised by ten respondents to the national questionnaire, then all of the participants in the four phases of the interviews were asked about the issue of time for coaches to carry out their roles. It did not depend on the size, nor decile of the school concerned, all four programme leaders felt challenged by not enough time for teacher coaches to effectively perform their roles. Programme Leader 1 commented on how they would use their coaches more effectively if time allowed:

I think if I had unlimited resources, it would be about creating time for coaches and the rest of the staff to get into other people’s classrooms, because we have that built into what we do here, but we are always constrained by timetable and relief. So in a perfect world you wouldn’t have those constraints. (Programme Leader 1. Phase 4 interview)

Similarly, Coach 5 identified the desire to have more time in order to complete a greater number of classroom observations, they said, “I think what hasn’t worked is just having enough time to do walk-throughs”. Programme Leader 3 highlighted the tension between requiring a teacher coach to teach timetabled classes and using their time to coach other staff, they said, “the challenge is trying to restrict how much they teach, trying to restrict how much we use them and it is difficult you see when staff with big class sizes say it’s not fair”. Coach 3, working in the same school, identified that the challenge of time was not only about the tension between teaching load and coaching load, but also the tension between activities other than teaching disrupting the coaches’ ability to perform their coaching roles, they explained, “the only challenge
is getting time to see people. There has been a lot of sport in term one, a lot of extra-curricular activity, basically it takes people out of the coaching situation for a bit”.

The challenge of finding time to perform teacher coaching activities was a topic raised by a number of the interview participants. Programme Leader 4 stated in reference to their coaches that it is important “to make sure that they have the time, making sure they don’t get distracted with other things. Programme Leader 4’s intentions were also a challenge raised by Coach 1 who said:

It would be great if I just did the coaching, but I’ve also got the teaching and the HOF role and I’ve got all the paperwork for the faculty. And out of all those the coaching which is really the most important bit is kind of just built in as a small component, but this is so important because you want the teachers coming through to do a better job than you could. (Coach 1. Phase 3 interview)

However, both Coach 1 and Coach 2 presented the solution to fulfilling multiple roles within a school as approaching each relationship with “clarity at the start” and “each role with an element of “consistency and professionalism”.

Finding time to juggle multiple roles and activities with the school environment was not a challenge only experienced by the coaches, as two of the coachees also raised this issue. Coachee 1 said:

It’s just balancing it with the workload, hey. There were times where we didn’t meet and that was because they had a full on workload and when they didn’t have a full on workload then I had a full on workload, so you know trying to balance out the right time to meet. (Coachee 1. Phase 2 interview)

Coachee 1’s viewpoint was also shared by Coachee 2 who said, “It’s always a bit tricky trying to balance all the things I need to do for my provisional registration with the teaching and learning that needs to happen as well as the administration and things like that”. Interestingly, Coachee 1 perceived that the requirement to meet weekly, which was specified by their school to complete their provisionally registered support and guidance programme, was too much, they said, “you have to meet once every week for a whole term, I reckon that is way too much, I would probably halve it”. Whereas in contrast, Coachee 4 at another school, who had experienced an external coach visiting them for a whole day once a term, perceived this not to be enough and
stated, “I would like more time, my ideal would be have them visit every three weeks for the first year, one observation and one meeting after the observation, if you do that four times a term would be ideal”. A final theme raised by the interview participants related to teacher coaching and the provision of time, was raised by Programme Leader 5 who felt that the challenge relating to teacher coaching and time allowance was about finding enough time for all of those involved to meet in order to train and share ideas or experiences, they said:

I would give the coaches more time. I’d give them time as a group at the beginning of the year. Even a couple of days together to do a really good workshop. I’d do the same with the beginning teachers and new teachers. I’d give them time to bond and time to talk about what do they need from the coach. (Programme Leader 5. Phase 4 interview)

Interlinked with the theme of time allowance and teacher coaching was also the concept of financial resourcing of teacher coaches. Two programme leaders and one coachee all raised the need to better fund teacher coaching in education. Programme Leader 3 stated, “this is a decile 1 school and it’s all about resources and money. would definitely have more of them, I’d have a couple of people and then they could really get to grips with professional learning and appraisal”. Programme Leader 5 concurred, “we need to double the role. I don’t think we get enough resources in schools and if we did, if we put more energy and money into resourcing coaching I think our classrooms would get better too”. After their own positive experience of teacher coaching Coachee 4 also agreed with the need to provide more teacher coaches nationwide, they said:

Give me 500 teacher coaches going around New Zealand and dealing with ten different schools and then you have 5000 schools that are sorted right. How do we create that sort of structure, because there are people that have the experience and the knowledge that can really make the difference. (Coachee 4. Phase 3 interview)

Overall, the findings show that there were a wide range of opinions and perceptions from professional development leaders, programme leaders, coaches and coachees across the country regarding teacher coaching and time allowance. All of the programme leaders believed that a lack of funding and time was influencing the design and implementation of their programmes. Overwhelmingly, leaders of teacher
coaching programmes perceived a need to increase the number of teacher coaches and the time allowance provided for current teacher coaches, which they believe would improve teaching and learning in New Zealand secondary schools. However, another perspective was also provided relating to how teacher coaches are used in their current roles and the possibility of providing them with less roles and responsibilities outside of their coaching. The time provided to each coach could also possibly be divided between coaches in a different way, as some coachees believed they were being over coached and this was leaving them with not enough time to complete their administrative duties and marking.

5.5.3 The challenge of defining teacher coach roles and responsibilities

A final theme that was not evident in the teacher coaching literature nor raised in the national questionnaire was surrounding defining teacher coach roles and responsibilities. This theme was raised by two coachees and also commented upon by two coaches. It was perceived by two coachees in two different organisations that their coaches did not have a clear understanding of what the coachees needed to complete in order to achieve full registration status and they desired greater clarity and direction from their Coaches. Coachee 5 explained, “it would be beneficial if the person who was in charge of all the beginning teachers actually knew what was required of us to get registered, what do we need to be ticking off”. Similarly, Coachee 1 stated, “they need to be specific on what we need and communicate with the coaches on what is expected”. Similarly, Coach 2 desired greater clarity from their programme leader regarding their responsibilities:

> There wasn’t direction about where to put more energy or where to put time…more guidelines because I know that there’s a job description but you look at it and it seems like an infinite thing – so maybe what is important – what are the minimum things – because it’s a big time allowance – so where would the school see the value lying. (Coach 2. Phase 3 interview)

Even though this challenge was only raised by a small number of participants, it was important to present in this study, owing to the fact that the implications of a coachee receiving misinformation regarding the requirements for gaining full teacher registration could be significant in terms of delaying their career progression and movement up the salary scale.
5.5.4 Key findings: The tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in New Zealand secondary schools

- Participants did not have a shared definition of teacher coaching in the schools in which they operate.
- Teacher coaching is perceived differently in different schools and by different stakeholders in the same school.
- Different expectations can lead to different stakeholders having different expectations about a teacher coaching programme.
- Participating coaches were challenged by a lack of time to carry out their coaching and by multiple responsibilities that they held.
- Programme leaders perceive that a lack of funding and thus time for coaches is negatively affecting programme design and implementation decisions.
- Participating coaches and coachees desire clear guidance in terms of their roles and responsibilities, particularly in relation to the process required to gain full teacher registration.

5.6 Consolidation of key findings

Four themes from the findings of this study have emerged which provide new knowledge regarding teacher coaching in New Zealand secondary schools, the themes are: purpose; evaluation, training and funding. These themes present the complex challenge faced by those operating teacher coaching programmes in New Zealand secondary schools and are perceived to influence the overall impact of teacher coaching that is being implemented.

The findings indicate that nationally the practice of teacher coaching is poorly defined and schools lack a shared definition of coaching. Confusion regarding defining and understanding the concept of teacher coaching is reflected on a national scale by different educational organisations, such as the Ministry of Education and the Education Council of Aotearoa New Zealand, promoting teacher coaching with different language and in order to achieve a variety of objectives. There was no evidence of a guiding national organisation or framework available to support teacher coaches operating in New Zealand’s secondary schools. Different school
communities are operating with different perceptions of what is teacher coaching, how it should be implemented and what it can achieve. In individual schools it was not common for programme leaders or coaches to articulate coaching definitions, objectives or programme principles with coachees when initially establishing a coaching partnership. Consequently, coaching participants were shown to be operating with different perceptions of the objectives of their teacher coaching programmes that in turn led to differing expectations.

Using teacher coaches to support beginning teachers was the most common reason for implementing teacher coaches in the respondents' schools. Participating beginning teachers presented a conflicting set of perceptions regarding their experiences of teacher coaching, with some desiring more contact time and others less. Other than supporting new teachers, the findings indicated that coaches were also being used for a wide variety of different reasons, including to support all staff professional development, as part of appraisal processes and to support teachers identified as needing assistance. There was little evidence to suggest that programme leaders had considered the impact of implementing teacher coaching in order to achieve this variety of different aims; nor had they considered if the approach to teacher coaching needed to be different in these different contexts in order to achieve their stated objectives.

The findings of this study also indicated that teacher coaching is a common approach whose implementation has been driven nationally by the Ministry of Education’s development of the Specialist Classroom Teacher Role and the inclusion of teacher coaches in centrally funded projects such as Te Kotahitanga. However, individual schools have also funded their own teacher coaching initiatives and subsequently the findings show that the number of teacher coaches working in each of the participating schools is significantly different. An expert coach approach that used coaches drawn from the current teaching staff and given an identified role was the most common form of coaching being carried out. Predominantly senior leadership teams were shown to be determining the scope and the nature of teacher coaching that was operating in their school. However, there was little evidence to suggest that when designing and implementing teacher coaching programmes school leaders base their decisions on evidence collected from their schools or the teacher coaching literature. Even though
school leaders desire that teacher coaching supports teachers to change their practice and to improve student outcomes, it does not appear these espoused objectives drive programme design decisions. Instead, the design and implementation of teacher coaching programmes is being driven by available funding pathways, such as funding for the Specialist Classroom Teacher Role and projects such as Te Kotahitanga. These government funding streams are influencing the number of teacher coaches, the coaching approach chosen and the ways that the coaches operate. Subsequently, participating schools are not operating teacher coach programmes that reflect best practice in the literature nor what was their desired programme structure, but instead are implementing a ‘best fit’ model with the resources that they have available. For coaches participating in this study this has meant that their coaching role is only one small part of their overall position in the school that also involves sports coaching, teaching and faculty leadership.

There was no evidence of formal evaluation of coaching practices and outcomes in the participating schools of this study. Instead judgements made about coaching by teachers were based on assumptions and perceptions. Participating schools had relied predominantly on informal observations and feedback questionnaires to evaluate the impact of coaching programmes. Nevertheless, the findings show that teacher coaching is perceived to be creating an impact in all of the participating schools.

Participating coaches reported that they believed a variety of strategies have an impact on teacher’s practice and improving student outcomes, these included: observations and recording of lessons, reflective questioning, goal setting and record keeping. Yet, it was not clear how any of the evaluation strategies had isolated the effects of teacher coaching from any of the other variables operating in secondary schools. Nor was it clear how claims made by programme leaders such as coaching had improved NCEA results were being substantiated. There was no evidence that those evaluating teacher coaching programmes had engaged with the latest coaching evaluation literature and therefore had not attempted to consider how coaching was creating an impact. Consequently, the simplistic nature of evaluation strategies is limiting programme leaders and coaches from gaining an understanding of how their coaching is working and how it might be improved. Furthermore, this does not allow
coaches to understand if they change their coaching approach or a particular aspect of their coaching, if these changes have a positive or negative effect on a programme’s stated objectives. Similarly, on a national scale, the Specialist Classroom Teacher coaching role is funded in every secondary school in New Zealand and yet since 2007 there has not be an evaluation of this role. Therefore, the Ministry of Education do not know if this investment is providing a return and if this coaching role is having an impact.

It was also identified in the findings that teacher coaches are not being provided with appropriate training in order to carry out their roles. Initial training for coaches new to a role is being sourced by the coaches themselves rather than their leaders. They are drawing on short commercial courses and those provided by universities. There appears to be no effort to investigate the needs and previous experience of new coaches and therefore there is no evidence of alignment between coaches’ individual needs, the programme within which they operate and the training that is being provided. There is no evidence of school leaders providing ongoing supervision of coaches that involves professional development based on evaluation of their current coaching.

The following discussion chapter will use the teacher coaching literature presented in Chapters Two and Three to examine and critique the four factors of: purpose and practice; evaluation; training; and funding constraints. These factors present challenges faced by those operating in teacher coaching programmes and are perceived to influence the overall impact of teacher coaching that is being implemented in the secondary schools participating in this study.
CHAPTER SIX: DISCUSSION

6.1 Introduction
This chapter discusses and critiques the findings of this study against the literature presented in the conceptual framework in Chapter One and the literature review, Chapter Two.

Figure 6.1. Concepts relating to teacher coaching in New Zealand secondary schools

The conceptual framework presented four concepts relating to teacher coaching that emerged by following a conceptual framework development process, see Figure 6.1 above. These four concepts were: how teacher coaching is used as a vehicle in national professional development projects; how coaching is presented by the Ministry of Education resource pages as a tool that can be used to support appraisal processes, implement a new curriculum, support the induction of new teachers and to support the development of school leaders; how coaching is situated within the political landscape of professional learning in New Zealand schools; and how teacher coaching is presented in the New Zealand focused professional development and teacher coaching research. However, owing to the fact that at the outset of this study little research existed in relation to teacher coaching in the New Zealand secondary context, it was not clear how and why teacher coaching had become established in the New Zealand education secondary sector. Therefore, these concepts were serving only as ‘intellectual bins’ and were based on presumed relationships and contexts
within which teacher coaching could be found to be operating (Baxter & Jack, 2008; Miles & Huberman, 1994).

At the outset of this study it was known that teacher coaching was being used in New Zealand secondary schools and the conceptual framework process presented some of the key contexts in which teacher coaching was operating. However, this study has shown that the visual representation in Figure 6.1 above is a simplistic view of teacher coaching in New Zealand secondary schools. The findings of this study have provided a deeper understanding of how and why teacher coaching is being used across New Zealand secondary schools. This study has also revealed the complexities associated with implementing teacher coaching within individual schools. What has emerged from the findings are four interconnected factors of: purpose and practice; evaluation; training; and funding constraints which are perceived to influence teacher coaching in New Zealand secondary schools.

![Diagram showing factors influencing teacher coaching in New Zealand secondary schools]

Figure 6.2. Factors that influence the design, implementation and impact of teacher coaching in New Zealand secondary schools

It is evident from the findings that these four factors are influencing how school leaders are designing and implementing coaching programmes. However, it is also evident that school leaders are challenged by these factors and do not have a clear
understanding of how they are influencing the outcomes of the coaching that they are providing. Participating programme leaders did not share an understanding of the concept of teacher coaching. Within the same coaching programmes different stakeholders held different perceptions about coaching and expectations about what it could deliver. The design of teacher coaching programmes in New Zealand’s secondary schools was also shown to be constrained by funding. School leaders were not able to implement the coaching programmes they desired and instead made compromises that they believed affected the impact of teacher coaching. However, owing to a lack of rigorous evaluation it was unclear if current teacher coaching programmes were achieving their stated objectives and were making most efficient use of their teacher coaching budgets. This lack of appropriate evaluation also led to training that was not targeted on individual coaches’ needs. This discussion chapter will show how these meta-inferences, that have emerged from the findings of this study, are interconnected, influence each other and the perceived impact of teacher coaching that is being implemented in participating New Zealand secondary schools.

6.2 The purpose and practice of teacher coaching in New Zealand secondary schools

The literature presented in the conceptual framework chapter showed that teacher coaching was being promoted as a professional development strategy by a range of educational organisations within the New Zealand secondary context. Teacher coaching was shown to be a strategy that could be used: in nationwide professional learning projects (Bishop et al., 2007; McNaughton et al., 2013; Poskitt & Taylor, 2008); as a tool for the appraisal of teachers (EDUCANZ, 2016); as a support strategy for the induction of provisionally certified teachers (EDUCANZ, 2015); and as an approach for supporting school leaders’ development (Robertson, 2004, 2008). Furthermore, the literature presented in the conceptual framework showed that no single organisation has taken a lead role in developing coaching in education in New Zealand. Nor has there been established a national body of educational coaching or a national coaching framework. Therefore, at the outset of this study the conception of teacher coaching in New Zealand secondary schools was a diverse picture supported by no evidence to establish if New Zealand schools had responded to this drive by the Ministry of Education and Education Council.
The findings of this study have provided new knowledge regarding the use of teacher coaching in New Zealand secondary schools. In the national questionnaire 93% of respondents were shown to use teacher coaching in their schools to achieve a range of different objectives, including: to implement a particular strategy, to develop a positive school culture and because it is perceived to be cost effective. The findings have also shown that the two most common reasons for using teacher coaching amongst the participants of this study was to support provisionally certified teachers and as a professional development strategy for all staff. However, teacher coaching served a plethora of purposes. In a fifth of responding schools, teacher coaching was shown to have been implemented in order achieve four or more of the reasons highlighted in Figure 6.3 below within the same school. Currently, there does not exist research which examines the different ways that teacher coaching is used in education internationally. However, the work of Cornett and Knight (2009), who completed an extensive literature review of coaching in education, appears to reflect the findings of this study. In that they concluded coaching in education is being used for a variety of different purposes and using a number of different approaches. In this way, the work of Cornett and Knight (2009) suggests that the use of teacher coaching in New Zealand secondary schools is reflecting international trends. However, owing to the fact that Cornett and Knight (2009) focused on reviewing literature rather than actual coaching practice their work cannot provide an in depth understanding of how teacher coaching is being used in countries outside of New Zealand.

In terms of the practice of teacher coaching, this study has shown that there are some common strategies that are used by teacher coaches in New Zealand secondary schools, including: lesson observations, goal setting, reflective questioning and record keeping. However, the way that these strategies were implemented were found to be unique within each coaching partnership. Some of the coach participants favoured a structured approach that involved meetings on a specified day and a list of pre-prepared questions, whilst other coaches used a ‘drop in’ approach that was less routine and involved short impromptu observations and follow up conversations.

Figure 6.3 below, presents the different ways that respondents to the national questionnaire showed that they were using teacher coaching in their schools. Purposes contained in the darker circles were those offered as statements in the
questionnaire, which had been shown by the conceptual framework process as being some of the reasons that teacher coaching had been implemented in New Zealand schools. The two other reasons ‘cost effective’ and ‘develop a positive culture’, shown in the lighter circles, were those offered by respondents to the ‘other’ box on the questionnaire. Even though these two reasons might not be teacher coaching objectives in their own right, they offer further insight into other supplementary ways that teacher coaching is perceived to benefit teachers and schools.

![Diagram](image)

*Figure 6.3. Why and how teacher coaching is being used in New Zealand secondary schools*

Overall, the findings of this study provide a snapshot of the current state of teacher coaching in New Zealand secondary schools. What has been uncovered is a complex picture of how teacher coaching is being used in a multitude of different ways in the New Zealand secondary environment. A strength of these findings is that they provide new knowledge regarding how schools have responded to the Ministry’s promotion of teacher coaching through their funding of the Specialist Classroom Teacher role, their publications and centrally funded professional development projects. However, rather
than providing greater clarity about teacher coaching in the New Zealand secondary context, this new knowledge presents greater complexity, owing to the fact that Figure 6.3 shows that teacher coaching is being implemented to achieve a wider variety of objectives than first assumed at the outset of this study. On the one hand this new knowledge provides national funding bodies with information to better understand how current coaching funding is being used and implemented within the secondary sector. On the other hand, it also provides a challenge to national organisations regarding how to support schools that are using coaching in such a wide variety of different ways. The challenge, raised by this study, regarding the many different ways that teacher coaching is being implemented, is not one that is evident in the existing teacher coaching research. However, it is supported by the work of Bono et al. (2009) who investigated 428 coaching practices across a range of contexts and concluded that there was little uniformity of practice in relation to philosophical approaches, activities, goals and evaluation methods that has led to a challenging situation in which “everyone is doing it and everyone is doing it differently” (p.364).

A positive perspective of the challenge uncovered by this study and supported by the work of Bono et al. (2009) is that the variety of coaching objectives and approaches implemented in New Zealand secondary schools reflects the versatility of teacher coaching as an approach. The literature review of this study presented many of the different practices and approaches of teacher coaching. Broadly the approaches to teacher coaching can be divided into three categories: coaching by paid ‘external coaches’ who are facilitators brought into a school; coaching by ‘expert’ teachers selected from the current staff and given a paid role; and unpaid ‘peer’ coaching of teachers by their colleagues in a reciprocal partnership (Ackland, 1991; Antsey & Clark, 2010; Murray et al., 2009). Even though the approaches described are all based on some sort of coaching partnership, they are all influenced by the context in which they are implemented and inextricably linked with the intentions of different coaching programmes. However, the variety of available approaches and objectives that can be met by teacher coaching is perceived by Joyce and Showers (1980; 1981; 1982; 2002) as a strength of teacher coaching because it can be adapted to achieve a multitude of purposes in a range of different contexts. In contrast, in a recent article in which Theeboom et al. (2013) presented a meta-analytical study of coaching, they highlighted that there is currently a lack of review to show if coaching can have impact
in all of the different contexts in which it has been implemented. Similarly, neither within the literature review nor the findings of this study was there evidence to show that teacher coaching can be used to successfully meet each of the objectives shown in Figure 6.3. Therefore, there was little evidence to explain why schools had chosen to implement teacher coaching.

The findings of this study have shown that New Zealand school leaders are determining the scope and nature of teacher coaching operating in their schools, yet it appears that many of their decisions are not founded on evidence and are not supported by the coaching literature. This diverse, but seemingly random application of coaching in a multitude of educational settings, presents a complex picture of teacher coaching that appears to be mimicking the early introduction of executive coaching which was described in a Harvard Review article by Sherman and Freas (2004) as "like the Wild West of yesteryear, this frontier is chaotic, largely unexplored, and fraught with risk, yet immensely promising" (p.80). These authors offer a perspective that provides educational practitioners of coaching with both hope and concern. Concern, because amongst the ‘chaos’ of the current teacher coaching environment resources could be wasted and opportunities missed. However, the hope that Sherman and Freas’ (2004) statement raises for current practitioners of teacher coaching in New Zealand, owes to the fact that subsequent authors (Ditzig, 2016; Maritz, 2013) who have built on Sherman and Freas’ (2004) work, have shown how executive coaching has developed into a practice supported by an extensive research base, national organisations and shared frameworks.

6.2.1 Defining teacher coaching

One of the issues that increases the complexity for teacher coaches in New Zealand secondary schools is the lack of a shared definition. Even though teacher coaching is being promoted by the Ministry of Education and it has now been implemented in many New Zealand secondary schools, it is not clear when discussing the concept that practitioners share the same understanding with regards to ‘what is teacher coaching?’ This challenging situation was highlighted in this study when comments received in response to the national questionnaire suggested that professional development leaders were unable to discuss teacher coaching due to a lack of shared definition. The lack of a shared understanding with regards to a definition of teacher
coaching was a theme that was also evident in the findings of the Phase 3 and 4 interviews. When each of the programme leaders and coaches were asked if they had a shared common definition of teacher coaching in their schools, they had not. When asked to describe their understanding of teacher coaching, each of the programme leaders and coaches offered a different response, with some describing it as a role held by an individual and others describing it as a skill that can be learned. Those coaches that perceived coaching as a skill were focused primarily on the concept of reflective questioning being used to develop teachers' practice. Whilst those that understood coaching as a role, focused on the different jobs that coaches did such as supporting new teachers, leading professional development and working with teachers of challenging classes.

A lack of shared definition with regards to teacher coaching is raised by Cornett and Knight (2009) in the introduction to their literature review of over 250 articles, they explain, “there is an additional issue that must be surfaced. One major challenge any discussion of coaching research faces is the multiplicity of ways in which the term has been used” (p.193). The challenge that Cornett and Knight (2009) propose was further evidenced in the literature review of this study, in which the variety of coaching definitions that exist were presented. Coaching in education was shown to be described by Pearce and Crilly (2009) as a strategy to share best practice; by Megginson and Clutterbuck (1995) as a skill to support learning about teaching; by Carey et al. (2011) as a consultant approach to professional development and finally by Bruce and Ross (2008) as a professional development activity in which one person supports another. This range of descriptions could be considered a strength of teacher coaching, in that it presents a wide variety of different ways that coaching can be understood and applications for its use. However, a conflicting perspective questions if with this many differing definitions a group of researchers or practitioners can discuss, evaluate or develop teacher coaching if they do not share a common language or understanding of the concept?

Different perceptions with regards to defining teacher coaching was highlighted in the findings of this study by the triangulation of data provided by interviews with programme leaders, coaches and coachees who were all operating in the same school. Within the coaching programme operating in School 1 each participant held
their own perception with regards to the purpose of coaching and it was evident that the different participants had not discussed these different perceptions and were therefore not aware of each other’s expectations. Furthermore, these differences of understanding were also compounded by teacher coaches not articulating their definition, principles or objectives at the outset of their coaching partnerships with teachers. All the coaches perceived that the start of their coaching relationship had been informal and the coaches had just turned up and started observing. Within the literature, Buysse et al. (2009) present the problems that can be caused by a lack of shared understanding when they state in their review of professional development literature that a lack of agreed-upon definition and purpose “contributes to the lack of a common vision for the most effective ways of organizing and implementing professional development” (p.235). This perspective does not suggest that stakeholders should choose and operate with only one definition, however the argument proposed by Buysse et al. (2009) supports the findings of this study that if participants in the same programme do not share or discuss their own understanding of teacher coaching that misconceptions can occur and opportunities for development be lost. Consequently, Cornett and Knight (2009), Buysse et al. (2009) and the findings of this study converge and present the difficulty of operating within a coaching programme that lacks a shared understanding.

Overall, the findings of this study have shown that schools have implemented teacher coaching in a wide variety of different ways and to achieve a variety of different objectives. It could be argued that multiple uses of coaching could be viewed as a strength of the approach, which lends itself to supporting the development of a variety of education objectives. Yet, what was shown from the findings of this study is that the participating school leaders did not have evidence to support their reasons for choosing to use teacher coaching and they lacked a clarity of definition, articulation of purpose and communication of school objectives when implementing their programmes. This, creates the paradoxical situation in which teacher coaching is being widely implemented yet the programme leaders, coaches and coachees are operating in a state of confusion.
6.3 Evaluation of teacher coaching in New Zealand secondary schools

The findings of this study show that the evaluation of teacher coaching programmes in New Zealand secondary schools primarily focus on coaches’ and coachees’ experiences and does not focus on how teacher coaching is achieving stated objectives. Consequently, without evaluation practices that focus on the way that programme goals are being achieved, it is unclear how coaches are establishing objectives, identifying their training needs, or establishing if they are making the best use of their allotted coaching funding and time.

All of the programme leaders, coaches and coachees perceived that teacher coaching was having an impact on either teachers’ practice, staff culture or student outcomes. From the programme leaders’ perspective impact appeared to be measured in performance outputs regarding teachers involved in the coaching or their students. From the coaches’ perspective, all five of them believed that four strategies were having an impact on teacher coaching in New Zealand secondary schools, these were: observation and evidence collection; reflection; goal setting and record keeping. Owing to the fact that the impact of teacher coaching had previously not been explored in the New Zealand secondary context, these findings provide new knowledge which appears to support the international research presented in the literature review that suggests teacher coaching can have an impact on teachers changing their practice (Garet, et al., 2008; Hendrickson et al., 1993; Neuberger, 2012) and students’ achievement (Bossi, 2008; Cusumano, 2006; Matsumera, 2010; Murray, Ma & Mazur, 2009; Pruitt & Wallace, 2010) However, it should be acknowledged that these findings were the perceptions of a small group of programme leaders and coaches. Furthermore, they were not able to provide evidence to show that appropriate evaluation had been implemented in order to explain how programme leaders had established the link between coaching and student results, nor how the coaches had decided upon these strategies. This incongruous situation is also highlighted in the literature of Theeboom et al. (2013) who state “while coaching is often considered as a useful tool for individual and organizational development, the lack of quantitative review of research on the outcomes of coaching makes it prone to skepticism” (p.2). Similarly, in this study the programme leaders, coaches and coachees held a shared belief that teacher coaching is a professional development approach that offers promise in terms of improving educational outcomes. Yet, these findings also raise
the question of whether this is a false promise that has been propagated by the enthusiasm of participants rather than rigorous evaluation.

Guskey (2000) suggests that the process of evaluating professional development initiatives in schools, including coaching programmes, should focus on the five key areas of: participants’ reactions; participants’ learning; change caused within the organisation; how the participants have applied what they have learnt; and what was the impact on their students. It was evident from the findings of this study that amongst the participating programme leaders there was a desire to evaluate the impact of the teacher coaching programmes that they had implemented. However, the evaluations described in the findings of this study were focused primarily on participant’s reactions and less on the other four of Guskey’s (2000) descriptors. The process of evaluating the success of teacher coaching was described by all four of the programme leaders as being challenging and therefore it was evident that they had relied on participant questionnaires or student feedback because these were feasible methods.

As Phase 4 interviews began to unpack how teacher coaching was being evaluated the findings challenged the espousals of participant programme leaders with regards to their assertions that teacher coaching was having an impact in their schools. Phase 4 interviews showed that the way that respondents were gathering data was based almost entirely on the perceptions of those either leading or participating in the coaching programmes. These evaluation attempts showed that programme leaders perceived evaluation of their coaching programmes to be desirable. However, by only using anecdotal evidence and short questionnaires, they were unable to substantiate the link between the coaching that had taken place and the perceived impact, to explain how the impact of the coaching was isolated from other factors operating in a typical secondary school, or identify how impact was occurring. Guskey (2000) suggests that by only adopting superficial evaluation practices of this nature it can potentially lead participants to “waste time, energy and other valuable resources” (p.1). Guskey’s (2000) perspective is based on a substantial foundation of his own and others’ research and therefore provides a strong argument for those in New Zealand secondary schools to develop the way that they carry out evaluation of their teacher coaching programmes.
The literature provides some insight into how programme leaders could improve their evaluation practices in order to avoid wasting valuable resources. A wide range of the coaching literature both within and outside of education investigates if coaching has an impact on intended objectives. The literature shows that the objectives of different coaching programmes are contextually relevant to each programme and therefore a number of different studies have used a range of different approaches in order to evaluate if coaching ‘works’. Within the business context these studies explore objectives such as ‘return on investment’ and development of leadership capabilities in CEOs. Within education the objectives explored by research include the effect of teacher coaching on the literacy scores of students and how coaching supports teachers to implement a particular strategy.

Theeboom et al. (2013) and Kampa-Kokesch and Anderson (2001) suggest that in order to support coaching, practitioners evaluation methods need to focus on how coaching works. Theeboom et al. (2013) state that practitioners need “to shift attention from the question ‘does it work?’ to ‘how does it work?’”. A question that can only be answered by exploring the link between impact and the different underlying mechanisms, processes and contexts that interact within a coaching partnership” (p.17). The implications of Theeboom’s (2013) conclusions for participants of this study is that rather than programme leaders using questionnaires to review stakeholders’ opinions there is a need for the coaches themselves to engage in evaluation strategies that interrogate the individual mechanisms of their practice. In their critical examination of coaching as an intervention, Kampa-Kokesch and Anderson (2001) concurred, that in order for evaluation practices to be useful practitioners need to focus on “what specifically about the coaching process is responsible for the desired outcome?” (p. 207). These researchers place the responsibility for evaluation with coaching programme leaders and coaches. The argument that they propose is that if these practitioners are able to identify how their coaching is impacting their stated objectives then best practice can be increased or replicated and less effective processes can be improved or developed. In this way teacher coaches can be more efficient and effective. Yet, in this study there was no evidence to show that participants had endeavored to inquire into how teacher coaching was having an impact in the ways that are described by Theeboom et al. (2013) or Kampa-Kokesch and Anderson (2001).
leaders and coaches seemed unaware of the coaching evaluation literature of this nature and repeated that evaluating the impact of coaching was “difficult”. This raises the issue that although researchers such as Guskey (2000) and Theeboom et al. (2013) might be highlighting the benefits of in depth evaluation of coaching programmes, is it practical and possible for teacher coaches to design and conduct these types of evaluation amongst the many other activities they must engage with in a typical school day?

A significant challenge for coaching practitioners attempting to deepen their evaluation practices was raised by the findings of this study, which was the unique nature of teacher coaching in each school. The findings showed that each school had implemented teacher coaching for different reasons and using different approaches to suit their individual contexts and requirements. Furthermore, the coaches all highlighted that the goals of each individual coaching partnership were different. The unique nature of each coaching programme and partnership further increases the challenge for those attempting to design evaluation approaches. Corbett and Knight (2009) explain, due to the individual nature of teacher coaching in each school, evaluation practices are particularly complex as they must take into account the different contexts and objectives of each programme. Corbett and Knight (2009) state “coaches are a unique species in most schools, and appropriate methods of evaluation need to be developed, validated and used. We believe any evaluation method must be reliable and valid” (p.208). In this way, researchers such as Theeboom et al. (2013) and Kampa-Kokesch and Anderson (2001) provide a vision for how professional development or coaching evaluation might move beyond methods that are focused only on participant reaction. However, a weakness of this research is that it does not acknowledge the significant challenge that this vision presents to programme leaders and coaches who are required to design appropriate, unique and rigorous evaluation strategies in order to suit their different contexts, programmes and partnerships. However, if they were able to meet these challenges the work of Guskey (2000) suggests that they will be rewarded by achieving an insight into how the money and time invested has made a difference and a better understanding of development areas and training needs.
6.4 Training of coaches in New Zealand secondary schools

The interviews with coaching programme leaders conducted for this study found that although all of the programme leaders acknowledged that there was a need for teacher coaches to be trained, none of the programme leaders had provided specific teacher training for coaches when they were initially employed. In a research study into how coaching can support newly qualified teachers, Hobson et al. (2009) concluded that training courses that ensure coaches’ development should be a priority for school leaders who want to successfully meet their programme objectives. Therefore, a paradoxical situation existed in which the participating programme leaders concurred with Hobson et al’s (2009) findings, however due to a lack of time they had not yet implemented any formal training structures.

The small amount of training that the coaches participating in this study had experienced had been organised by the coaches and involved one day courses which are criticised in the literature as “rarely changing teacher practice sufficiently to impact on student outcomes (Timperley et al., 2007, p. xxv). Neither did these professional learning opportunities reflect the characteristics of effective professional development identified in the literature. The literature suggests that professional development needs to be a critical concern of school leaders and should be based on a holistic model that meshes leadership, performance management and strategic management (Cardno, 2005). The research based studies of Darling-Hammond et al. (1995), Desimone (2009), Ingvarson et al., (2005) and Timperley et al., 2007) also suggest that professional development should allow teachers to reflect on their practice, engage them in identifying what they need to learn and allow them to be involved in the planning of how these needs will be met. Furthermore, professional development should provide opportunities for teachers to use a cycle of inquiry to test new methods of practice, whilst receiving coaching and support from their colleagues (Darling-Hammond et al., 1995; Desimone, 2009; Ingvarson et al., 2005; Timperley et al., 2007). Consequently, the findings of this study show that although the literature highlights the importance of training teacher coaches and is clear about the characteristics of effective professional development this is something that the school leaders participating in this study had not designed nor implemented and the coaches had not experienced.
Even though programme leaders had not organised initial training for their coaches, some of the coaches had experienced training through external organisations. Coaches 1, 3 and 4 were required to attend training days because as part of their role they were also mentor teachers for the Teach First NZ programme. Despite these training days being not specifically focused on coaching, the coaches described them as helpful because they got to practise strategies that they perceived to be supporting their coaching, such as reflective questioning. However, returning to the theme of evaluation discussed in the previous section, there was no evidence that training of this nature was linked to evaluation of their practice such as that suggested by Theoboom et al. (2013) and Guskey (2000). In this way the training that they had chanced upon was not targeted at their individual needs nor focused on the context of their programmes and therefore did not reflect the features of effective professional development such as allowing participants to be involved in the planning of how their needs will be met, nor providing opportunities to use a cycle of inquiry to test new methods of practice (Darling-Hammond et al., 1995; Timperley et al., 2007).

In contrast to the lack of training provided for teacher coaches participating in this study, Coach 4 had been involved in developing a government funded teacher coach training programme in Norway that provided an example of what effective coach training might look like. This initial teacher coach training programme involved six days of training spread over a year with participants observing each other and completing individual inquiries. Although, there is currently no specific teacher coach training literature with which to critique this training programme, Cushion et al. (2003) did complete an extensive study into what effective coach training should involve. Cushion et al. (2003) concluded that coach training programmes should involve supervised field experiences in a range of different contexts, in order to provide “coaches with multiple opportunities to test and refine knowledge and skills, make coaching judgements that are meaningful within their particular situation, and understand the pragmatic constraints of coaching contexts” (p.226). In this way, the experience of Coach 4 in Norway is supported by the literature outside of education and together they show that resources do exist to support coaches and programme leaders in New Zealand secondary schools to develop new coach training programmes, even though participants in this study have yet to engage in this process.
A second area of coach training that participants in this study were shown not to be engaging in was the ongoing supervision of their own practice. All of the coaches did have a school leader to whom they reported, however the perception of the coaches and the programme leaders was that these relationships were about checking in, reporting any issues or discussing resourcing requirements. There was no evidence from the coaches to suggest that these meetings provided development opportunities to reflect about their practice, discuss cases, evaluate the impact of their work, or share strategies and experiences with other coaches. This finding conflicts with the findings of Grant (2012) who concluded, after examining the supervision of 174 coaches from the field of business in Australia, that in order for coaches to be effective organisations should endeavour to make their coach supervision personalised, developmental and of a high standard. Grant (2012) states on going coach supervision needs to involve a “structured process for coaches designed to help coaches attend to improving the quality of the coaching, to grow coaching capabilities and support themselves and their practice with the help of a coaching supervisor” (p.17). However, Grant’s (2012) conclusion does raise the question that without a shared definition of the concept of teacher coaching it is challenging to discuss ‘structured processes’, ‘quality coaching’ and ‘coaching capabilities’. Which once again highlights the challenges of the individualised and contextual nature of teacher coaching. Nevertheless, Grant’s (2012) findings do provide teacher coaches in New Zealand secondary schools with guidance with regards to what their coaching supervision could involve, even though the participants of this study were shown not to have implemented training of this nature.

Overall, the participants of this study have shown that the approach to their training and ongoing supervision is limited and does not reflect the importance that the literature places on the training of coaches. Without evaluation of their individual coaching practice the training that coaches have experienced has not been contextualised to their programme, nor focused on their individual development needs. For the participants of this study, the ongoing supervision and development of the coaches was limited to meetings with a school leader and there was no evidence in these meetings of supervisory or development activities being carried out, as is recommended in the literature that explores effective coaching supervision.
6.5 Funding Constraints
The final theme that emerged from the findings of this study is one that was shown to influence the other three themes of purpose, evaluation and training. What was not understood at the outset of this study was how a perceived lack of professional development funding from the Ministry of Education is constraining the way that teacher coaching is operating and affecting the achievement of programme objectives. The issue of funding and resourcing of teacher coaches is one that has been shown in the findings of this study to underlie the programme design decisions that participating leaders had to make. This research has provided new knowledge into how programme leaders perceive that a lack of funding is negatively affecting the impact of the coaching programmes that they are delivering. However, it should be acknowledged that in the course of completing this research the structure for how the Ministry of Education fund professional development and thus coaching in schools has changed. Within the framework of the government’s Investment in Educational Success initiative schools are being encouraged to join a community of learning of approximately ten schools (Ministry of Education, 2014). Even though membership of a community is not compulsory, schools within a community can access greater levels of funding for professional learning and staff in these schools can apply for the newly created roles of ‘leadership advisor’ or ‘expert partner’ who are mentoring and coaching other teachers (Ministry of Education, 2016). How communities of learning will operate, what these new roles will involve and how schools access funding for professional development is still being developed, however it is clear that there is a policy shift towards schools working together rather than in isolation.

It was shown in the literature used to create the conceptual framework how teacher coaching operates as an approach within the context of professional development and learning (Ministry of Education, 2014), which in turn is influenced by how the Ministry of Education professional development funding is structured and delivered (Ministry of Education, 2016). The conceptual framework showed that teacher coaching does not have a distinct funding line in schools. Instead, the Ministry of Education has funded nationwide projects such as Te Kotahitanga (Bishop et al., 2007) of which coaching was included as a developmental strategy. Furthermore, the Ministry have also developed the Specialist Classroom Teacher role which is funded in every secondary school in the country and although it is not explicitly labelled as a coaching position
the findings showed that 53% of participating schools perceived this role to be a coaching position (Ministry of Education, PPTA, & NZSTA, 2007). At the outset of this project the researcher was also aware that individual schools had implemented a wide variety of different coaching roles and initiatives from their own working capitals.

Within the arena of professional development and funding in New Zealand schools the literature showed there to be conflicting perspectives. One perspective suggests that the Ministry of Education are providing millions of dollars of professional development funding yet they do not have robust processes in order to set priorities or to evaluate impact. This situation was highlighted in a 2008 report by the Auditor General that recommended that the Ministry of Education develop a systematic approach to setting priorities and introduce systems to review whether initiatives supplied value for money (Auditor General, 2008). In this way, there is a suggestion that the Ministry should become more involved in how professional development funding is spent and monitored within schools. However, a conflicting perspective regarding the funding of professional development initiatives is presented by Codd (2005), who criticises the approach proposed by the Auditor General as a low trust model that he believes discourages schools from engaging in professional development (Codd, 2005).

It is amongst these competing perspectives that participating programme leaders in this study were shown to be operating their teacher coaching programmes. Within a system that on one hand appeared to be providing more money for professional development initiatives that included coaching positions, as shown in the government’s recent announcement regarding their $334 million Investment in Educational Success Initiative (Ministry of Education, 2014). Yet, on the other hand, a system that is demanding greater accountability by placing restrictions on how this money can be accessed and spent, as shown in the Ministry’s recent announcement that funding for professional development can only be accessed if it meets their newly created criteria (Ministry of Education, 2016). The outcome of this approach for participant of this study was that, although school leaders were being told more money was being made available to fund a greater number of coaching positions, they perceived that they did not have enough funding to implement the teacher coaching initiatives that they desired and they believed would have the greatest impact for teachers and students in their schools. There were three ways that funding constraints
were shown to be affecting coaching programmes, these were: through the restriction of the number of teacher coaches a school could employ; restricting the number of hours a teacher coach could spend coaching; and through limitations placed on coaches because they had accessed funding from a particular source.

6.5.1 Restrictions on the number of teacher coaches a school could employ

All of the programme leaders perceived that due to a lack of funding they were employing a smaller number of coaches than they desired and therefore not achieving all of their programme objectives. The literature that presents the characteristics of effective professional development suggests that professional development should provide opportunities for all teachers to use a cycle of inquiry, whilst receiving coaching and support from their colleagues (Timperley et al., 2007). Programme leaders were clear that although they desired to offer teacher coaching to all those who required support or requested support, due to a lack of funding this could not happen. Consequently, school leaders’ espoused objectives and the literature regarding the characteristics of effective professional development were not driving teacher coaching programme design decisions. Instead, the design and implementation of teacher coaching programmes were being driven by funding constraints that were influencing the number of teacher coaches employed in a school and who could receive coaching. The findings showed that for those leaders in wealthier schools this meant they had funded a greater number of coaches from funds supplied by increased student donations or international student fees. Whilst, participating schools who could not charge donation fees or attract international students, were not operating teacher coach programmes that reflected the school leaders’ desired programme structures. Instead, they were implementing a ‘best fit’ model with the resources that they had available.

6.5.2 Teacher coaches fulfilling multiple roles

A further consequence of funding constraints shown by the findings of this study is that schools are requiring teacher coaches to fulfil multiple roles and therefore they could not spend the time that they desired actually coaching teachers. These limitations placed on teacher coaches is contrary to what is identified in the literature as best practice for teacher coaches. In two extensive coaching reviews both L’Allier et al. (2010) and Fullan and Knight (2011) suggest that one of the most important
principles for effective teacher coaches is to spend time face to face coaching teachers. However, the coaches in this study all reported that they could not commit the time that they wished to coaching teachers because they also had to carry out other roles such as head of faculty, sports coach or professional development coordinator and they perceived that this was negatively constraining the objectives of their coaching work.

6.5.3 Funding streams
A final perceived consequence of limited funding was that participating programme leaders were being forced to fund teacher coaching through a variety of different funding streams. In all four schools they had begun by using the Ministry funded Specialist Classroom Teacher position to implement coaching in the first instance for provisionally certified teachers. They had then looked to other sources of funding in order to either increase the time that a Specialist Classroom Teacher could be coaching rather than teaching, or to create a greater number of teacher coaching positions in their schools. Three sources of funding had been typically accessed to increase coaching hours in the four schools, these were: using funding from the Teach First NZ teacher training programme, joining a government funded professional development project such as Te Kotahitanga or asking the Board of Trustees to pay for coaching time. However, the findings showed that different funding streams placed particular demands on teacher coaches. For example the Teach First NZ coaches had specified coaching hours that must be delivered to trainee teachers enrolled in their specific programme. Furthermore, only schools that had access to student donations or international student fees could access funds from the Board of Trustees. Once again this had led to restrictions to how coaching programmes could be designed and meant that rather than adopting the characteristics of effective professional development for all staff, funding constraints had meant compromises had been made in the way that teacher coaching had been implemented.

6.5.4 Linking funding and evaluation
This research has presented new knowledge that suggests teacher coaching in New Zealand secondary schools is perceived by programme leaders to be negatively impacted by funding constraints. They believe that a lack of funds for professional development is restricting them from implementing teacher coaching in ways that they
perceive would best achieve their programmes’ stated objectives. Therefore, programme leaders believed that if the Ministry of Education increased professional development funding or relaxed constraints placed on professional development funds that they could provide more coaches, allow currently employed coaches more time to coach and implement coaching programmes in ways that they believed would better achieve their stated objectives. However, this research provides qualitative evidence that this is not necessarily the case, because the findings have also identified conflicting sets of perceptions regarding coachees’ experiences of teacher coaching. With some coachees desiring more contact time and others less. Those coachees that desired less contact time believed that teacher coaches were meeting with them too often and therefore wasting time and resources. Nevertheless, this was not a viewpoint shared by all of the coachees, some of whom desired more time with their coach.

The contrasting perceptions of the coachees, provides an interesting counterpoint to the time and funding challenged discourse presented by the coaches and programme leaders. On one hand you have the coaches and programme leaders requesting more funding and time to carry out actual teacher coaching, and yet on the other hand some coachees in this study suggested that they perceived less coaching would allow them to be more effective. This paradox is highlighted by Cornett and Knight’s (2013) observation that coaching in education is a concept that is perceived in many different ways by those engaged in the practice. However, returning to the earlier theme of evaluation, it was clear that both of these contrasting viewpoints were based on participants’ perceptions not on evaluations that measured the effectiveness or impact of the coaching. Therefore, although some coachees perceived that they were being coached too much, without evaluation of both their needs as a provisionally certified teacher and the effect that their coaching was having, then their opinion was not possible to quantify. However, designing and implementing these kind of evaluation methods has so far been a challenge for programme leaders and not one that has been engaged with by the participants of this study.

Overall, the findings of this study move the discussion regarding teacher coaching and funding beyond the simplistic relationship presented in the literature of the conceptual framework chapter. Initially the relationship was shown to be that the Ministry provides
funding for either a professional development project or role, schools adopt the project
and the coaching is carried out. However, what this study has shown is that both the
way that these funding streams are structured and how schools implement their
coaching is perceived to impact the teacher coaching being carried out. This research
has shown that although the Ministry of Education are promoting an increase in
funding for professional development and introducing more coaching positions in
schools, that school leaders perceive they still do not have enough money in order to
implement the teacher coaching programmes that they believe will best achieve their
stated objectives. Programme leaders perceive that the impact of coaching in New
Zealand secondary schools could be improved by increasing the funding, however this
study has shown that this is not necessarily the case. This research has provided
evidence that with some coaches the same impact may also be achieved in less time
– a call to increase the efficiency of New Zealand’s teacher coaches rather than their
funding. However, as has been highlighted in this discussion section the amount of
professional development funding available to each school is different, as are coaches’
skills and coachees’ needs. Consequently, the findings of this study presents new
knowledge that paints a picture of coaching as a complex intervention which requires
programme leaders to use the funding to be responsive to the needs of individual
coachees and coaches.

6.6 Discussion Summary
At the outset of this study, the conceptual framework presented the contexts within
which teacher coaching was operating in New Zealand secondary schools, however
not much else was understood about this phenomena within the New Zealand context.
By discussing and critiquing the findings of this study with the literature, what has
emerged is an understanding of how the factors of purpose, evaluation, training and
funding influence teacher coaching in the New Zealand secondary context. The
interrelated nature of these factors presents a complex challenge for those attempting
to implement teacher coaching in their schools. Furthermore, there is little research
relating specifically to the context of teacher coaching and these four factors in order
to support practitioners to unpack these challenges, although research in the wider
coaching literature does provide some guidance. Finally, the greatest challenge that
has been uncovered by this study is the uniqueness of each coaching context,
programme, and participants. Even though school leaders can be guided by other
coaching programmes and the literature, the findings of this study show that teacher coaching is not a one size fits all approach. Consequently, within each school programme leaders need to identify their school’s needs; the most appropriate coaching approach, strategies and training; and a suitable evaluation method that will allow them to judge how their choices are impacting their stated objectives. The concluding chapter of this study will explore the implications of these findings for practitioners of teacher coaching and future researchers.
CHAPTER 7: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

7.1 Introduction
The purpose of this thesis was to investigate the phenomenon of teacher coaching in New Zealand secondary schools. The aim of this study was to fill the knowledge gap between the promotion and use of teacher coaching throughout New Zealand secondary schools and the lack of informed evidence regarding the use of teacher coaching in the New Zealand context. Subsequently, the five research questions that formed the basis of this study focused on exploring the practical use of teacher coaching in New Zealand secondary schools:

1. In what ways are school leaders using teacher coaching in New Zealand secondary schools?
2. Why are school leaders adopting teacher coaching as a method of professional development in New Zealand secondary schools?
3. What are the features of teacher coaching programmes, implemented in a sample of New Zealand secondary schools, which have the greatest impact on developing teachers’ practice and improving student outcomes?
4. Are there tensions between the socio-political context, the perceptions of staff, the coaching strategies and expected outcomes, within a sample of teacher coaching programmes implemented in New Zealand secondary schools?
5. How can teacher coaching in New Zealand secondary schools contribute to building a theory of teacher coaching?

This chapter begins with the strengths and limitations of the study. It also provides an overview of how the study design has addressed the research questions and reached conclusions. Finally, implications for practice related to leaders, coaching practitioners and researchers of teacher coaching are presented.

7.2 Strengths and limitations of the study
The pragmatic mixed methods approach used for this study provided a combined breadth and depth of findings that would not have been achieved using a single method design. The combination of the questionnaire and the in-depth interviews provided the opportunity to understand the phenomena of teacher coaching at a national level and
also within the personal context of individual coaching partnerships. A further strength of this study was that the research design allowed for collected data to be analysed through three different types of triangulation: triangulation of methods, triangulation of perspectives and triangulation across time. The quantitative findings collected by the closed questions presented in the national questionnaire were compared with opinions garnered from the open questions in the same questionnaire. Both of these sets of data were also compared with the aggregated opinions of the programme leaders, teacher coaches and coachees. Furthermore, the data collected from the interviews gathered from each individual coaching partnership in Phases 2, 3 and 4 allowed multiple opportunities for cross data analysis to occur. In this way, perceptions drawn from different coaching partnerships could be compared and contrasted with each other. With interviews being conducted with programme leaders, coaches and coachees this also allowed for opportunities of cross case analysis of different groups, for example only the perceptions of programme leaders or only the perceptions of coachees.

A strength of using the questionnaire as a research tool in this study was it allowed complete coverage of the possible sample. Research questions one and two called for exploration of secondary schools in New Zealand and the questionnaire was distributed to every secondary school in the country. Furthermore, care was taken to pilot the questionnaire design, to personalise the email accompanying the questionnaire and to follow up the original distribution email with a subsequent reminder message. In terms of the semi-structured interviews, by drawing the interview participants from a range of different schools and coaching programmes with different objectives, this strengthened the findings by providing a range of perspectives related to teacher coaching.

Both a strength and a limitation of this study is that it provides a snapshot at a particular point in time of teacher coaching in New Zealand secondary schools. A strength is that this had not been achieved previously and therefore provides a unique perspective for those involved in this phenomenon. However, a limitation of this snapshot, is that the findings of this study have shown how this perspective is not one dimensional but is perceived differently within each of the different contexts that teacher coaching is operating and by each of the participants involved. Furthermore,
the snapshot that has been presented is not one that is fixed in time but instead constantly changing. The introduction of the government’s Investment in Educational Success initiative which has created communities of learning, new ways of accessing professional development funding and new coaching positions in schools, has shown how the landscape of teacher coaching in New Zealand secondary schools is constantly in a state of flux and therefore the snapshot provided by this study is one that is subject to ongoing change.

A limitation of the study was the paucity of the literature that contributed to a conceptual framework for theorising the status quo because of a previous lack of research regarding teacher coaching in the New Zealand secondary context. This meant at the outset of the study there was little guidance available in terms of where to begin and which questions would effectively allow an understanding of this phenomenon. This challenge was further compounded by so many different definitions and perceptions of teacher coaching existing in the literature and within the New Zealand education context.

A methodological limitation of the study relates to the response rate of the questionnaire and the size of the sample used for the interview phases. Even though the questionnaire was distributed to every secondary school in the country, only 28% of professional development leaders responded. Consequently, this limited the generalisations that could be made as it is not clear what, if any, bias may exist amongst the respondents. For example, those respondents that replied may be more inclined to discuss teacher coaching and therefore more likely to provide a positive perception regarding this topic. Owing to the fact there was only one researcher, this limited the sample for the semi-structured interviews to 14 participants from the Auckland area. This number was chosen as it provided a range of coaching perspectives, whilst the raw data produced by 14 participants was of an amount that could be effectively managed by one person. However, by restricting the interview sample in this way it limited the range of perspectives that could be collected. A repeat study with a larger research team might benefit from interviewing more participants from a wider range of coaching contexts and different geographical locations.
7.3 Conclusions
This section of the conclusion chapter provides a summary of the research design and a synopsis of how the preceding chapters have addressed the research questions. The pragmatic mixed methods approach chosen for this study was one informed by the exploratory problem solving intent of the study’s research questions. A dominant qualitative approach, using a sequential design, incorporating triangulation of methods, perspectives and across time, provided an appropriate research design framework in order to achieve the study’s purpose of being able to investigate the five research questions.

This study has shown that teacher coaching is being used in many of New Zealand’s secondary schools in order to achieve a wide variety of objectives. School leaders are typically controlling the decision making processes regarding why and how teacher coaching is being implemented. The Specialist Classroom Teacher role was shown to be the most popular approach to implementing teacher coaching, which was focused on supporting provisionally certified teachers. However, teacher coaching has also been implemented in order to: implement strategies; support those requesting help; drive faculty and school-wide professional development; support appraisal and competency processes; and to develop school culture. Across the school leaders, coaches and coachees interviewed as part of this study there was both hope and enthusiasm for the practice of coaching which they saw as something that could support teachers to improve their practice and therefore benefit their students. Yet, there was no evidence to show that teacher coaching can successfully achieve the programme objectives stated by those involved in the coaching programmes. Consequently, the findings of this study raises the question: Is the hope and enthusiasm of those involved in teacher coaching in New Zealand misplaced, propagated by the enthusiasm of participants rather than vigorous evaluation?

Coaches perceived that the strategies of observation, reflective questioning, goal setting and record keeping to be the features of teacher coaching programmes that have the greatest impact on developing teachers’ practice and improving student outcomes. However, coaches were not evaluating the relationship between these strategies and the overall impact of their coaching and therefore it was unclear why or how they had chosen to favour these strategies.
Confusion was evident amongst the socio-political contexts, the perceptions of staff, the coaching strategies and expected outcomes of teacher coaching programmes in relation to the four factors of: purpose; evaluation; training and funding. Nationally, the study has shown that there is no central leadership of teacher coaching and although teacher coaching has been widely implemented in the secondary school sector, school leaders, coaches and coachees are operating in a state of confusion. Different organisations describe coaching differently and promote it in order to achieve different objectives. Across different schools and amongst stakeholders in the same school teacher coaching is perceived differently, leading to different participants holding different expectations. Evaluation practices are typically based on participants’ perceptions and do not explore how impact is being achieved. Programme leaders are not able to understand if or how their programmes are meeting their stated objectives. Consequently, teacher coaches are not able to identify or replicate best practice, nor identify their development and training needs. Therefore, current training is generic and is not targeted towards individual coaches or programmes.

In terms of drawing conclusions in relation to the contribution that this study can offer towards building a theory of teacher coaching, the study provides new knowledge to the field of teacher coaching by presenting the complex challenge faced by participating programme leaders and coaches when implementing teacher coaching in their New Zealand secondary schools. This study proposes that teacher coaching in New Zealand secondary schools is a complex concept that is socially constructed. In this way, rather than the existence of one teacher coaching definition, purpose, approach and evaluation strategy, this study has concluded that each coaching programme and partnership is a unique reflection of their environmental context, as perceived by each individual participant. Consequently, when viewed through a social constructivist lens teacher coaching is shown to be more complex than originally perceived at the outset of this study.

The complexity exists on two levels - nationally and within individual schools. Nationally, complexity is created through diversity of contexts, objectives and approaches. Within individual schools complexity is created by the interplay between purpose, evaluation, training and funding. Even though school leaders have adopted
teacher coaching across New Zealand secondary schools, understanding of this complexity is not currently evident in the New Zealand education context. At the outset of this study promotion of teacher coaching by the Ministry of Education (2014) showed it to be the ‘go to’ strategy that could support appraisal processes, implement a new curriculum, support the induction of new teachers and support the development of school leaders. However, the findings of this study have shown that in order to effect change through coaching you cannot simply pick an objective and begin to coach. Instead, consideration needs to be given to the four factors of purpose, evaluation, training and funding if programme objectives are to be achieved. By examining the findings of this study against the literature relating to defining coaching, effective professional development, coach training and professional development evaluation, this study has shown that participants were challenged to manage these four factors. At the heart of this challenge was a lack of clarity with regards to defining, articulating and evaluating teacher coaching in New Zealand secondary schools. School leaders’ understanding of what is teacher coaching and what they were aiming to achieve with each different coaching programmes was commonly not articulated to the coaches or coachees. Without a clear understanding of a programme’s objectives some participants had different expectations. Furthermore, without clearly articulated coaching objectives it was difficult for the leaders to formally evaluate their programmes’ impact. Teacher coaches had favoured strategies, but did not actually know which of their strategies were working and which were not. Consequently, best practice could not be replicated; coaches did not know if they were using their time efficiently; and school leaders could not measure the impact or return of their coaching investment. Clearly, the challenge of managing these factors identified by this study as influencing the impact of teacher coaching programmes is one that school leaders need support to achieve.

Consequently the findings of this study provides a snapshot of how teacher coaching is currently operating in New Zealand secondary schools, which provides opportunities for practitioners of teacher coaching to reflect upon their own programmes. Within an education environment that is currently in a state of change due to the implementation of the Investment in Educational Success initiative and the introduction of Communities of Learning, this study encourages others to consider if they have defined teacher coaching in the context of their programmes and if they have
articulated their objectives. They are persuaded to think about how they will design robust evaluation strategies that will assist them to: identify the relationship between best practice and impact, make the best use of available funding and highlight development areas. Finally, they are also encouraged to contemplate how targeted training can be organised to support new coaches and the ongoing development of more experienced coaches. The implications of these issues for school leaders, coaching practitioners and researchers of teacher coaching are explored in the next section of this chapter.

7.4 Implications for school leaders and coaching practitioners
This exploratory study has aimed to fill the gap between the use of teacher coaching in New Zealand secondary schools and the lack of literature regarding teacher coaching in the New Zealand secondary context. The ability of teacher coaching to achieve stated objectives has been shown to be influenced by the factors of: purpose, evaluation, training and funding. This section of the conclusion chapter will consider the implications of this new knowledge for practitioners of teacher coaching.

7.4.1 Implications for school leaders and coaching practitioners: Purpose
The findings of this study have shown that teacher coaching is a social construct that in New Zealand secondary schools is being perceived in a variety of different ways, implemented for a plethora of different reasons and in order to meet a number of different programme objectives. In some cases there are multiple coaching programmes operating in the same school. There was also evidence in the findings of this study and the literature that teacher coaching is defined in many different ways. Programme leaders were shown to hold different personal definitions regarding what constitutes coaching. In the same school programme leaders, coaches and coachees were shown to all have different understandings regarding what is coaching.

To address these challenges, current school leaders and teacher coaches could consider working together to co-construct a national framework for coaching in education. Similar documents in the United Kingdom have reviewed literature and current practice to illustrate the practical differences between forms of coaching and mentoring, the skills required to coach and have presented diagrams that share coaching activities (Centre for the Use of Research and Evidence in Education, 2005).
The New Zealand education context has a wealth of features that distinguish it from the British context, such as: bi-culturalism; the National Certificate of Educational Achievement; and Specialist Classroom Teachers. Therefore, it would be appropriate that New Zealand develop their own framework. Such a document could provide school leaders and coaches with support in order to aid them to design teacher coaching programmes and reflect on their current initiatives. Within the context of the newly created Communities of Learning, a framework of this nature could provide a structure for schools and coaches to share their knowledge, practice and experience of teacher coaching. Sharing coaching knowledge of this nature could be particularly beneficial to coaches. It was common for the coaches interviewed as part of this study to be operating alone and therefore there was little opportunity for them to discuss their practice of teacher coaching with other practitioners.

To address the challenges created by multiple coaching definitions and purposes existing within individual schools, all stakeholders could benefit from having a shared and co-constructed understanding of teacher coaching. Furthermore, in schools that have more than one teacher programme operating, it would be helpful to define teacher coaching in the context of each programme. Owing to the fact that a programme that has been established to support new teachers may be defined and perceived differently to a programme established as part of an appraisal programme. In this way clarity of purpose is established for all those concerned. Furthermore, by establishing the purpose of a programme then coaches and programme leaders can use these objectives to design evaluation strategies that consider if coaching has met their intended objectives.

7.4.2 Implications for school leaders and coaching practitioners: Evaluation

The findings of this study showed that the programme leaders and coaches relied most commonly on feedback collected from coaches and their coachees in order to evaluate if coaching was achieving a programme’s stated objectives. Much of the evidence presented by programme leaders and coaches was anecdotal and collected through informal observations or conversations. There was a lack of evidence to show how those conducting evaluations of teacher coaching programmes were isolating the effects of coaching when using broad evaluation measures such as a school’s National
Certificate of Educational Achievement results, which were clearly being influenced by a variety of other factors.

Recent literature (Ditzig, 2016; Theoboom et al., 2013) has highlighted how evaluation methods can be designed to establish the effect of different strategies and the impact of different aspects of coaching upon stated objectives, which are evaluation approaches that allow coaches to identify best practice. Therefore, practitioners of teacher coaching in New Zealand secondary schools could consider engaging with the coaching literature in order to support them to design evaluation methods that best serve their teacher coaching programmes. Programme leaders and coaches should look to design evaluation methods that identify how their coaching is having an impact so that best practice can be replicated and development areas identified. In this way wasting resources and time on coaching that is not achieving their stated objectives can be avoided and training needs can be identified and targeted.

7.4.3 Implications for school leaders and coaching practitioners: Training

The interviews with coaching programme leaders conducted for this study found that none of these leaders had developed specific teacher coaching training. Consequently, the findings of this study show that although the literature highlights the importance of training teacher coaches when they first begin coaching, this is something that the school leaders participating in this study found to be challenging and training was not implemented in a structured manner. In terms of on-going teacher coach supervision, the participants of this study provided no evidence that they were receiving any regular or structured supervision. All of the coaches did have a school leader to whom they reported, however the perception of the coaches was that these relationships were about checking in, reporting any issues or discussing resourcing requirements. There was no evidence from the coaches to suggest that the supervisor meetings provided development opportunities to reflect about their practice, discuss cases, evaluate the impact of their work, or share strategies and experiences with other coaches.

Consequently, school leaders could consider implementing initial teacher coach training, particularly for initiatives like the Specialist Classroom Teacher role which exist in the majority of New Zealand Schools. This study showed that the Specialist
Classroom Teacher role was the most common form of coaching in New Zealand secondary schools and therefore has the potential to impact a large number of teachers and to appropriate significant amounts of funding. Consequently, providing those teachers fulfilling the Specialist Classroom Teacher with initial training would potentially support a large number of coaches operating in New Zealand secondary schools and influence the impact of these teacher coaches. Once again, the current establishment of Communities of Learning might provide a vehicle for groups of schools to work together in order to train their teacher coaches.

Within the findings of this study, Coach 4 presented a possible model that they had experienced in Norway that developed the skills of new coaches and included: engaging with coaching literature, coach skills training, and observations of their coaching conversations. Examples of this nature provide structures and direction for those developing teacher coach training in New Zealand to use as a guide.

Teacher coaches working in New Zealand secondary schools, other than Specialist Classroom Teachers, could benefit from structured training provided by the employers. Rather than leaving teacher coaches to organise their own training, leaders could work with their coaches to identify their needs in relation to their current skills and the programs in which they operate and organise appropriate training. This approach would also be relevant for those schools who are implementing peer coaching approaches involving all of their teachers. Feedback provided in this study suggested that training provided to peer coaches was typically limited to a few hours and was not understood by some teachers. Once again, in order to maximise the potential impact of a peer coaching programme, leaders are required to provide training that considers individual participants’ needs and the objectives of the programme. Finally, the literature with regards to teacher coach supervision (Grant, 2012, Salter, 2008) suggests that teacher coaches in New Zealand secondary schools could benefit from structured supervision that supports their work by providing them with opportunities to: meet with other coaches; discuss coaching partnerships; engage with the emerging literature; have their practice observed; and to evaluate the impact of their work.
7.4.4 Implications for school leaders and coaching practitioners: Funding

When the programme leaders were questioned about the number of coach positions they had created and the teacher coaching approach they had chosen, they cited financial constraints as influencing the approach and number of coaches they had appointed. Therefore, it appeared that many of their decisions regarding choice of coaching approach were not linked to their stated objectives, nor were they based on evidence and did not reflect findings presented in the teacher coaching literature. In some situations a lack of funding meant that programme leaders were not able to fund the amount of contact time or the number of coaches that they desired. Programme leaders were forced to implement coaching programmes that were not what they desired but were perceived to be the best they could do with the money they had.

There was also evidence in the findings of this study that showed teacher coaches are being challenged in New Zealand secondary schools due to the multiple roles that they are being required to fulfil. All four programme leaders expressed in the interviews how they felt challenged by not enough time for teacher coaches to effectively perform their roles. One response to these challenges could be to call for greater funding to provide more teacher coaches in each secondary school. However, the literature regarding teacher coaching presents coaching initiatives that have been shown to achieve programme objectives and those that have not. Therefore, providing more funding in order to provide teacher coaches with more time is not necessarily going to produce greater impact. Returning to the previous section regarding implications for practitioners in relation to evaluation, by developing evaluation methods that focus on identifying best practice then teacher coaches can make best use of the funding and time that they have allocated.

The findings of this study also showed that the many responsibilities teacher coaches assumed and how efficiently they used their time when coaching also influenced their role as a coach. Some of the coaches interviewed as part of this study were also subject leaders, sports coaches, school-wide professional development facilitators and house leaders. With so many responsibilities these coaches found it a challenge to find time in order to meet with their coachees. Furthermore, the strategies that different coaches used in their coaching partnerships either created more time for coaching or impeded their ability to find time to be face to face with teachers.
example, some coaches observed a full one hour lesson each time they worked with a teacher, transcribing the whole lesson as it was taught. Other coaches, observed only 15 minute sections of lessons whilst recording comments on their devices. Consequently, different coaches were able to coach more or less coachees with the same time allowance.

To address these challenges teacher coach programmes leaders could benefit from protecting coaches’ time so that their timetable is spent face to face coaching with teachers. Coaches could avoid becoming involved in other responsibilities such as sports teams, other positions such as subject leader or professional development coordinator for the whole staff. Coaches could consider how they can conduct their coaching in order to make the most efficient use of their time. School leaders or leaders of Communities of Learning could consider methods of collating and sharing coaching strategies that support coaches to make the most efficient use of their time.

There was also evidence in the findings that coaches have a responsibility to design coaching programmes that make the most efficient use of the available coaching time and resources. Schools that provide the same coaching contact time to newly trained teachers and experienced overseas teachers newly arrived in New Zealand, could benefit from designing more personalised teacher coaching programmes. Consequently, those that require a greater level of support would be provided with more time and those with a greater level of experience could have less face to face coaching time. In this way, coaching funding would not need to be increased.

7.5 Recommendations for future researchers
This exploratory study has aimed to fill the gap between the use of teacher coaching in New Zealand secondary schools and the lack of literature regarding teacher coaching in the New Zealand secondary context. The ability of teacher coaching to achieve programme objectives has been shown to be influenced by the factors of: purpose, evaluation, training and funding. This section of the conclusion chapter will consider the implications of this new knowledge for researchers of teacher coaching by providing some recommendations regarding the direction of future studies.
This study has shown that although teacher coaching programmes have been implemented in many New Zealand secondary schools, there does not exist any research which investigates if teacher coaching can be effective in these contexts. For example, participants in this study showed that the Specialist Classroom Teacher position was the most common form of coaching being used in their schools and typically their focus was to coach provisionally certified teachers. However, the only research to date regarding the Specialist Classroom Teacher role was conducted in 2006 (Ward, 2007) and focused on participant satisfaction. There does not exist any research that has explored if Specialist Classroom Teachers are having an impact. Guskey (2000) suggests that by avoiding evaluation practices that focus on impact it can potentially lead participants to “waste time, energy and other valuable resources” (p.1). Therefore, future research could examine if the implementation of teacher coaching in New Zealand secondary schools is achieving its stated objectives and if the investment that is being made in teacher coaching within New Zealand secondary schools is having an impact. Owing to the fact that both the New Zealand professional development literature (Timperley et al., 2007) and the Ministry of Education (2014) call for student outcomes to be the primary focus of teacher’s professional development it would suggest that any future research examining the impact of teacher coaching in New Zealand secondary schools could inquire into how or if teacher coaching that has been implemented is improving outcomes for students.

A further finding of this study was that teacher coaching had been implemented using several different approaches and to achieve a variety of different objectives in the same school. There was evidence of situations in which the same teacher was experiencing coaching as part of a professional development programme, as part of their appraisal and as a strategy to support individual students. There currently does not exist any research into the experiences of teachers involved in multiple coaching programmes. Therefore, researchers could consider exploring if the impact of teacher coaching is affected by having multiple programmes operating in the same school and if the different programmes positively or negatively influence participants’ perceptions of coaching.

This study has shown how current coaching research such as Ditzig (2016) has begun to focus on empirical evidence that explains how coaching has an impact and which
factors are creating these effects. Meta-analysis of this nature allow practitioners to understand elements of their practice that are working and elements that require development. Even though currently there do not exist enough studies to allow meta-analysis of teacher coaching in New Zealand to take place, researchers could consider developing studies that inquire into which elements of teacher coaches’ practice are achieving stated objectives and which require further development.

The literature exploring teacher coach training and supervision is currently limited and would also benefit from further research in this area. This study could find no literature that explored the characteristics of effective teacher coach training, nor studies that explored the link between a coaches’ training and the impact of their work. Therefore, researchers could consider exploring current training available to teacher coaches in New Zealand and evaluate its impact or look to consider the elements of effective teacher coach training in the New Zealand context.

All of the participating programme leaders in this study believed more funding would improve the impact of their teacher coaching programmes. However the findings also revealed participating school leaders did not know if their investment in teacher coaching was having an impact on their stated objectives. Therefore, in order to assist schools in making more efficient use of their coaching resources, researchers could consider exploring which teacher coaching approaches in the New Zealand context deliver the greatest impact. In the field of executive coaching there exists studies that explore coaching return on investment. Such studies in the field of education could assist school leaders to make evidence based decisions that would allow them to better target the limited coaching resources they have.

Future researchers could also support teacher coaches by comparing the impact of different teacher coaching approaches and exploring the strengths of each different approach. They might also consider inquiring into the relationship between different teacher coaching contexts and different coaching approaches. Such research may support teacher coaches to make informed decisions when designing and implementing teacher coaching programmes in their schools and allow coaching resources to be most effectively utilised and targeted.
7.6 Final Words

School leaders and teacher coaches are faced with multiple influencing factors and a number of complex decisions when implementing teacher coaching in New Zealand secondary schools. The findings of this study challenge programme leaders to consider how and why implementation decisions are made throughout their programme design and implementation journey. The findings also encourage decisions that are supported by robust evaluation. Furthermore, the findings provide opportunities for stakeholders to consider how their position in a school and personal perspective of teacher coaching might influence the choices they make. Overall, the study supports programme leaders to consider how the different elements of teacher coaching initiatives influence each other and ultimately the impact of a teacher coaching programme.

This study set out with the intention of exploring the phenomenon of teacher coaching in New Zealand secondary schools. The findings of this study have shown teacher coaching is a popular but complex professional development strategy that is being used in secondary schools across New Zealand. School leaders are looking to their teacher coaches in order to achieve a wide variety of goals. The educational coaching literature and the findings of this study suggest teacher coaching can have an impact on teachers’ practice and student outcomes. However, previous studies have shown this is not always the case. Therefore, in order to have the greatest chance of achieving a coaching programme’s stated objectives programme leaders need to consider how they design and implement teacher coaching in their schools. The four factors of: purpose, evaluation, training and funding have been shown by the findings of this study to be interrelated factors operating in teacher coaching programmes in New Zealand. These factors are perceived by those involved in teacher coaching in New Zealand secondary schools to have an influence on the outcome of teacher coaching programmes.

Teacher coaching in New Zealand secondary schools holds much promise. However those involved in the practice of teacher coaching need to continue to reflect upon and refine their activities. Currently, there is a danger those involved in teacher coaching ignore the complexities of this intervention and subsequently diminish its potential outcomes. School leaders should be aware the concept of teacher coaching is a social
construct which is not only influenced by their unique environmental context but also the individual perceptions of all those involved. There is no one way of understanding teacher coaching, but a plethora of different definitions, approaches and perceptions. Consequently, programme leaders are faced with a complex challenge when implementing teacher coaching. School leaders could consider articulating their objectives and understanding of teacher coaching and seek out the perceptions of other participants. They also might consider each of their objectives and design programmes that tailor definitions, principles, strategies, training and evaluation methods to the context and participants involved in each unique teacher coaching programme. If teacher coaching programmes are designed with this level of individualisation and thought then there is a significant chance that teacher coaching will deliver on its perceived potential and support teachers across New Zealand to develop their practice and improve outcomes for their students.
REFERENCES


Reiter, B. (2013). *The epistemology and methodology of exploratory social science research: Crossing Popper with Marcuse*. Florida, United States of America: Government and International Affairs Faculty Publication.


APPENDICES

Appendix 1. National Teacher Coach Questionnaire

1: Which statement best describes your school? Please tick one box

- [ ] Secondary (years 7-10)
- [ ] Secondary (years 7-13)
- [ ] Secondary (years 9-13)
- [ ] Secondary (years 11-13)
- [ ] Other: 

2: How many students attend your school? Please tick one box

- [ ] 100-300
- [ ] 300-600
- [ ] 600-900
- [ ] 900-1200
- [ ] 1200-1500
- [ ] 1500-1800
- [ ] 1900-2100
- [ ] 2100+

3: How many teaching staff (including part-time staff) work at your school? Please tick one box

- [ ] 1-20
- [ ] 20-40
- [ ] 40-60
- [ ] 60-80
- [ ] 80-100
- [ ] 100-120
- [ ] 120+

4: How many teaching staff operate as teacher coaches in your school? Please tick one box

- [ ] 1
- [ ] 2-5
- [ ] 6-10
- [ ] 11-15
- [ ] All the teaching staff
- [ ] Other: 
5: In which different ways are teacher coaches used in your school? Please tick all that apply to your school
- Specialist classroom teacher role (SCT)
- Te Kotahitanga project
- Appraisal process
- Competency process
- School-wide professional development
- Faculty based professional development
- Teacher coaching is not used in our school (please submit this form now)
- Other: 

6: For what reason is teacher coaching most commonly used in your school? Please tick one box
- Specialist classroom teacher role (SCT)
- Te Kotahitanga project
- Appraisal process
- Competency process
- School-wide professional development
- Faculty based professional development
- Other: 

7: Why was teacher coaching chosen as a form of teacher support in your school? Please tick all that apply to your school
- Teacher coaches were provided by an external source such as the Ministry of Education
- Teacher coaches are seen as the most effective strategy to meet our development objectives
- Due to the research regarding professional development and teacher coaching
- Not sure
- Other: 

8: Who chose teacher coaching as a form of teacher support in your school? Please tick all that apply to your school
- Board of Trustees
- Senior leadership team
- Teachers
- An external source such as the Ministry of Education
- Other: 

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9: What are the objectives of teacher coaching initiatives operating in your school? Please tick all that apply to your school

- [ ] To support newly qualified teachers
- [ ] To support teachers identified as needing assistance
- [ ] To implement a particular strategy, resource or programme
- [ ] To work with those that have requested to work with a teacher coach
- [ ] To develop all teachers' practice
- [ ] Not sure
- [ ] Other: 

10: What kind of teacher coaches are used in your school? Please tick all that apply to your school

- [ ] Peer coaches (colleagues coach each other)
- [ ] Expert coaches (staff from within the school hold an identified teacher coach position)
- [ ] External coaches (facilitators from external agencies come into the school to coach)
- [ ] Other: 

11: Which is the most common form of teacher coaching used in your school? Please tick one box

- [ ] Peer coaches (colleagues coach each other)
- [ ] Expert coaches (staff from within the school hold an identified teacher coach position)
- [ ] External coaches (facilitators from external agencies come into the school to coach)
- [ ] Other: 

12: How are the teacher coaches chosen in your school? Please tick all that apply to your school

- [ ] Provided by external agencies
- [ ] Positions are advertised and interviews are held
- [ ] Teachers identified as being effective are asked by senior management
- [ ] All staff are trained to be teacher coaches
- [ ] Coaching is completed by those holding leadership positions
- [ ] Other: 

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13: How often do you provide training for the teacher coaches in your school? Please tick one box only
- [ ] More than once a month
- [ ] Once a term
- [ ] Once a year
- [ ] Twice a year
- [ ] At the start of their contract or initiative
- [ ] Never
- [ ] Not sure
- [ ] Other: [ ]

14: How are those teachers that are coached chosen? Please tick all that apply to your school
- [ ] All staff are coached
- [ ] Teachers volunteer to be coached
- [ ] Teachers are identified by a team leader
- [ ] Teachers in an identified group are coached (a particular faculty for example)
- [ ] All provisionally registered teachers are coached
- [ ] All teachers taking part in a particular programme or initiative are coached
- [ ] Not sure
- [ ] Other: [ ]

15: How would you describe the coaching approach that is used by the coaches in your school? Please tick all that apply in your school
- [ ] A reform approach (teacher coaching focused on implementing a new initiative such as e-learning)
- [ ] A professional development approach (teacher coaching focused on supporting teachers to develop their teaching practice)
- [ ] An evaluation approach (teacher coaching focused on evaluating a teacher's effectiveness against an identified set of standards)
- [ ] Not sure
- [ ] Other: [ ]
16: How is the impact of the teacher coaching programmes happening in your school typically measured or evaluated? Please tick all that apply in your school

- [ ] Student feedback
- [ ] Feedback from coaches
- [ ] Feedback from teachers being coached
- [ ] Achievement data
- [ ] Lesson observation data
- [ ] Observation of teacher coaches at work
- [ ] Impact of teacher coaching is not measured
- [ ] Not sure
- [ ] Other: 

17: From your experience, are there any benefits of implementing teacher coaching in your school? Please write your comments below

18: Have there been any challenges when implementing teacher coaching in your school? Please write your comments below

19: Are there any further comments that you would like to write about the teacher coaching programmes operating in your school? Please write your comments below
Appendix 2. Chi-Square Test results for variables showing significant relationships

Q7: Teacher coaches were provided by an external source such as the Ministry of Education
Q9: To work with those that have requested to work with a teacher coach

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<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q9 To support newly qualified teachers

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q9 To implement a particular strategy

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q9 To work with those that have requested to work with a teacher coach

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Q7 Due to the research regarding professional development and teacher coaching
Q9 To work with those that have requested to work with a teacher coach

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q9 To develop all teachers’ practice

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Q7 Due to the research regarding professional development and teacher coaching
Q9 To implement a particular strategy

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q9 To develop all teachers’ practice

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Q7 Teacher coaches were provided by an external source such as the Ministry of Education
Q11 External coaches (facilitators from external agencies come into the school to coach)

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q11 Expert coaches (staff from within the school hold an identified teacher coach position)

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q15 A professional development approach (teacher coaching focused on supporting teachers to develop their teaching practice)

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q16 Student feedback

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q16 Feedback from coaches

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q16 Feedback from teachers being coached

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Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives
Q16 Lesson observation data

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Q7 Due to the research regarding professional development and teacher coaching
Q16 Student feedback

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Q8 Senior leadership team
Q7 Teacher coaches are seen as the most effective strategy to meet our development objectives

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Q7 Due to the research regarding professional development and teacher coaching

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Q8 An external source such as the Ministry of Education
Q7 Teacher coaches were provided by an external source such as the Ministry of Education

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Q6 School-wide professional development

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Q8 Senior leadership team
Q9 To support newly qualified teachers

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Q9 To support teachers identified as needing assistance

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Q6 School-wide professional development

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Q8 Board of Trustees
Q11 External coaches (facilitators from external agencies come into the school to coach)

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Q8 Senior leadership team
Q11 Expert coaches (staff from within the school hold an identified teacher coach position)

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229
Q8 Senior leadership team
Q12 Teachers identified as being effective are asked by senior management

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| Pearson Chi-Square | 15.533*       | 1    | .000                  |                      |                  |
| Continuity Correction | 13.405    | 1    | .000                  |                      |                  |
| Likelihood Ratio     | 15.011        | 1    | .000                  |                      |                  |
| Fisher's Exact Test   | 15.373        | 1    | .000                  |                      |                  |
| Linear-by-Linear Association | 97          |      |                      |                      |                  |

Q8 Senior leadership team
Q12 Coaching is completed by those holding leadership positions

| Chi-Square Tests |
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|                  | Value             | df   | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
| Pearson Chi-Square | 4.945*        | 1    | .026                  |                      |                  |
| Continuity Correction | 3.709      | 1    | .054                  |                      |                  |
| Likelihood Ratio     | 6.230           | 1    | .013                  |                      |                  |
| Fisher's Exact Test   | 4.894          | 1    | .027                  |                      |                  |
| Linear-by-Linear Association | 97          |      |                      |                      |                  |

Q8 Teachers
Q12 All staff are trained to be teacher coaches

| Chi-Square Tests |
|------------------|-------------------|-----------------|-----------------|-----------------|
|                  | Value             | df   | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
| Pearson Chi-Square | 9.050*        | 1    | .003                  |                      |                  |
| Continuity Correction | 6.149       | 1    | .013                  |                      |                  |
| Likelihood Ratio     | 6.628           | 1    | .010                  |                      |                  |
| Fisher's Exact Test   | 8.957          | 1    | .003                  |                      |                  |
| Linear-by-Linear Association | 97          |      |                      |                      |                  |
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Appendix 3. Interview Schedule. Phase 2. Teacher coaches

Interviewer Introduction, thank you and purpose (2 minutes)

Hello. My name is Paul Bennett and I’d like to thank you for taking the time to be part of this research. The focus of this interview is to gain your opinions regarding the teacher coaching programme in which you have been involved this year. This interview should take a maximum of 40 minutes.

General questions

Q. Please could you tell me about your involvement in teacher coaching?
Q. How would you define teacher coaching?
Q. In your mind do you see this sort of coaching rather than mentoring role is different?
Q. What do you see as the principles underlying your coaching partnerships?
Q. Do you have a set timeframe of work? Do you work for a certain number of hours or what’s the structure?
Q. Are there any other sort of activities or strategies that you are using explicitly?
Q. Is your teacher coaching working and how do you know?
Q. Do you see any other professional development approaches that do a similar job?
Q. Anything else you’d like to add and about teacher coaching
Appendix 4. Interview Schedule. Phase 2. Teacher coachees

Interviewer Introduction, thank you and purpose (2 minutes)

Hello. My name is Paul Bennett and I’d like to thank you for taking the time to be part of this research. The focus of this interview is to gain your opinions regarding the teacher coaching programme in which you have been involved this year. This interview should take a maximum of 40 minutes.

General questions
Q: What has been your experience of teacher coaching with…..
Q: So how many times would …. meet you in a term?
Q: So when you meet with … are there any sort of techniques or strategies that you see them using as in the way they talk to you as a coach?
Q What do you see are the benefits of having a teacher coach?
Q: Do you see any benefits for your students?
Q: Any challenges of working with a teacher coach?
Q: Has ….set out for you what are the principles of your coaching relationship?
Q: What sort of goals are you working on with your coach?
Q: Do you think it is starting to have an effect on those goals?
Q: Are there any spinoffs for you as a person or your teaching in general by meeting with a coach?
Q: Any down sides to teacher coaching for you?
Q: Apart from teacher coaching, do you see any other strategies that could help improve your teaching?
Q: Anything to add about teacher coaching?
Appendix 5. Interview Schedule. Phase 3. Teacher coaches

Interviewer Introduction, thank you and purpose (2 minutes)

Hello. My name is Paul Bennett and I’d like to thank you for taking the time to be part of this research. The focus of this interview is to gain your opinions regarding the teacher coaching programme in which you have been involved this year. This interview should take a maximum of 40 minutes.

General questions

Q: Please define teacher coaching. Do you think a definition is important?
Q: In terms of thinking about your coaching partnerships this year, do you think there are any key goals that a lot of the coachees shared?
Q: Can you think of one partnership that you think has worked really effectively – your coaching has made a big difference – why you think it’s worked – and how do you know it worked?
Q: Are there any of your partnerships on reflection this year that haven’t worked – your coaching hasn’t made a big difference – why you think it did not work – and how do you know it did not work?
Q: How do you think school leaders can best support coaches?
Q: If you were going to design PD for coaching what would you see as the important factors?
Q: Anything you would like to add about teacher coaching?

Interviewer Introduction, thank you and purpose (2 minutes)

Hello. My name is Paul Bennett and I’d like to thank you for taking the time to be part of this research. The focus of this interview is to gain your opinions regarding the teacher coaching programme in which you have been involved this year. This interview should take a maximum of 40 minutes.

General questions

Q: In terms of your experience of coaching this year, how's it gone?

Q: How would you define the teacher coaching that you have experienced?

Q: In terms of coaching strategies, what would you say is the main coaching strategies your coach has used?

Q: What were the main goals that you have focused on with your teacher coach?

Q: How do you think your teaching has changed from the start of the year?

Q: How do you judge or evaluate those changes?

Q: What do you see are the benefits for students in your classes of you having a teacher coach?

Q: Are there any drawbacks of teacher coaching?

Q: How could the leadership team improve the teacher coaching in this school?

Q: Anything that you would like to add about teacher coaching?
Appendix 7. Interview Schedule. Phase 4. Teacher coach programme leaders

Interviewer Introduction, thank you and purpose (2 minutes)

Hello. My name is Paul Bennett and I’d like to thank you for taking the time to be part of this research. The focus of this interview is to gain your opinions regarding the teacher coaching programme(s) that you have led this year. This interview should take a maximum of 40 minutes.

General questions

Q: Why have you chosen to use teaching coaching in your school?
Q: How do you define teacher coaching? Is it different to mentoring?
Q: Do you see any tensions between the same person doing competency coaching and leading professional development in the school?
Q: How does coaching fit with appraisal in this school?
Q: Those people who say that coaching should be confidential, do you agree with that?
Q: What criteria have you used when going about choosing your teacher coaches?
Q: How do you train your coaches?
Q: Why have you gone for internal staff as your coaches rather than external?
Q: Any challenges of running a teacher coach programme? Any issues?
Q: If you had unlimited resources would you do anything differently with your teacher coaching programme?
Q: How do you know your teacher coaching programme is working?
Q: Anything else you would like to add about teacher coaching?
Appendix 8. Individual participant information letter

Dear Sir/Madam

My name is Paul Bennett. I am Deputy Principal at Pakuranga College and I am currently enrolled in the Doctor of Philosophy (Education) course in the School of Education at Unitec New Zealand. I am requesting your help in the collection of data as part of the doctoral study for this course.

The aim of my inquiry is to explore teacher coaching in New Zealand secondary schools. The objectives of my research are to find out why and how teacher coaching is being used and what coaching approaches are deemed to be the most effective.

I would like to interview you for approximately 40 minutes to discuss:
How you have been involved in teacher coaching at your school?
Why have you used teacher coaching?
What coaching techniques have you used or experienced as part of your teacher coaching programme?
What were the outcomes of the teacher coaching that you have been involved in?
How were these outcomes measured or evaluated?

The interview will be recorded and transcribed. Throughout the research neither you nor your organisation will be identified and you are free to request that I do not use any of the information that you have given, within three weeks of completing the interview. At your request, I am able to provide you with a copy of the transcribed interview and a copy of the doctoral thesis before it is submitted for assessment.

I hope that you will agree to take part and that you will find the experience valuable.

If you have any queries about the research, you may contact my principal supervisor at Unitec, New Zealand. My supervisor is Dr Suzanne Henwood, phone 09 8154321 ext. 5184 or email: shenwood@unitec.ac.nz.

Yours sincerely
Paul Bennett
Appendix 9. Individual participant consent form

PARTICIPANT CONSENT FORM FOR THE INTERVIEWS

TO:

FROM: Paul Bennett: 4a Maraetai School Road. Maraetai. Auckland

DATE: 13th February 2015

RE: Doctor of Education

I have had the research project explained to me and I have had an opportunity to have my questions answered.

I understand that everything I say is confidential and none of the information that I give will identify me or my organisation.

I am aware that I have the right to withdraw myself or any information that I provided for this research, within three weeks of completing the interview.

I agree to take part in this project.

Signed: ...........................................

Name: .............................................

Date: .............................................
Full name of author: **Paul Nathan Bennett**

Full title of thesis/dissertation/research project ('the work'):  
TEACHER COACHING IN ARTS AND ART TEACHING, NEW ZEALAND  
SECONDARY SCHOOLS: AN EXPLORATORY STUDY

Practice Pathway: **EDUCATION**
Degree: **PhD**
Year of presentation: **2017**
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Signature of author: **PB**
Date: **31/3/2017**