THE IMPACT OF STUDENT FEEDBACK ON SECONDARY TEACHERS

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ABSTRACT

This thesis explores the impact of student feedback, as a part of the formal appraisal process within a secondary school, on the teachers involved. The central theme of this thesis arose from the researcher’s experience of student feedback at his place of employment, a private secondary school in Auckland, New Zealand, in which student feedback plays a significant part in the appraisal process.

A search of the literature revealed that student feedback is rarely utilised as an instrument of data collection for appraisal purposes at secondary level, and that there is a corresponding gap in the literature on this issue.

The methodology chosen was a mixed-method approach involving a quantitative survey of teachers in four large Auckland secondary schools which utilise student feedback, followed by qualitative interviews with managers responsible for appraisal in the same schools. The survey was administered online and the interviews were carried out in person at the schools.

The thesis produced a number of findings. Both teachers who have participated in appraisal systems involving student feedback as a source of data, and managers who have implemented such systems are strongly positive regarding its usefulness and relevance. Teachers and managers also believe the implementation of student feedback has led to benefits in the teaching and learning processes within their schools. Few teachers report being significantly affected by negative or critical feedback from students. The thesis concludes that student feedback as an appraisal tool has a positive impact on secondary teachers when thoughtfully implemented.
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CHAPTER 1 - INTRODUCTION

Background to the Research

The impact of student feedback on teachers, as a part of teacher appraisal at the high school level, is an educational problem worthy of research in this country for a number of reasons. It is an issue that has not been well explored, either in New Zealand or internationally, and it is a topic that attracts much dispute and controversy – as Cardno and Piggot-Irvine (1997) note, “this is a contentious area of appraisal” (p. 97). Many teachers and researchers in social science are divided on whether students have anything of value to contribute to the appraisal process, whether they can be trusted to contribute intelligently and thoughtfully, and whether they have a right to comment on the effectiveness of their teachers. It can also be suggested that the process of formal appraisal has changed in recent years and will continue changing, with an increase in accountability, more focus on appraisal processes, and a need for more sources of data for appraisal, including the opinions of the recipients of the education process, the students.

Much of the theory underlying this study rests on the questions of whether professional appraisal is changing in nature and depth, and why. It is suggested in this thesis that appraisal is changing, and that such changes stem from an increase in accountability, not just in teaching but in all professional fields. Accountability, then, can be seen as underlying a shift towards an increased focus on performance and results within schools, abroad and in New Zealand, with a corresponding increase in focus on teacher appraisal, as Shinkfield (1995) suggests; “it is now accepted that schools must be accountable for achievement levels and expenditure” (p. 21). Any such increase in focus and expectation in professional accountability can be predicted to result in an increased focus on teacher performance and appraisal.

The use of student feedback as a formal component of the appraisal process in education can be traced back in Western culture to the 1950s in the USA. In contrast, tertiary institutions in the west have been making an attempt to listen to student opinion considerably longer, and have subsequently increased the involvement of student opinion in the performance
management of tutors and lecturers to the point that it is now an endemic and expected part of the tertiary education system. It has therefore been widely studied and researched. Secondary schools have been much slower to adopt this perspective, for reasons which will be outlined in chapter two. What is significant, however, is the resulting dearth of studies and research on this issue.

**Justification for the research**

It is suggested that student feedback, as one component of teacher appraisal, can be identified as a likely area of change and an issue worthy of attention. There are a number of issues that make this element of appraisal a controversial and important problem for educational academics to consider.

Firstly, the inclusion of student feedback is widely believed to have much potential for adding value to teacher appraisal (Scott, S., Issa, T., & Issa, T. (2008)) and indeed, to the teaching and learning process in a school. Secondly, the use of student feedback as a part of appraisal attracts caution and criticism from researchers who note its weaknesses, limitations and dangers (Centra, 1979). Thirdly, student feedback seems to have escaped the attention of academics in this country as there appears to be a significant gap in the knowledge base on this subject. The number of New Zealand high schools which currently utilise student feedback as a component of their formal appraisal systems is unknown. Studies and articles on the application of student feedback in New Zealand schools exist (e.g. Tod, 2000), but are rare.

Lastly, it is the author’s experience that the receipt of student feedback has the potential to discourage some teachers, and to negatively impact on their professional and self esteem. In the author’s current practice, students are requested to anonymously provide formal feedback on all teachers three times per year, and the information provided is used for a wide range of purposes, including being a component on which financial bonuses are determined. The information provided by students has been, in the author’s experience, widely varied. At best it is sensible, thoughtful, relevant and practical. At worst, it ranged through immature, personally-tinged, irrelevant and cruel. The way this feedback is received by teachers at this institution also varied widely – some reflected thoughtfully on all comments and made
positive use of those that made sense and that fitted with their own values and beliefs regarding teaching and learning. Others ignored feedback altogether, whilst a small percentage of teachers were noticeably discouraged by student critique, even that which was mild, sensible and relevant.

Given that this component of formal teaching appraisal has such potential for both positive and negative outcomes for teachers as individuals and for schools as organisations, and that there is at least a lack of depth in the relevant literature, it appears to offer a topic ripe for further research.

**Research Aim and Research Questions**

The aim of this thesis is to investigate the impact of student feedback, as a part of the formal appraisal process in a school, on the teachers being appraised. This thesis investigates how student feedback affects secondary teachers, and how they use this feedback to inform their professional practice.

The primary objectives of the thesis are:

1. To investigate the impact of student feedback on teachers – that is, feedback provided by students on their teachers - on the teachers themselves, and on their practice within the context of performance appraisal; and
2. To investigate how teachers use feedback provided by their students within the context of performance appraisal.

The research questions that will compose the core of this study are as follows:

1. How are teachers affected by student feedback received as a part of the appraisal process in high schools in New Zealand?
2. How do teachers use the feedback they receive from students during the appraisal process?
This thesis will contribute to the knowledge base in education theory by reporting the experience of teachers who have been part of an appraisal system which utilises student feedback as a data-gathering tool, and by outlining how these teachers have recorded and used the data provided by students to inform and improve their teaching practice. Student feedback is currently not widely used by secondary schools as a source of appraisal data and students are seen by many authors as being incapable of providing useful or relevant feedback.

**Outline of this thesis**

This thesis includes the following chapters. Chapter two is the literature review, which outlines and details the literature on appraisal in general, and on student feedback of teachers in the secondary context in particular. Studies on the historical background of student feedback within appraisal are considered, and research on the overall purposes and scope of appraisal are detailed. The place of student feedback within the appraisal process is examined and the links to professional development are summarised. Gaps in the literature regarding the use of student feedback on teachers are identified, and the arguments for and against the use of student feedback on teachers are considered. Finally, studies on student feedback in the New Zealand context are reviewed.

Chapter three details the methodology followed in this thesis. A methodological overview is given, followed by an explanation of the epistemological position taken. The research design is explained and the research methods outlined and justified in detail, including the requirements and rationale for a mixed-method approach. The data gathering instruments are described, and the methods of data analysis are also outlined. Issues relating to the reliability and validity of the data are discussed, and ethical considerations are also explored.

Chapter four is the data analysis chapter. The findings from the survey are shown descriptively, with the demographic questions briefly outlined followed by a summary of the data on the respondent’s status within the context of appraisal, and a summary of their perceptions regarding student feedback. Statistically significant associations between variables are detailed, with graphical demonstration where appropriate. Responses from the
interviews with school managers are then summarised and relationships to issues relevant to the research questions explored.

Chapter five presents a discussion of the findings of the research, as related to the research questions and research aim. It then draws conclusions based on these discussions. The conclusions are used to outline implications for theory, followed by implications for policy and practice. The impact on both professional development practices and on summative issues is considered and topics suggested as worthy of future research are discussed.

**Summary**

This chapter has provided foundations for the thesis. It presents justification for the research, and introduces the research aim and research questions. The methodology is briefly described and justified, and the report outlined. On these foundations, the thesis can proceed with a detailed description of the research.
CHAPTER 2 – LITERATURE REVIEW

Introduction

This chapter considers the literature on appraisal in general, and on student feedback of teachers in the secondary context in particular. The first section examines the background of student feedback in order to establish a historical context for the topic. The second section considers appraisal, its scope and purposes, and the particular difficulties in appraising teachers to develop a situational context. The growth in demand for appraisal and the current state of appraisal in secondary teaching are examined and the links between appraisal and professional development summarised. The third section focuses on student feedback as a part of the appraisal process, both in its summative and formative roles. Gaps in the literature regarding the use of student feedback on teachers are identified, and the arguments for and against the use of student feedback on teachers are considered. Studies on student feedback in the New Zealand context and international studies specifically on the effects of student feedback on teachers are reviewed, and government policy regarding the use of student feedback in the appraisal process is explained. The literature review is then summarised to justify the research questions chosen for this project.

Background

The professional appraisal of high school teachers can be traced back to the 1950s (Lokan & McKenzie, 1989; Narasimhan, 1997), and even further back for institutions of higher education. It should be noted that appraisal in education is generally referred to as evaluation in the USA and in publications from that country. This project will attempt to maintain clarity by generally referring to appraisal, but for the purposes of this study the terms can be considered to be synonymous.

The appraisal of university instructors by their students has been occurring since the 1920s. In that era, Harvard students started publishing assessments of their teachers’ effectiveness. The use of such publications became more widespread in the middle of the 20th century and in the 1950s the move towards considering the use of student appraisal of teachers at the secondary level was initiated when a USA government committee was formed to consider the
criteria that determined high school teacher effectiveness. The work of this committee lead to
the first appraisal of teachers in that country, at a time when the so-called ‘input-output’
studies of schooling argued that teachers had only a minimal impact on the outcomes of the
education process. This view was challenged over subsequent years in seminal publications
such as “Teachers make a difference” (Good, Biddle & Brophy, 1975) and “A Nation at Risk:

Since that time student appraisal of teachers has become endemic at tertiary level, and
somewhat inconsistently used at secondary level (Andrews, 2004). The appraisal of teachers
by their students at secondary level is likely, however, to be an increasing phenomenon in
western countries for reasons outlined in more detail below. This discrepancy in the
frequency of student appraisal in tertiary as opposed to secondary education has led to a
significant difference in the depth of the literature (Peterson, 1995).

**Appraisal**

Rudman (2002) states that appraisal is essentially a part of the broader issue of performance
management, and can be defined as “a process of planning an employees future work goals
and objectives, reviewing job performance and work behaviours, assessing progress towards
the predetermined work goals and discussing the employees training and development” (p.
437). Rudman’s definition is in the professional context and is not limited to the field of
education, but it is clear that appraisal is not a single action or event in an organisation’s or
individual’s calendar. Rather, it is a process linked to many aspects of personnel and
performance management, involving many separate activities.

**The Scope and Purposes of Appraisal**

Within the educational context, activities falling within the scope of appraisal are summarised
by Piggot-Irvine and Cardno (2005) as involving the following:

- The development and negotiation of a working, dynamic job description and/or
  performance management agreement in a partnership between the appraiser and
  appraisee,
Supervision of performance through regular monitoring, data gathering and meetings in which there is dialogue about performance and its improvement,

Formal occasions to review performance on the basis of databased judgements made by self and others in the framework of the job description,

Coaching, mentoring and support for professional development,

Consideration of constraints that might be affecting performance and efforts to remedy these,

Planning for development and for changes in the job (p. 24)

From this list in which each item on its own is a complex combination of actions and interactions, it is clear that appraisal cannot simply be defined or analysed. The goals of appraisal, however, can be more clearly defined and understood. Within the New Zealand context, the Principal’s Task Force in 1990 provided a set of guidelines regarding appraisal and stated that it has two main purposes:

- **Professional development**: this includes goal achievement; individual development and growth; and improvement of the institution,
- **A management function**: appraisal relates directly to the school’s accountability in terms of individual performance and its achievement of its charter objectives (Ministry of Education, 1990, p.31)

This dual nature of appraisal – being responsible for both developmental and accountability aspects of a school – contributes to its being poorly understood by many practitioners in education, both at management level and at the chalkface. This lack of understanding of the nature of appraisal is also identified by Piggot-Irvine and Cardno (2005) as the reason for the failure in the implementation of many appraisal systems. In particular, the fact that aspects of appraisal are connected with making judgements about employees (Rudman, 2002) causes problems both for those being appraised, and their appraisers.

**Difficulties in the appraisal of teachers**

One of the main problems in any discussion of the appraisal of teachers is the difficulty in defining good performance, or what exactly makes a good teacher. Teaching has been identified as a multi-dimensional task comprising many intangible aspects (Danielson and
McGreal, 2000; Stiggins and Bridgeford, 1985). Ramsden (1979) adds that the quality of teaching is also situational, and relative. Large scale studies in the USA in the 1950s were carried out in order to identify the ideal teacher stereotype. In summarising these, Barr (1961) concluded that it was extremely difficult to identify which teachers in a given school were the best, let alone ideal. He stated that “Some teachers were preferred by administrators, some were liked by pupils, and some taught in classes where there were substantial pupil gains, and generally speaking these were not the same teachers... different practitioners observing the same teacher arrive at very different evaluations” (Barr, 1961, cited in Wragg 1987, p. 6).

The nature of teaching has also been considered from a philosophical perspective and teaching has been variously described as a craft, a science and an art (although not, to the researcher’s knowledge, as a black art!). The purpose of this study is not to reopen the debate on defining teaching, or good teaching, however, it is sufficient to observe that appraisal as a process requires measurable outcomes if it is to be meaningful, and many of the important outcomes of the education process do not readily lend themselves to measuring. Preddy (2000) identifies some of these aspects and the nature of this dilemma. He observes that: “Many of the most valuable outcomes of education are multi-dimensional, complex and long-term… by focusing on measuring outcomes against pre-specified objectives, the product evaluation model ignores unplanned outcomes, and fails to explore the value and worth of the prescribed objectives and purposes” (p. 95). Despite these difficulties and for a range of reasons that will be considered next, the formal appraisal of teachers is an important and increasing part of education in this country.

**The growing demand for appraisal**

The drive towards better systems of teacher appraisal can be seen as part of an increase in accountability (Wragg, 1987). Piggot-Irvine (2000) observes “The enhanced accountability, or tightening of control for appraisal in New Zealand schools, has been increasingly evident” (p. 331). Educational institutions are clearly being required to be more accountable and a significant reason for this change is an increase in professional accountability. Referring to improving secondary schools in the United Kingdom, Bassett, D., Haldenby, A., Tanner, W., & Trehwitt, K., (2010) state “The task is to strengthen the accountability of schools so that, over time, all head-teachers look to strengthen their management ability to improve good teachers and weed out poor performers (p. 5). Preston (1989) has observed “a general
movement for more efficient management in the public and private sectors” (p. 18) and states the need for more accountability and quantifiably measurable performance indicators. Scriven (1989) links accountability with professionalism, stating that if teachers want to be considered and treated as professionals, then they must accept the associated responsibility, and “responsibility includes demonstrability” (p. 95). Cardno and Piggot-Irvine (1997) link accountability strongly to appraisal and state accountability as one of appraisal’s two main purposes. Furthermore, they show that accountability is a key purpose behind appraisal at multiple levels, from the school as a system down to the individual teachers and their obligations regarding professional development. More recently, Sinnema and Robinson (2007) claim that “public expectations about what all students should learn have risen substantially” (p. 320), leading to their claim that an increased focus on the leadership of teaching is currently required. Increased accountability in schools, then, is a growing phenomenon and can be seen as being driven from two directions.

Firstly, it is a bureaucratic theme being driven from the governmental level, as seen in the No Child Left Behind Act (2001) in the United States. Olson (1999) points out that “you don't have to look far for evidence that accountability is here to stay: Forty-eight states now test their students, and 36 publish annual report cards on individual schools” (p. 1), and the Act specifically demands the presence of a highly qualified and regularly appraised teacher in every classroom in that country. Also in the American context, Hoy and Miskel (2005) observe that “virtually all 50 states developed standards-based accountability systems for schools and districts during the 1990s” (p. 286). From a more international perspective, Middlewood and Cardno (2001) state that the links between globalisation, economic development and education systems became increasingly evident towards the end of the twentieth century, forcing governments to look more closely at their schools and to make them more accountable for educational outcomes.

Secondly, it is a theme resulting from the phenomenon of consumerism. Basset et al (2010) declare that “pupils are ongoing consumers of teaching” (p. 59). Although more evident at the tertiary level, students and parents at all levels of education are shopping around and seeking choice in where they receive education. In this country, and despite the tightening of school zoning legislation under the National government in 1998 and again under Labour in 2001, parents have simply used property purchase as a direct method of exercising their choice of where their children are educated (Lauder, 1994). From the perspective that students can be
considered as the commodities of a school produced for the employment market, McCuddy and Pirie (2007) identify four major forces that will increasingly influence schools, both public and private, with the first being that “the teaching and learning enterprise must respond to the demands of organizations that operate in an increasingly globalized economy” (p. 3). Narasimhan (1997) notes that “students… expect value for money. Value is a relative concept and whether a student obtains value depends on their perception of the teaching and learning situation” (p. 121). Recent economic recessions have only placed more pressure on private educational institutions to offer perceived value for money, making them more accountable in terms of results and outcomes. Smith (2008) believes that “There is a claim for quality assurance at all levels by stakeholders, and in education students are the primary stakeholders” (p 211). Accountability, then, can be seen as coming from more than one direction, and seems to be increasingly expected and demanded at all levels of society. Elmore (2004) believes that the pervasive drive for accountability comes from a basic societal belief that schools should demonstrate both their contributions to student learning and how they are improving their internal transformational processes.

Adams and Kirst (as cited in Murphy and Louis, 1999, p. 463 – 89) identify different types of accountability. Hoy and Miskel (2005) observe that “the driving forces behind educational accountability are straightforward but its practice is highly technical, legalistic and political. Therefore, many different types of accountability have emerged” (p. 286). With a focus on education, it is possible to identify a dominant form of accountability, which is primarily concerned with academic results, holding students, schools, and districts responsible for academic achievement (Elmore, 2004).

Appraisal in New Zealand has attracted much attention and legislative change in the educational reforms between late 1980s and the present. In 1989 the Tomorrow's Schools report (Government of New Zealand, 1988) and changes in the Education Act (Government of New Zealand, 1989a) led to substantial reorganisation of education in this country. Schools were, for the first time, made accountable to their communities as well as to government departments for their performance. Subsequently, the Draft National Guidelines for Performance Management in Schools (DNGPMS) were drafted in 1995 in an attempt to produce guidelines for performance management and appraisal in schools. As guidelines, they were not prescriptive, but were intended to give direction for boards of trustees in creating personnel policies and relating these to organisational goals and objectives.
Mandated in 1996, the guidelines were clearly accountability driven, defining and legislating a need for accountability in school’s appraisal systems. In 1998, appraisal was formally linked to financial reward in primary schools with the introduction of prescriptive professional standards for measuring teacher performance, closely followed by high schools in 1999. Piggot-Irvine (2000) encapsulates the changes in the law regarding appraisal in education in New Zealand when she states: “In summary, the post-reform legislation for appraisal has increasingly become more accountable in intent, and this has been further enhanced by the introduction of professional standards which have directly linked appraisal to remuneration” (p.334).

Accountability, then, can be seen as underlying a shift towards an increased focus on performance and results within schools, both abroad and in New Zealand, and it is hard to argue that this will not result in a corresponding increase in focus on teacher appraisal.

**The state of play of appraisal**

Despite the legislation referred to earlier regarding which appraisal systems were required by law to be established in New Zealand schools, it is difficult to know how many schools have followed the framework established by the guidelines, nor to know the extent to which they have followed them. Little statistical data has been collected on just how many schools do actually implement appraisal systems, or how they implement them (Cardno & Piggot-Irvine, 2002). Internationally, appraisal and evaluation systems tend not to attract widespread commendation. Mertler (1997) asserts that while almost all educational systems in the United States today evaluate the qualifications and work of their personnel, they are not positively viewed. He observes that “Historically, there has been widespread dissatisfaction with the quality of personnel evaluation in education. Educators, policy makers and community groups attack the near absence of personnel evaluation systems, or the superficiality of the systems that do exist” (p. 2). Elmore (2004) believes that there is now widespread acknowledgement that appraisal practices in schools have only a limited connection to improvements in the quality of teaching and learning.

Mertler (1997) believes that appraisal is all too commonly viewed as a means of control, of motivation, and of firing teachers when their performance is regarded as poor. He is also clearly supportive of many teachers’ concerns, believing that “teachers’ resistance to
evaluation is reasonable if the evaluation is subjective, unreliable, open to bias, closed to public scrutiny and based in irrelevancies” (p. 3). These concerns have led, particularly and inevitably in the United States, to appraisal becoming a sensitive legal issue. As Sinnema and Robinson (2007) observe, “in the United States, both summative and formative teacher evaluation is surrounded by legal complexity and risk that produces defensive behaviour on the part of both teachers and administrators” (p. 321).

Many appraisal systems in place, in New Zealand and overseas, follow what Hafaele (1993) describes as the dominant model of appraisal. In this model, the stereotypical administrator enters a teacher’s classroom once or twice a year, sometimes unannounced but more often with advance notice so the teacher can prepare something especially for the visit, and watches from the back for 20 – 30 minutes. Appraisers in such cases, according to Scriven (1989), are “nothing more than occasionally visitors to the classroom” (p. 91) and subsequent reports “suffer from samples that are inadequate in size and not representative, measurement artefacts, style bias and failures of empathy, and are usually vulnerable to personal bias (p. 91). Mertler (1997) raises several other concerns with this system of appraising, including the following:

- That the teacher is dependent on the administrator to collect and analyse information
- That any improvement in instruction is aligned with a single observer’s perceptions
- That teachers perceive appraisal as threatening
- That appraisers (often Principals) often have no training in observational techniques
- That appraisers do little or no preparation prior to observing a teacher
- That appraisers, having little time, are being unwilling or unable to devote the time necessary to conduct thorough appraisals
- That appraisers do not have specialized pedagogical knowledge of all teaching areas in which they are required to evaluate staff
- That teachers tend to compete with each other to look better on the evaluative criteria, rather than establishing a communicative environment where knowledge and practices are shared.
The concerns raised by the authors above highlight common flaws in the ways in which teachers are commonly appraised at present, and the need for other methods and sources of data. Students are an obvious source of useful data and the potential value of student feedback as a part of appraisal should not be underestimated.

Summative and Formative Appraisal

According to Manning (1998), “the improvement of instructional practice is quite possibly the most important – and most positive – purpose of teacher evaluation”. While Manning and almost all authors on this field acknowledge summative and formative outcomes of appraisal as its two main purposes, separating them into different types of appraisal is a common misconception (Piggot-Irvine & Cardno, 2005). Scriven (1989) avoids this trap by reminding us that appraisal is inherently summative, but may also have formative value – a spin-off of the process, or the “icing on the cake” (p. 96). There are, of course, many different purposes for summative appraisal, including but not limited to registration of a new teacher, approving an experienced teacher for promotion, annual appraisal as a bureaucratic requirement, and for determining bonuses or movement on a salary scale. Piggot-Irvine & Cardno (2005) insist that appraisal regarding remuneration and career progression is a different type of appraisal altogether which falls outside the scope of what is normally implied.

Appraisal and professional development

Professional development is recognised as vital for maintaining and improving the quality of teaching in a school. The 2007 McKinsey report (Moursheed, Chijioke & Barber, 2007) on high-performing schools highlighted the importance of professional development in achieving change: “The three pillars of the reform were professional development, professional development and professional development … We aligned everything – resources, organization, people – with professional development” (p. 37). The link between appraisal and professional development, which can be summarised as the formative outcome of the appraisal process, is therefore of considerable importance. Smith and Welicker-Pollack (2008) declare “it is therefore simply not enough for the institution to collect information about the quality of teaching. Its value lies in translating information collected by the student feedback into professional development activities at personal as well as institutional levels” (p. 211, 212). Professional development is an essential theme to consider in any discussion of
appraisal, and the two concepts are strongly connected in the literature. Most authors identify professional development as being one of the main purposes of appraisal (Manning, 1988; Mertler, 1997; Marsh & Roche, 1993), while others go further and state that it defines the nature of appraisal. Wragg (1987) believes that people approach appraisal in a manner defined by their own perspective. Some, he believes, “will regard it as a part of a continuous process for the improvement and extension of professional skills” (p. 2). Cardno & Piggot-Irvine (1997) state that mentoring and support for professional development is one of the key components of performance appraisal (p. 4), and one of its two main purposes (p. 5). They broaden the scope of what professional development encompasses, in stating that it “includes goal achievement, individual development and growth and improvement of the institution” (p. 5). In other words, professional development includes the development of individual teachers as people and as professionals, and the development of schools as educational bodies committed to serving the needs of their students. This link between teachers’ professional development as individuals and progress towards school-wide goals is considered important by numerous authors (Cardno & Piggot-Irvine, 1997; Hoban, 2004.) Other authors have bemoaned the lack of focus on the formative aspects of appraisal in education and are critical of this perceived omission. Frase and Streshly (1994) assert that, in the USA in that decade at least, “teacher assessment appears to be purely ceremonial, with little or no intent to improve instruction...” (p. 50), while Scriven (1980), a few years earlier, went further in declaring that the procedures used in teacher appraisal “are shoddy at the intellectual and the practical levels” (p.1). Mertler (1997) is more specific in observing that “it is evident that ....evaluation has been used to select and retain teachers, but seldom has it been used for the development of qualified teachers” (p. 2). The necessity for teachers to continually develop their own practice is therefore widely accepted and promoted in the literature on education and can be described as an essential part of belonging to a profession.

In case studies where appraisal has been sensibly applied as a part of teachers’ professional development, there is more positivity. More specifically, studies involving the use of student feedback as a source of data for teachers to base professional development on indicate much potential and promise. This type of development is described as action research and is posited by Mills (2007) as having many advantages. “...it is done by teachers, for teachers and students, not research done to them, and as such, is a dynamic and responsive model that can be adapted to different contexts and purposes” (p. 500). In an excellent example of the potential of student feedback-based action research, Raymond (2001) was part of a school
improvement project in the UK which attempted to involve the opinions of students to a
greater degree than previously attempted in that country. In her opinion, this resulted in “the
most significant and empowering professional development strategy that I have seen in any
school in any country” (p. 58). She recounts an example of a senior staff member who had
shown little interest in professional development in some 25 years, but who discovered much
about his own practice following only a single episode in which he allowed students to
observe and comment on his lessons for the first time.

Action learning is common in business organizations and is a process by which a group of
colleagues reflect and share experiences in order to improve their practice and performance.
Action learning starts with reflection, and student feedback can be a useful source of data for
a teacher to compare their own perceptions and experiences regarding teaching with how
students view their teaching. Hoban (2004) studied teachers in the Australian secondary
system and invited them to participate in an action learning programme based largely on
student feedback in the form of recorded interviews. Hoban (2004) concluded:

Without the introduction of the student tapes, the teachers’ reflection and discussions
would have occurred ‘inside the square of their own experiences.’ In short, it was the
introduction of recorded interviews with their own students that gave the teachers a
different perspective on their experiences. This provided the teachers with an
alternative perspective on their practice and was a catalyst for their reflection and
community discussions... in effect, challenging the assumptions that underpin their
practice provided dissonance in their beliefs about teaching. As such, listening to the
student data created a ‘problem’ for teachers and was as a catalyst for “double-loop
learning”. (p. 213)

**Student feedback**

It is suggested that student feedback will be an increasingly popular source of data for use as
a part of the appraisal process, and a clear reason for this is the need for measurable,
reportable data for use in management decisions. Good appraisal needs data (Piggot-Irvine,
2000) and this author notes in her study on the current state of appraisal in New Zealand
schools that there is a “continued avoidance of the assembling of objective information for
appraisal” (p. 345). This, she reasons, will lead to an increase in subjective decision making which cannot be an ideal basis for either the managerial accountability aspects of appraisal, or any connections to summative and administrative decisions such as promotion and salary. Appraisal, then, should be based on factual and objective data if it is to be reliable and trustworthy, and anything else exposes the appraisal process to criticism and mistrust. Staff may perceive the appraisal process as being ad-hoc, low priority and subjective. Such a climate could lead to a degree of mistrust between school management and teachers (Piggot-Irvine and Cardno, 2005). New Zealand studies suggest that a worrying trend of avoiding objective information in the appraisal process persists in schools (Piggot-Irvine, 2003). In a 1996 survey on this issue, only 27% of respondents reported that they sought and collated objective information. Student feedback is a clear source of quantitative data that can be used for either the accountability or developmental focus of the appraisal process. As discussed below, it is data that is generally reliable and valid, and it can also be sought on a regular basis to provide longitudinal data, adding an extra dimension.

The use of student opinion as a source of data for the appraisal process has attracted a significant amount of research and discussion in the literature, although grounded and common sense opinion on this contentious issue is somewhat thinly distributed. The literature can be broadly divided into two sides of a central argument. There is widespread support and advocacy for the use of student feedback on teachers, and an opposition which identifies flaws and problems in its use and application which are proposed as sufficient to warrant excluding this practice from teacher appraisal. The middle ground is, sensibly, occupied by those who agree that student feedback is a valuable tool and a useful component of teacher appraisal, but who recognise that it has limitations and needs to be utilised carefully.

**Gaps in the literature regarding student feedback**

The literature on professional development and appraisal is, in general, lacking in studies on student feedback. A careful search of the literature on appraisal reveals a very distinct gap regarding the use of student feedback on in the high school environment. Mertler (1997) comments “a substantially lesser amount of research has involved the evaluations of secondary teachers by their students” (p. 8) and quotes a survey of evaluation practices in 213 school districts in the USA cited by Barsalou, Killinger and Thompson (1974) in which *no use of student data* is mentioned. Student feedback on the teaching faculty is widely and
indeed almost universally used at university level, but is not yet common at the high school level (Peterson, 1995). There are, correspondingly, a large number of studies on student feedback of instructors at university level and a relative paucity specific to high schools. As Peterson (1995) notes, compared to the vast number of tertiary studies, “the literature for schoolteachers… is much less available” (p. 87).

In the high school studies that do exist, no studies appear to have been carried out investigating the connections between unpleasant and harshly critical student feedback and the emotional impact this has on the teacher who receives it. Wragg (1987) comments briefly on this issue in his excellent and practical text on appraisal, in reflecting on a particular example of feedback addressed to him as a teacher, in which a student stated that “…the trouble with you is that you think you are God’s gift to teaching… what makes you think your jokes are actually funny?” (p. vii). Wragg’s observation that “the temptation to crawl away into a quiet corner and plan a dignified suicide” (p. vii) is a humorous reflection on a serious issue which deserves more attention.

A case in point regarding the paucity of studies on this issue, from the literature in this country, is the otherwise excellent Best Evidence Synthesis iteration on Teacher Professional Development and Learning by Timperley et al (2007). This comprehensive examination of the issues linking teacher learning and student learning is described as a “powerful addition to the field” (p. viii) and the authors are described as having “painstakingly searched the literature to find studies that provide evidence of the nature of the relationship between teacher learning and student learning” (p. viii). Despite including an exhaustive range of studies and sources in their review on this subject within the New Zealand context, the theme of student’s feedback on their teachers is not mentioned once and no study on this topic is referenced. Another important study on teacher appraisal in New Zealand by Sinnema and Robinson (2007) considers a range of concerns with and approaches to teacher appraisal, but does not mention student opinion.

Data and conclusions from the many higher education level studies available can and do have some relevance to the high schools, and most of the references referred to in the following section come from studies in the tertiary sector, in the absence of high school-specific sources. In support of this assumption, it is worth noting that commentators on the use of student feedback on teachers as a part of the appraisal process point out that senior high
school students, at least, are only one year younger than tertiary students whose opinions are frequently sought for lecturer appraisal (Moses, 1989). Nevertheless, some caution in generalising and applying studies from the tertiary to the secondary environment seems sensible.

**In support of the use of student feedback**

In support of the use of student feedback, several authors point to the value gained in asking students to reflect on the learning process, believing that students learn by evaluating and making judgments, and that students should learn to differentiate between task and person. (Moses, 1989; Morse, 2007; Chang, Piket-May & Avery, 1998). Many authors believe that students benefit by being given the responsibility of contributing and commenting on their teachers and on the teaching process in their school. Young adults are part of very complex relationship dynamics at school and carry many diverse roles and responsibilities (Schratz & Blossing, 2005). High schools can be said to underestimate the complexity of their students’ daily lives, however, denying the existence of such responsibilities and establishing expectations on an ideology of immaturity (Rudduck & Flutter, 2004). High school students want to be treated with respect and the act of being asked to give their opinion and to provide input into how the school operates can help them feel more respected and to behave in a more positive and constructive way.

Rudduck and Flutter (2004) support the use of student feedback based on the following three arguments: that students do have some maturity and want to be treated as adults; secondly, that they need to feel respected and listened to (both as individuals and as a group); and thirdly, that involving and consulting pupils contributes to a sense of belonging and inclusion. In other words, they link the use of student feedback to the concept of *student voice*. Using this instrument is, therefore, in itself, a response to pupils’ need for recognition and a medium for pupil participation at class level.

The value of using students as a source of information regarding teacher effectiveness is also considered important (Scott et al, 2008; Rowley, 2003; Peterson, 1995). Students are noted as able to provide information that other sources seldom can, including the development of motivation in the classroom, the degree of equity shown to students, the amount of rapport developed with students and the frequency of homework. Peterson (1995) believes that
student data provides high reliability due to the large number of students available for use as correspondents, that report data is efficient in terms of time and money, and that students deserve a voice as stakeholders in the education process. Several studies have concluded that student feedback as an instrument for appraising teachers is reliable and valid (Cranton & Smith, 1990; Hooper & Page, 1986; Toby, 1993). They also conclude that student ratings are positively correlated to the amount learned in a course, as well as to colleague (peer) ratings and to ratings by expert, external appraisers. Such studies strongly suggest that teachers can and should be able to benefit from student feedback of their teaching, and that no teacher should believe that they cannot improve in their professional practice. Moses (1989) is unconditional is stating that “there is no doubt that students can give valid feedback that can help teachers evaluate the effectiveness of their teaching strategies (p. 21), while Marsh (1987) adds “student ratings are clearly multi-dimensional, quite reliable, reasonably valid, relatively uncontaminated by too many variables often seen as sources of potential bias, and are seen to be useful by students, faculty and administrators” (p.392).

Finally, some authors observe that students are capable of evaluating teachers, simply because, they do it all the time. In defence of student feedback, Bassett et al (2010) declare “it can’t be right for us to say ‘we can’t have pupils evaluating teaching,’ they do so every day of their school life, it’s just that we don’t ask them for the feedback. (p. 59).

**Questioning the use of student feedback**

There are a number of concerns regarding the value of student feedback and it has been questioned by many authors. Many secondary teachers seem to be either uncomfortable with, or genuinely threatened by the idea of allowing their students to provide feedback on them. Basset et al (2010) observe that “There has been a small but very vocal proportion of the teaching profession who have regarded pupils’ evaluation of teaching as a threat, and that has been rather highly publicised in the press” (p. 59). A website created in 2001 called RateMyTeachers.com allowed students to anonymously give numerical ratings on their teachers, as well as to write a small comment on their perceptions of the teacher. As of April 2010, over 11 million teachers, mainly in western countries, had been added to this website and rated by participants. This website has generated significant controversy. Teacher unions in Australia, the United Kingdom and the United States have sought to shut down the site, without success. Explaining their reasons to try to have the site closed down, a representative
of the National Union of Teachers in the United Kingdom stated “The comments being made are extremely personal and they have caused members a lot of distress... I think teachers are making the conscious decision to steer clear of the site, ignore it completely, because they fear seeing it would cause them immense distress” (Dailymail.co.uk). Notwithstanding the fact that this website has no connection to appraisal or professional development in any school, the response from teachers to the idea of students commenting on their professional practice reveals clear underlying concerns.

There is considerable doubt as to whether student feedback contributes to improved instruction in the classroom (Andrews, 2004), although this raises the question of whether teachers are using feedback effectively, rather than whether it can be a useful source of data. Richardson (2005, p. 392) states that “the routine collection of students’ evaluations does not in itself lead to any improvement in the quality of teaching”. It is indeed self-evident that carrying out surveys with students is pointless unless the teachers use the data received to inform their own practice, as a mirror in which to look for previously unknown weaknesses and misconceptions. Scott and Dixon (2009) take this theme one step further and argue that, before they even start surveying students, teachers need to come to an understanding that the processes of carrying out and reflecting on student feedback may well be useful and advantageous, both for themselves as professionals and by direct implication for the students they teach and the organisation they work for. Students are considered as inappropriate for appraisal in that they cannot be considered to be experts in a subject (Cashin, 1988; Rowley, 2003; Richardson, 2005; Peterson 1995). The ability of students to fairly evaluate a teacher is a difficult factor to ignore, and this problem becomes more significant as the age of the students in question decreases. Even adult learners appear to have significant gaps between their expectations of a good lesson and their perception of actual lessons (Narasimhan, 1997). Younger learners, including high school students, are still developing an awareness of themselves as learners and an appreciation of the learning process per se. They are often sufficiently immature so as to react on a personal level when submitting feedback. Worthington (2002) has, for example, undertaken a study that demonstrates that expected grade was one of a number of significant influences affecting student ratings of teachers. Students have been shown to rate some courses and subjects more highly than others (Centra, 1979; Koh & Tan, 1997). Boland, Lehman and Stroade (2001) and Darby (2006) have shown that students rate elective courses more favourably than core ones, presumably because students are participating in a programme that they have an interest or focus in. Bassin (1974)
noted poorer evaluations tended to be given to quantitative courses. Some teachers are rated more highly than others for extraneous reasons such as age, gender, personality and appearance (Koh & Tan, 1997; Coles, 2002). McGoldrick and Schuhmann (2002) observed, unsurprisingly, that a student’s personal liking for the tutor had an effect on student evaluations of that tutor. Smith and Kinney (1992) suggest that age has an effect on appraisal, with older and more experienced teachers receiving better feedback from students. Physical appearance and personality are also likely to be reflected in feedback, although they have little bearing on teaching effectiveness. Other researchers have noted a number of variables which influence teacher appraisals by students. Perkins, Guerin and Schleh (1990), Greenwald and Gillmore (1997) and Wachtel (1998) have noted the link between grades awarded by teachers and the evaluations of their students. This leads teachers to start to teach to their appraisals, dummying-down assessments to raise grades and working to entertain. (Peterson, 1995). Crumbley, Henry and Kratchman (2001) state that students respond better to certain teaching techniques, marking teachers lower if they used those the students were less familiar with. Liaw and Goh (2003) and Defusco (1999) note the effect of class size and record a tendency for small classes to be rated more favourably than larger. Even the time of day a course is taught can be linked to students’ opinions of the course – DeBerg and Wilson (1990) argue that late afternoon and evening classes are less conducive to teaching due to student (or teacher!) fatigue.

Student feedback attracts critique as it has not been proven to be effective, or to have made a positive difference to important outcomes such as teaching and learning in schools. Marsh (1987) considers it difficult to properly test the benefits of student feedback when he states:

No research has examined the effects of continued feedback for student evaluations over a long period of time with a true experimental design, and such research will be very difficult to conduct... the long term effects of students’ evaluations may be amenable to quasi-experimental designs … but the difficulties inherent in the intervention of such studies may preclude firm generalizations (p. 342).

In another tertiary level study, Kember, Leung and Kwan (2002) found no measurable improvement in student feedback ratings over a 6-year longitudinal study. Although formal inference could not be drawn as there are too many variables affecting this data, they
concluded that “a teaching evaluation system that does not appear to demonstrate any overall improvement in teaching quality cannot be considered satisfactory” (p. 422).

Student feedback, then, is a more complicated source of data than other types used for appraisal, and as such it is less appropriate for summative purposes than other types. According to Moses (1998), “student feedback is not appropriate for summative issues – salary, promotion, appointment – as students are dependent on teachers to a very high degree and a very unequal power relationship exists” (p. 70). As discussed previously, appraisal does have a range of purposes, on a continuum from an accountability focus through to a development focus, and student feedback is sometimes identified as less appropriate for purposes at the accountability end of the continuum. Marsh (1987) with support from Moses (1989) argues that the least appropriate use of student ratings is as a summative judgement for purposes that might incur potential pecuniary or personal penalty. Shannon, Hancock and Trentham (1993) note that “feedback from student evaluations should be diagnostic. That is, this information should provide faculty with a profile of their strengths and weaknesses, and be useful in working toward the improvement of their teaching” (p. 42). Marsh (1987) also cautions that, despite the generally supportive research findings, student ratings should be used cautiously, and there should be other forms of systematic input about teaching effectiveness, particularly when they are used for tenure/promotion decisions.

Regardless of the appropriateness of using student feedback on teachers, the issue of the impact of such feedback remains as a concern that is seldom mentioned in the literature. Teachers are unlikely to be more emotionally robust than people in any other occupation, but in receiving feedback on their chosen profession from children, particularly those in the turbulent years of adolescence, their professional and personal weaknesses are analysed and commented on more cruelly than in any other profession. Peterson (1995) recognises this problem and identifies, in particular, open-ended comments as the primary source of concern. Good surveys are representative and should focus on average perceptions of a group, not individual statements. Peterson observes, however, that it is difficult for a teacher to ignore the pointed criticism of one or two students even if the average responses for the rest of the class on a range of Likert-scale questions are positive.
Studies on student feedback in the New Zealand context

The literature on student feedback as a part of appraisal is limited in this country, in line with trends overseas. Tod (2000) carried out three case studies on schools in the Nelson district. Interviews were carried out with department heads, teachers and students in order to analyse the types of feedback employed, how teachers received and applied the feedback received to their own practice and whether any improvements in teaching and learning could be linked to the use of student feedback. This study was not able to make any definitive connections between the use of student feedback and quantifiable changes to teaching and learning, and concluded that both the methods used to gain student feedback and the underlying philosophies for this process could be improved. Tod concluded “until the concept of 360 degree feedback is fully understood by schools, student evaluations of teacher performance will continue to be ad hoc and will fall well short of their potential” (p. 30). Overall, this study generated more questions than it answered and can be viewed as a clear indicator of a topic deserving further study.

Studies on the effect of student feedback on teachers

The only study found by the researcher which did investigate how teachers view and react to student feedback occurs at the tertiary level, at a teacher education institution in Israel. In this study by Smith and Welicker-Pollack (2008), 410 teacher educators were invited to participate by responding to questions on “what is the teacher educator’s attitude to students evaluating their teaching?” Notably, only 21% of educators responded to this study, possibly indicating that the majority did not perceive their students’ feedback to be an issue of concern. The survey focused on ten areas of relevance which were:

1. Attitude to standardized feedback;
2. The importance of standardized feedback to the institution;
3. Perceived students’ attitude to the standardized feedback;
4. Superiors handling of the collected information;
5. Institutions’ handling of the reported information;
6. Teacher educators personal handling of the reported information;
7. Impact of standardized assessment of teaching;
8. Preferred ways of assessing quality of teaching in teacher education;
9. Perceived ways of how the institution assesses quality of teaching; and
10. Perceived value of statements in current questionnaire.

(p. 208)

The context of this study is sufficiently removed from that of New Zealand secondary schools to limit its value as a reference point for secondary student feedback in this country. However, in that the participants surveyed were professional educators responding to questions on the feedback provided by their students, the conclusions do add value and are summarised here. They are, that the educators have a generally positive attitude towards student feedback of their teaching; that the educators believe that their students were capable of assessing their teaching and responded honestly, and that the educators took the feedback they received seriously and applied it in a formative sense to their own practice, that is to say, as a source of professional development. Smith and Welicker-Pollack (2008) conclude that the teacher educators surveyed did reflect on the feedback received, and did take action based on this reflection. In this, they clearly align their conclusions with Kolb’s (1984) model of experiential learning in being based on action, reflection on action, and developing a personal understanding of what takes place. The research questions in this study, particularly relating to the formative use of student feedback, can be directly linked to these conclusions.

The legal basis for the use of student feedback in this country

Under current legislation in New Zealand, the responsibility for identifying professional development needs and instituting a programme to meet those needs now lies with schools rather than external bodies such as inspectors. Any effort made by a school to analyse, change or improve appraisal practices will therefore bring into focus the professional development practices in place at that time. Ministry of Education guidelines and expectations for developing and implementing a performance appraisal system (Ministry of Education, PMS 1, 1997) state in section 7 that boards of trustees must develop an appraisal policy, and that procedures for appraisal must include self-appraisal. Advice on how to best support self-appraisal is then provided in section 8, where the guidelines for Evaluating work performance and professional growth include the following:
Although self-appraisal is a crucial component, evidence from overseas research confirms that there are sometimes differences between what teachers think and say they are doing, and what is actually occurring. Observing teaching, coupled with the sharing of perceptions about what is happening in classrooms, increases the validity of conclusions. For each appraisal, a range of other devices may be used to support limited classroom observation.

For example:
- portfolios;
- video or tape recordings of parts of lessons;
- structured student feedback/comment; and
- analysis of documentation provided by either students or teachers.

In considering the range of data gathered during classroom observation and by other techniques, it is especially important to consider:
- emerging patterns; and
- any apparent discrepancies in the information provided. (Ministry of Education, PMS 1)

This document instructs and guides professional appraisal in all New Zealand schools. The fact that it only mentions the use of student feedback once, and then only as one possible example of a range of devices which may be utilised to support classroom observation, is a clear statement that student feedback has minimal profile and is given a very low priority by educational policy makers in New Zealand.

**Summary**

Appraisal has been identified in this literature review as an important but complex task that falls within the broader domain of performance management. The appraisal of teachers, in particular, is identified as being particularly difficult as the outcomes and quality of teaching can be difficult to define and harder to measure. One way of measuring these parameters is by consulting the students taught.

A demand for an increased degree of appraisal of teachers is identified as being likely in the current climate of increased accountability at all levels of professionalism. The links between
appraisal and professional development, the formative value of what is essentially a summative process, have been clarified.

Within this current climate of appraisal, student feedback has been shown to be a useful but highly controversial method of obtaining data as a part of the appraisal process. The arguments for and against the implementation of student feedback at the secondary level have been summarized and its limitations as a part of the appraisal process identified. Significant gaps in the literature on the use of student feedback, particularly regarding its effects on teachers and on how they utilize and implement student feedback in their practice have been highlighted. Studies on the use of student feedback in this country, and Ministry of Education policy regarding its place in the appraisal process have been considered.

A consideration of these gaps in the literature in light of the importance and potential of, and likely increase in demand for secondary teacher appraisal leads therefore to the identification of the research aim addressed in this thesis, which is to investigate the impact of student feedback, as a part of the formal appraisal process in a school, on the teachers being appraised.

In order to satisfactorily approach this research aim, questions stemming from the issues identified in this chapter have been identified which serve as a focus for the research that is carried out. The research questions that will compose the core of this study are as follows:

1. How are teachers affected by student feedback received as a part of the appraisal process in high schools in New Zealand?
2. How do teachers use the feedback they receive from students during the appraisal process?
CHAPTER 3 - METHODOLOGY

Introduction

This chapter explains the ontological position and the epistemological paradigm underlying the project. It then links this epistemology to the research design and to the methodology employed, and justifies these links. The chapter concludes by explaining in detail the research methods used, including how data was analysed, considers the reliability and validity of the results, and outlines ethical issues associated with the project.

Methodology overview

In order to approach the research problem in this thesis in a comprehensive way, the researcher decided that it was important to gather data from a large number of teachers who have participated in appraisal systems involving student feedback. An online survey was chosen as the primary data collecting instrument, given the limitations of time and money available. A number of schools in the Auckland district were contacted to ask if they included student feedback in their appraisal systems, and if they would be interested in participating in a research project on this subject. Most schools contacted indicated that student feedback was not a part of their appraisal systems, and some that did canvas student opinion were not prepared to participate. Access was ultimately granted to four large schools in Auckland which did use student feedback in the appraisal process and the teachers in these schools were invited to participate by completing and submitting the online survey. The questions in the survey were a combination of demographic questions on variables such as the respondent’s age, gender and subject specialty, and opinion questions relating specifically to student feedback.

Responses to these questions were analysed statistically in order to make generalisations regarding what teachers think of student feedback after receiving it, and to identify any significant associations between demographic variables and opinion. The statistical tools used were non-parametric analyses in the Statistical Package for the Social Sciences (SPSS) for Windows programme. The data was assumed to be non-parametric as the sample size was too small to generate reliable normal responses.
Collecting opinions from teachers in this way was not seen as a sufficiently comprehensive approach to answer the research questions, however, and it was decided that other sources of data should also be collected. Since the survey did not approach school managers or ask any questions regarding the target schools’ strategies or intentions regarding appraisal, interviews were subsequently carried out with managers at the schools on these issues. Questions in the interview schedule were generated from analysis of the teachers’ responses in the survey, in order to clarify the trends and associations generated.

This combination of a primary, largely quantitative data collection method followed by a secondary, quantitative method is described as a mixed-method approach and is outlined and justified in detail later in this chapter.

**Epistemological approach**

The methodological approach to a problem is broadly determined by how the researcher views and understands the world (Bryman, 2008; Creswell, 2002) and by the type of approach which is considered to be the most appropriate for understanding the specific problem. The approach underlying this project is a reflection of the tension between the researcher’s scientific background and perspective, and the necessity of understanding highly complex, multi-layered social organisations such as schools. The former led the researcher to seek a positivistic approach with the use and analysis of quantitative data to inform and describe the issue under examination, but the latter called for an interpretive paradigm. Interpretivism is an approach that considers the subjective nature of how humans view their social worlds (Cohen, Manion & Morrison, 2007), requiring a different logic to that of the natural sciences (Bryman, 2008). An interpretive approach is more clearly aligned with the collection of qualitative data, with words rather than numbers (Bryman, 2008). It is also more useful for employing an inductive approach to the link between theory and research, generating rather than testing theory. This provided a good fit for the issue being studied, as it is considered to be an issue lacking theoretical consideration in the literature. Interpretivism, therefore, forms the underlying epistemological approach used in this research.
Within this framework, a constructivist ontology has guided the establishment of research design. The rationale for this ontology rests on the highly complex nature of schools as social entities which are continually being defined and altered by their participants (Bryman, 2008). As such, schools in general, and the relationships between individuals in the school setting in particular were considered as unsuitable for being viewed objectively as phenomena independent to their participants and their perceptions of it. Rather, they are social constructs in a continual state of flux. In this study, the feedback provided by students about their teachers within the context of a staff appraisal system is a function of their relationship with those teachers. This relationship is a highly complex social construct, and can be expected to be changing and evolving from day to day. As discussed in the literature review, student feedback attracts some criticism as a source of data for appraisal purposes because student voice can be considered to be unpredictable, and dependent on a large range of socially dependent variables. Therefore, a constructivist ontological approach was considered to be appropriate.

The dichotomy between the two conflicting approaches of positivism and interpretivism described above led the researcher to select a mixed-method research approach, combining elements of positivism and the collection of some quantitative data within a broadly interpretive epistemology. The use of quantitative data satisfies many of the practical considerations required by a positivistic epistemology. The questions under consideration involve “teasing out the relative importance of a number of different causes of a social phenomenon” (Bryman, 2008, p. 26) while qualitative data is expected to add value in providing a strategy which “is sensitive to how participants interpret their social world” (p. 26).

Finally, the use of an inductive approach was considered to be appropriate for this study as the research questions are not grounded in any clearly defined theory. This is an acceptable, if less common foundation for research (Bryman, 2008). An analysis of the literature relating to student feedback on teachers in the secondary environment reveals a defined gap in social science theory, on the issue of theoretical descriptions on how teachers respond to and use student feedback. The development of the research questions on which this inductive process has been established is also based on the researcher’s experiences and subsequent reflections. Therefore, the research carried out is to a significant degree data collection which, upon
analysis and reflection provided the opportunity for generalisations and conclusions relevant to the research questions.

**Research design**

As mentioned, the research design chosen for this project is a mixed method approach, as the research includes methods associated with both quantitative and qualitative research analysis. The mixed method strategy is a relatively new development in social science research and has gained considerable popularity in recent years. Fontana and Frey (2005), in summarising concerns that every form or type of interview has limitations and brings problems of context with it, state that “an increasing number of researchers are using a multi-method approach to achieve broader and often better results (p. 722). The use of mixed method research is questioned by some authors (Hughes, 1990; Smith & Heshusius, 1986) who query whether quantitative and qualitative research can be combined. In the educational context, Keeves (1997) disputes this, arguing that “while it is useful to separate approaches to the conduct of an inquiry in education into a scientific tradition and a humanistic tradition, it is important to recognise that such a separation is one of convenience and does not reflect an inherent epistemological difference” (p. 277). For the purposes of this project, the two research strategies are viewed as compatible as well as complementary. Teacher responses in the survey provide quantitative data regarding their perspectives on the impact of student feedback which are subjected to bivariate analysis to search for relationships to other variables, such as the teacher’s years of experience, position in the school, and subject taught. Interviews with school managers were subsequently carried out and analysed qualitatively, to clarify relationships and issues raised by analysis of the survey data, and to make connections between management practice and teacher experience regarding student feedback.

This effective combination of data types and analyses is an example of another rationale for the use of a mixed methods approach in this project, which is that of completeness. Bryman (2008) notes that “a more complete answer to a research question ... can be achieved by including both quantitative and qualitative methods” (p. 612). He implies that any gaps left by one method can be filled by another. In this project, the primary data collection method of a self-completion survey questionnaire is reinforced by the use of another data source, the interviews with school managers. Keeves (1997) believes that educational research may be
incomplete if mixed methods are not used, stating that “educational research is essentially multidisciplinary in nature drawing on many disciplines”, and therefore, “it is also clear that if many disciplinary approaches can be employed in the investigation of educational problems then many different methods of inquiry are available. Educational research is not only multi-disciplinary but also multi-method” (p. 278).

A further reason for why a mixed method approach has been preferred is one of credibility. Under this rationale, the symbolic virtues of one approach as perceived by the target organisation lend legitimacy to the researcher, increasing the chances of permission being granted to carry out the research (Bryman, 2008). In the case of this project, it was felt that the simplicity and anonymity of an online self-completion questionnaire would be less threatening and more appealing to Principals, thus increasing the chance of gaining access to the school and subsequently, to policy documents and to an interview with the Principal. Schools in New Zealand are frequently requested to be the subjects of research and the time pressure on teachers is a concern to Principals. In this research, the researcher experienced considerable difficulty gaining access to schools which utilised student feedback in their staff appraisal systems, and which were prepared to participate in this project. A request for teachers to be part of focus groups, or to be interviewed in person, may well have been even more difficult to promote to school principals.

A fourth rationale for the use of a mixed methods approach is one of utility. This rationale is premised on the basis that a mix of quantitative and qualitative methods will provide findings that have more utility, or in other words, are more generally useful to anyone interested in the study and its conclusions. According to Keeves (1997), “the quality of a study rests on its utility” (p. 282). The utility of the findings of this study to schools and researchers interested in the field of appraisal in general, and in the use of student feedback in particular, is of much importance to the researcher. It was therefore a priority to present conclusions that were as relevant and as meaningful as possible to a wide range of educationalists, from teachers to academic policy makers. Mixed method research was chosen to maximise these qualities.

As a final rationale for a mixed methods approach, it is acknowledged that this project approaches an issue in which there is a significant element of the unknown, as noted in the literature review which identified only one prior study on the issue of student feedback on teachers in secondary education in New Zealand. While a cross sectional survey was desired
by the researcher in order to gain a sample that was at least minimally representative of teachers in the Auckland region, survey data on its own was not considered capable of providing a sufficiently comprehensive picture of the issues raised in the research questions. A qualitative component was also merited, as Creswell (2002) asserts, “if a concept or phenomenon needs to be understood because little research has been done on it, then it merits a qualitative approach” (p. 22). The contrasting potentials and values of quantitative and qualitative research were therefore best resolved by employing both in a mixed methods approach.

The search for consistency or overlap between methods can be described as triangulation, which as Bryman (2008) explains “implies that the results of an investigation employing a method associated with one research strategy are cross-checked against the results of using a method associated with the other research strategy” (p. 611). As well as attempting to draw conclusions on how teachers are affected by student feedback and on how they utilise the feedback they receive, this project attempts to investigate what factors, if any, are associated with these results. Creswell (2002) believes that “if the problem is identifying factors that influence an outcome... then a quantitative approach is best” (p. 21, 22). Some quantitative data, however, and cross-sectional designs in particular, are not regarded as reliable for establishing causal relationships without the use of an experimental design (Bryman, 2008). Bryman (2008) states that “with cross sectional designs of the kind used in most social survey research, there is ambiguity about the direction of causal influence” (p. 156). Triangulation was therefore seen as valuable in helping to establish the direction of any relationships discovered between variables examined in the survey. Triangulation fits exactly the criteria for mixed method research and can be seen as an attempt to cross-check the findings of qualitative and quantitative research (Hammersley, cited in Richardson, 1996, p. 352). The particular type of triangulation used in this project is that in which one research method (in this instance, qualitative research) is used in order to aid or complement another research strategy (quantitative research).

There are several different mixed method strategies described in the literature. This project adopts the Explanatory Design, as described by Creswell (2002). Creswell believes this design to be “perhaps the most popular mixed method design in educational research” (p. 566) and notes it is also referred to as a two-phase model. Creswell illustrates the Explanatory Mixed Method Design in this way.
Creswell (2002) outlines the basic rationale for this approach as follows:

- **The mixed method researcher places a priority on quantitative data collection and analysis.** This is done by introducing it first in the study and having it represent a major aspect of data collection. A small qualitative component follows in the second phase of the research.
- **The mixed method researcher collects quantitative data first in the sequence.** This is followed by the secondary qualitative data collection. Researchers often present these studies in two phases, with each phase clearly identified in the headings in the report.
- **The mixed method researcher uses the qualitative data to refine the results from the quantitative data.** This refinement results in exploring a few typical cases, probing a key result in more detail, or following up with outlier or extreme cases. (p. 566)

Following this approach, quantitative data were collected first. This data was taken from an online survey comprising 28 questions, 11 of which elicited demographic data and the subsequent 17 questions focusing on the respondents’ experience of student feedback as a part of their appraisal and professional development processes. This data was analysed descriptively in order to produce broad conclusions regarding the respondents’ experiences, and then inferentially to seek out possible relationships between demographic questions such as age, gender and subject taught, and the respondents’ general experience of student
feedback. Descriptive analyses on questions regarding teacher experience of student feedback provided clear answers to some of the issues raised in the research questions. Demographic variables were then found to have statistically significant relationships to statements describing the respondents’ experience of student feedback and their use of student feedback in informing their practice. These results were then used to generate questions for the qualitative phase of the project. The relationships identified in the quantitative analysis were considered in interviews with school managers responsible for the appraisal process. In this way, the collection of qualitative data was used to try to clarify and explain issues generated via the survey research, and where possible, to identify possible causality where a relationship was inferred.

Research methods in detail

In order to gather sufficient relevant data, a combination of methods was carried out in line with the overall methodology described above. Cohen, Manion and Morrison (2007) describe data gathering methods as “that range of activities used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction” (p. 47). The activities employed to gather data in this project were a combination of:

- An online survey, voluntarily completed by teachers; and
- interviews with school Principals regarding the overall culture of appraisal at the school.

These processes were carried out in four large New Zealand secondary schools in which student feedback is a part of professional appraisal.

Survey of teachers

The survey instrument chosen was an online survey, designed and hosted at the website www.surveymonkey.com. An online survey was chosen for a number of reasons; including, that it could easily be offered to the prospective respondents as a link in an email, and, when sensibly designed, is straightforward and quick to complete. These qualities were hoped to maximise the response rate. The strengths and weaknesses of questionnaires as data gathering
tools in the educational context are widely described (Bryman, 2008; Cohen, Manion and Morrison, 2007; Neuman, 1997) and it was clear that in order to be useful, valid and ethical, the survey instrument needed to be carefully and thoughtfully constructed.

Survey research is defined by Bryman (2008) as comprising:

> a design in relation to which data are collected predominantly by questionnaire or by structured interview on more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two) which are then examined to detect patterns of association. (p. 46)

In this project, the cases to be examined are variables related to teachers’ perceptions and intentions regarding student feedback received in the appraisal process at their schools. The non-manipulable variables they are connected to are the school’s policies, along with demographic and professional data. Associations in the resulting data are inferred and examined, notwithstanding the inherent weakness of surveys regarding the establishment of the direction of these relationships.

The size of the sample taken for this project is largely dictated by the practicalities – as Bryman (2008) notes, most decisions about sample size “are affected by considerations of time and cost” (p. 179). Invitations to schools to participate in the research are accompanied with clear descriptions of the purpose and nature of the project. In order to maximise response rate, a problem exacerbated by the busy schedules and workloads experienced by many secondary teachers, the survey questionnaire was kept as brief and simple to complete as possible. A maximum time for completing the questionnaire of five minutes was planned – this was easily bettered under test conditions when piloting the survey. The schools surveyed are large Auckland secondary schools of between 1200 – 2000 students with approximately 80 – 120 full-time teachers. Since some target schools are not using student feedback as an appraisal in all departments, it was clear that not all teachers would respond. With teacher workloads under consideration, a response rate of 25% was targeted which was almost achieved, as responses provided approximately 100 respondents. In fact, 93 responses were received within three weeks of the survey being made available to teachers at the target schools. It is the size of the response relative to the total population of teachers that provides
some indication of external validity. With approximately 16,500 teaching staff in the Auckland region (Ministry of Education, 2010), this project cannot claim to be truly representative of all secondary schools in Auckland. Rather, it hopes to make generalisations that are broadly indicative of the issues under examination in Auckland secondary schools.

The questions used in the survey are a combination of multiple-choice demographic questions, closed multiple-choice Likert Scale statements, and open questions for respondents to comment further on the issues raised in the survey. SurveyMonkey is used as the survey tool (www.surveymonkey.com), allowing all teachers in each target school to be contacted with a single email containing a web-link. Sample sizes are expected to be sufficient for reliability given access to the teaching staff of four sizeable secondary schools.

It is considered standard practice for all data collecting instruments to be piloted and the survey was piloted twice before being considered ready for use in the field. Firstly, the questionnaire was time-tested by several acquaintances to ensure that it could be completed within a five minute time frame, as this was seen as an important assurance to add to the introductory page of the survey instrument. Secondly and importantly, the questions themselves were piloted on staff at the researcher’s school, in an informal trial of the survey tool. Staff at the researcher’s school were asked to consider whether any questions were difficult to interpret, had too many or no logical options available, or included hidden double-meanings. The feedback received was overwhelmingly positive and only minor changes and corrections were required to be made to the questions.

The design of the questionnaire (see Appendix A) involved two distinct sections, the first focusing on demographic data and the second examining issues related to student feedback. There were 11 questions in section one (demographic data), considering cases such the teacher’s age, years of experience, type of school, subjects taught and the type of feedback provided by students. Section two included 15 statements on the teacher’s experience of student feedback and the way they used it in informing their practice. Respondents are offered six answer choices to these statements on a scale range of one (1) – six (6) in which response “1” implied a response of “I Strongly Agree” and response “6” indicated “I Strongly Disagree”. The researcher prefers an even number of options in the Likert scale responses on the basis that this reduces the tendency for respondents to choose a middle option as a ‘default’ answer. The use of six-option Likert scale responses produced data which can
approximate interval/ratio variables (Bryman & Cramer, 2001). Interval/ratio variables provide parametric data which can be statistically and inferentially analysed more effectively than ordinal variables.

The survey was completed with the inclusion of two open questions which allowed respondents to add any comments they felt were relevant to the two issues focused on during the survey, namely, the respondents’ experience of student feedback, and the extent to which they utilised feedback in informing their practice. Answers to the open questions could not be analysed quantitatively but were coded and summarised in the analysis stage.

**Data Analysis**

The quantitative data obtained from the survey was summarised, analysed and presented using SPSS for Windows under the guidance of a supervisor, employing primarily non-parametric analyses as appropriate for the data. Initially, responses were statistically compiled to show means and standard deviations, providing useful generalisations about how teachers experienced and used student feedback. Subsequently, the presence of statistically significant associations between the questions in section one (demographic responses) and section two (student feedback responses), and between responses in section two, were determined. The association test used to test for relationships between sections one and two was in all cases Spearman’s rho which is an appropriate test for a combination of ordinal variables and interval/ratio variables, and the level of significance used for all analysis was $p < 0.05$. In cases where statistically significant associations were identified, contingency tables were generated to display the apparent relationships between the variables, and these relationships were considered as cases to be examined in questions in the subsequent interview phase of the project.

The open questions in the survey provided qualitative data and these were therefore treated differently. Responses to these questions were grouped into three categories, those which were specifically or generally positive regarding student feedback, those which were neutral, and those which were specifically or generally negative. These responses were counted to further identify the degree of support for student feedback expressed by the respondents, and then further categorised into statements which reflected on, or provided clarity for the Likert Scale questions. Finally, the responses were filtered for those which provided specific
reference to issues raised in the interviews, and selected responses were presented in the data analysis in Chapter four.

**Interviews with School Managers**

The interviews in this project were intended to provide qualitative data, not quantitative data, in order to contribute towards a mixed methods approach and to clarify, if possible, the nature of associations between variables identified in the survey previously. Reasons justifying this approach are detailed previously. The interview, then, is intended to ascertain the interviewee’s (either the Principal, or a member of the management team with responsibility for appraisal) perspective on the issue of student feedback and on how teachers within the schools perceive and utilise student feedback. Issues generated from analysis of the responses in the survey taken previously formed the basis for most of the questions in the interview, but were supplemented with questions focused on an understanding of the culture of the school regarding the value of student opinion. The questions were designed to encourage reflection and perspective and were not closed, encouraging participants to provide their own unique and personal perspectives on the issue studied. A semi-structured interview was therefore employed so that responses from the various managers interviewed could be fairly compared and coded equally. The list of questions or *schedule* is detailed in the appendices and was taken to each interview and asked in approximately the same sequence.

Data was recorded with notes, with permission from the interviewees, and a summary of the key issues generated during each interview was written shortly afterwards in order to facilitate analysis.

Analysis of the interviews was achieved by concentrating again on the themes that were identified as significant in the literature review and in the responses from the survey. Comprehensive content analysis on the entire dialogue was not required as the only data considered of relevance were statements made relevant to student feedback and appraisal. Coding was used to categorise and count the responses and statements given by the respondents. Once coding had been completed, an analysis of the statements made most and least often was undertaken in order to make generalisations regarding the school’s culture relating to the use of student feedback.
Reliability and validity in relation to each method

The two criteria considered to be of primary importance for establishing the quality of research are reliability and validity, (Bryman, 2008).

Reliability

Reliability is defined as meaning that “individual scores from an instrument should be nearly the same or stable on repeated administrations of the instrument” (Creswell, 2002, p. 180). The researcher approached all data collection activities in this project with the intent that another researcher could repeat the activities and collect the same or similar data, and is confident that this is the case. The reliability inherent in most social data is subject to many unpredictable variables, as people are complex and their responses can vary from day to day. Documentary analysis is generally exempt from such variation, and can be considered to be reliable. Similarly, surveys are inherently reliable if properly constructed and administered to a sufficiently large sample. Cronbach’s reliability scale was calculated by SPSS to provide a statistical indication of the reliability of the survey data.

Validity

Cohen, Manion and Morrison (2007) observe that “the researcher will need to locate discussions of validity within the research paradigm being used” (p. 134), acknowledging the large number of different definitions and types of validity, and the significant differences between the validity of quantitative data as opposed to qualitative data. Indeed, there is some discussion that validity is too completely connected with a positivist paradigm and that it should be removed from qualitative research in favour of authenticity (Maxwell, 1992). The survey instrument was therefore designed and constrained by positivist principles such as being carefully controlled, replicable, and as context-free as possible. As internal validity in particular is considered to be weak in surveys, associations between variables were only inferred with the support of appropriate statistical support through SPSS. The researcher preferred to acknowledge the potential for human error in the qualitative sections of this project and to focus on those principles which can maximise the validity (both internal and external) of the data and subsequent conclusions; these include that the natural setting is the
principle source of the data, that context is carefully considered, that the researcher is the key instrument of research, that data is descriptive, and that there is a concern for inductive analysis as opposed to deductive conclusions (Cohen, Manion & Morrison, 2007). The validity of the total data gathered was confirmed by triangulation and comparison of the two data sources.

**Ethical considerations**

Ethical approval for this project was sought and received from UREC (the Unitec Research and Ethics Committee). An ethical approach to research is largely dependent on the integrity and value system of the researcher (Neumann, 1997), but as a starting point the research was founded on an awareness of four key potential concerns identified by Bryman (2008), namely:

- the potential for harm to participants;
- a lack of informed consent;
- the invasion of privacy; and
- deception.

(p. 118)

The small size of the New Zealand education system was also considered as this factor raises the sensitivity required to conduct research as schools and individuals can be more easily identified.

The potential for harm being caused to participants was minimised by careful attention to the anonymity of the data, both from survey respondents and for the documentary and interview data. Some of the questions asked are clearly sensitive, and employment-related. The time taken to participate is considered to be important, and the survey was carefully restricted to take less than five minutes under typical circumstances. Interviews were carried out at the participant’s schools for convenience, and interview questions were constructed to be objective and non-judgemental. All data relating to the project was kept secure during the research phase and afterwards, with only two electronic copies in existence, both password-
protected. The only physical copies of the final thesis are stored at Unitec, and these contain no information identifying the schools or participants.

All participants were fully informed of the purpose and nature of the research, and the time required to participate. The survey instrument included detailed information on the first page and in the email inviting teachers to participate. Principals were contacted through their personal assistants via email initially, and then by phone and direct email. Information sheets describing the purpose of the research and what it entailed were emailed, and consent forms indicating an awareness of all aspects were signed and returned. Board of Trustees awareness of the research activities, including documentary analysis of school policy, was indicated in a letter of approval signed by the Principals concerned. Principals were provided a summary of the findings taken from their involvement for checking before data analysis started, and were aware that they had the right to withdraw any or all data relating to their involvement up to the stage at which data analysis had been completed.

The voluntary nature of participation in the research is considered to be appropriate protection against any invasion of privacy. Principals voluntarily provided approval for their teachers to participate, and the survey instrument itself as well as the email inviting participation were explicit in stating that involvement was voluntary.

Finally, the researcher is confident that no issues of deception were raised in the presentation or collection of data in this project, and that the work presented is exactly what it is stated to be. While some social research necessitates a degree of deception in order to not taint or affect data, this was not the case in this project. Principals and teachers were fully aware of the underlying goals and intent of the project and were in no way misled.
CHAPTER 4 – FINDINGS

Introduction

The two data collection methods used in this project were an online survey for teachers, and interviews with a manager responsible for appraisal, at the target schools. This chapter presents an analysis of the data from each of these research activities.

Survey Data

A summary of the findings of the Likert Scale questions in the survey, with brief analysis and comments on the relevance of these findings is described below. Selected responses to the open-ended questions, on respondents’ experience of student feedback and on how they used information received from student feedback in informing their own teaching practice, are shown where they relate to specific questions in the survey. Subsequently, this section presents statistical analysis of the survey data, to demonstrate validity and statistically significant associations and correlations between different data in the survey, and finishes with a focus on key findings in the responses to the open ended questions.

A Summary of the Demographic data

The data showed that almost an equal number of men and women completed the surveys at the target schools. There were some notable correlations between the gender of the respondent and answers to questions regarding feedback, which are outlined later in the chapter.

Almost all respondents indicated their age, with only two non-responses to this question. The most common age groups reported were 40 – 49 and 50 – 59 years, these two groups comprising more than half of all responses. There were notable correlations between the age of the respondent and answers to questions regarding feedback.

A significant majority of respondents, almost 50%, indicated they had been teaching for longer than 15 years, and only three respondents for less than two years. Correlations
between the years of teaching experience of the respondent and answers to questions regarding feedback are outlined later in the chapter.

The length of time respondents indicated they had been teaching at their current school, surveyed in question four, was widely varied. Interestingly, 22 respondents (23%) have been at their current school for less than two years. With only three teachers in the sample being in the profession for less than two years, this seems to indicate a high rate of transfer between schools. 86% of respondents have been teaching at their current school for less than 10 years.

A significant majority of respondents responding to question six indicated either Languages or Humanities as their primary teaching area (see Figure 4.1). This is not representative of the ratio of teachers by subject area in New Zealand secondary schools. Although language teachers comprise the largest subject area (32%) in New Zealand, humanities teachers comprise only 19%, approximately equal in proportion to those teaching Science, Mathematics, health and technology subject areas (Ministry of Education, 2005). This variation from national averages may be a result of different subject departments in the target schools adopting their own preferences and systems with regard to teacher appraisal, resulting in unequal response rates from teachers at those schools. Correlations between the primary subject taught and answers to questions regarding feedback are outlined later in the chapter.

Fig 4.1: Survey responses on primary subject area taught
Respondents were able to select all of the year levels they typically taught, and all year levels from year 9 – year 13 were well represented. Senior year levels, years 11 – 13, were more frequently taught than years 9 and 10, and comprised 73% of the responses. Correlations between the year levels taught and answers to questions regarding feedback are outlined later in the chapter.

Although no integrated schools were included in the survey, a small number of respondents (5%) indicated that they taught at an integrated school. This would seem to suggest that some teachers at state or private schools are unsure of the meaning of an ‘integrated school’. It is possible that these teachers assume it refers to the integration of male and female students in a co-educational environment.

All respondents correctly indicated that they taught in a co-educational school in response to question eight.

**A Summary of the Data on the Context of Appraisal**

Respondents were asked to indicate the extent to which student feedback was part of the formal appraisal process at their school. The majority of respondents (57%) indicated that student feedback is always a part of the appraisal process at their school. 40% indicated that it is usually, or sometimes a part of appraisal. This would seem to indicate that the use of appraisal data varies from department to department within the target schools. A small number of respondents (3%) were not aware if student feedback was a part of formal appraisal.

42% of respondents were not currently responsible for appraising other teachers and had never done so. However, the majority of respondents (58%) either were currently responsible for formal appraisal, or had been in the past. There were notable correlations between the respondent’s experience regarding appraisal responsibility and answers to questions regarding feedback, which are outlined later in the chapter.

Multi-choice questions are the most common form of feedback utilised by the schools surveyed, occurring in 91% of reported cases. However, the opportunity to provide open-ended comments on teachers as well as multi-choice answers was the most frequently
reported system, comprising 57% of responses. This question did not provide any significant correlations with answers to questions regarding feedback as might have been expected given the theory on student feedback, which is discussed further in the following chapter.

**Findings on Perceptions of Student Feedback**

Descriptive results for responses to the questions on student feedback in the survey are displayed as histograms below. The 6-option Likert Scale questions provide response data which is strictly described as ordinal, but which can be approximated as interval data (Bryman, 2008). This allows the data to be treated as numerical data, allowing statistical analysis. Normal curves, with means and standard deviations have been calculated and displayed on the histograms. Selected responses to open-ended questions are added where relevant to the question being discussed.

**Positive perceptions of student feedback**

Responses to questions which asked respondents to indicate their support of student feedback as an appropriate and useful source of data for appraisal purposes were clear and unambiguous.

![Histogram of survey responses on student feedback](image)

**Figure 4.2:** Survey responses on student feedback providing useful information for informing teaching practice
Data in responses to question 13, shown in Figure 4.2, showed that respondents were strongly in agreement that student feedback provides data which is useful for informing their teaching practice.

The most frequent response, chosen by 45% of respondents to this question, was option 2 (“agree”) and the mean of 2.38 was also closest to this response. No respondents strongly disagreed with this statement. One respondent commented in support of this statement:

*My first experience of student feedback is at this school - it has been very worthwhile and informative*

Another respondent was less positive regarding the usefulness of student voice:

*Responses often not very consistent ... for example, some students in the class rank an aspect highly while other students in the same class rank the same aspect poorly (e.g. clear directions and explanations given)*

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**Figure 4.3:** Survey data on whether student feedback responses affirm the teacher’s confidence
Respondents indicated that they found student feedback data affirmed their confidence in themselves as teachers. Data in response to question 16 is shown in Figure 4.3.

This data is clearly uni-modal with a standard deviation of <1.0. A large majority of responses (79%) chose either response 2 or 3 (“agree” or “tend to agree”). One respondent wrote more information on this issue, indicating that feedback was often double edged, containing affirming and critical elements:

*Most feedback has been positive and it gives me renewed enthusiasm. Conflicting feedback is a problem. Often students from overseas want me to be stricter but Kiwi students prefer a more relaxed style.*

Most respondents also considered student feedback as appropriate for appraisal purposes. Responses to this question are shown in Figure 4.4.

![Figure 4.4: Survey data on whether student feedback data is appropriate for professional appraisal purposes](image)
Respondents were also strongly positive on the overall effects of student feedback on the teaching and learning process at their schools. Responses to this question are shown in Figure 4.5.

**Figure 4.5:** Survey data on the use of student feedback resulting in benefits to teaching and learning in the school

The mean of 2.75 fell within the response of “agree” to this statement and the data was again clearly uni-modal.

**Negative perceptions on student feedback**

A number of questions offered respondents the opportunity to indicate concerns, reservations and negative perceptions regarding student feedback.

Respondents were asked whether student feedback depended on the grades they received in the class. This data is shown in Figure 4.6.
Figure 4.6: Survey data on whether student feedback depends on grades received

There was a wide range of responses to this question, with data which was partly bi-modal. There were responses in all possible options from “strongly agree” to “strongly disagree”, and the mean was very close to the middle of possible responses. 84% of respondents selected a response from 3 - 5 (“agree to some extent” to “disagree”). One respondent made a clear link between feedback and grades:

*I feel there is no ideal time to obtain student feedback as it is often clouded by the immediate factors such as current grade, feedback received in class, how interesting the last lesson was, etc.*

Another respondent believed that:

*Some times it is fine but it is strongly linked with how well the student gets along in class.*

Respondents indicated whether their student feedback included vindictive responses. This data is shown in Figure 4.7.
Figure 4.7: Survey data on student feedback including vindictive responses

This question also generated a wide range of responses, with all possible answers selected by at least two respondents. The most frequent response was 5 (“disagree”) and the mean of 4.23 fell within the range of response 4 (“tend to disagree”). One respondent described the way students sometimes approach feedback in this way:

Some see it as a 'get your own back' tool.

Another respondent implied that a teacher needs to look past the vindictive comments to find feedback that was useful:

You definitely have to sift through many useless or vindictive feedback sheets to get honest and valid feedback.

Respondents were given the opportunity to indicate that student feedback data damaged their confidence in themselves as teachers. Data on this question is shown in Figure 4.8.
Figure 4.8: Survey data on student feedback damaging the confidence of teachers

Although this question was the exact opposite to the statement in question 16, response data was not the mirror-image that might have been expected. The standard deviation of 1.116 was notably larger and the data was bi-modal. A much larger number of respondents chose option 3 (“tend to agree”) to question 17 (29%) compared to those who chose option 4 (“tend to disagree”) to question 16 (11%). As might be expected, the data in this question closely matched that of question 15, on responses being vindictive. A respondent described the impact of critical feedback in this way:

Very helpful, sometimes a little soul destroying, but generally useful and gives you a reminder as to your weaker areas in the students eyes.

Another respondent added:

On occasions a bit of negative feedback which is not well backed up can damage a teacher's moral for no good reason... they can make some damaging comments while not necessarily taking the situation that seriously.
Respondents were given the opportunity to indicate that student feedback data had been sufficiently negative to cause them to consider leaving their school, or the profession. These data are shown in Figures 4.9 and 4.10.

**Figure 4.9**: Survey responses on whether student feedback had caused a teacher to consider leaving their school

Responses to these two questions are, predictably, very similar. For question 18, the mean of 5.48 fell between the options “disagree” and “strongly disagree”. The standard deviation of 0.874 indicates a strongly uni-modal response. Significantly, 4% of respondents indicated a positive answer to this question. The mean response to question 19 of 5.56 was closer to the answer “strongly disagree” and the standard deviation was even smaller. However, 2% of respondents had considered quitting teaching altogether because of student feedback.
Figure 4.10: Survey data on whether student feedback had caused a teacher to consider quitting the profession.

Respondents were encouraged to indicate their concerns regarding the use of student feedback for summative purposes. Responses to question 26 are shown in Figure 4.11.

Figure 4.11: Survey data on whether teachers are concerned regarding the use of student feedback data for summative purposes.
This data had the largest standard deviation of any question (1.424), meaning that teachers were more divided in their opinions on this issue than on any other. There were five or more responses to all answer choices. The mean of 3.29 was very close to the median response.

Finally, respondents were asked to indicate whether they believed that older students were more capable of providing meaningful feedback – directly implying, therefore, that younger students were not as capable. While this question did not specifically address a negative perception of student feedback overall, it allowed respondents to indicate whether some students, at least, were not particularly suitable to survey for feedback on their teachers. Responses are shown in Figure 4.12.

![Figure 4.12](image-url)

**Figure 4.12**: Survey data on older students providing more meaningful feedback data than younger students.

Teachers responding to this question tended to agree, but there was some disagreement with responses in all answer categories including option 6 (“strongly disagree”). One respondent believed that student feedback improved as more time was spent with students, which would
indicate that older students would tend to give better feedback to the teachers they have come to know better:

I find that student feedback on my teaching changes dramatically as the year progresses. This is due to developing relationships.

How teachers use student feedback data

Respondents were surveyed on what they did with the data received from their students. Question 20 showed that most respondents did thoughtfully consider the feedback they received from students, as shown in Figure 4.13.

Figure 4.13: Survey data on the extent to which teachers consider student feedback responses

77% selected responses 1 – 3 ("strongly agree" – "tend to agree") and the mean of 2.31 was closest to response 2 ("agree"). A small number of teachers indicated that they did not reflect
on the feedback provided by students. A respondent commented on this issue in the following way:

*I have used student feedback in the planning of my lessons and structured them accordingly to try and incorporate the student's point of views and new learning methods.*

Another respondent who had disagreed with this statement commented that time for reflection was a problem:

*I haven't really - I need to spend more time reflecting and improving the teaching but time for this is a luxury at times. I have only been at this school for a short time and they have only introduced the student feedback component of performance review this year.*

Question 21 showed a similar response to that of the previous question, with an overwhelming number of respondents (86%) indicating that they prepared or updated an action plan in response to feedback they received from students, as shown in Figure 4.14.

![Figure 4.14](image_url)

**Figure 4.14**: Survey data on whether teachers use an action plan in response to student feedback data
There was a predictably strong statistical correlation between individual responses to these two questions. Respondents were often specific in the open-ended responses on how they used student feedback as a source of information for consciously improving their practice. Some responses included:

*It's always worth noting what students think about what you yourself think you do well (or badly). Marking books is a chore for me but that's what students say they want and value so I have tried to mark books more often.*

*Have improved areas found wanting (such as marking feedback and desire for more group work).*

Question 22 asked whether respondents discussed student feedback with their line manager, as shown in Figure 4.15.

**Figure 4.15:** Survey data on whether teachers discuss student feedback with their line managers
This question provided a broad spread of responses with a large standard deviation of 1.34. The mean of 2.84 fell slightly on the positive side of responses, within the range of answer 3 (“tend to agree”). Given that a high percentage of respondents thoughtfully consider student feedback, and use it to create or update an action plan and to inform their practice, the low correlation between this question and previous questions is somewhat surprising. One respondent indicated that they wanted student feedback to be communicated to their managers, indicating that this did not happen as regularly as they wished:

*When I am not in a leadership position, often student feedback should be referred to higher status people to listen to and to implement changes. No current pathway for this.*

**Findings from Statistical Analysis of the Survey Data**

**Internal reliability**

The internal reliability of the survey responses was determined statistically. Cronbach’s Alpha was performed on the six questions relating to student feedback that stated a positive perspective on this issue. These questions were questions 12, 13, 20, 21, 23, and 24.

Predictive Analytics Software (PASW) returned the following result, based on 86 cases. 8 cases were excluded because of missing data.

**Reliability Statistics**

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.872</td>
<td>6</td>
</tr>
</tbody>
</table>

This value of 0.872 indicates a strong internal reliability for this data set.
**Significant associations between variables**

A second set of statistical tests applied was in order to identify associations between the demographic and contextual data provided in questions 1 – 12, and respondents’ opinions on student feedback in questions 13 - 26.

With the exception of question one, the demographic and contextual data is in the form of nominal, or categorical variables. Under a strict definition, the opinion data (6-option Likert scale responses) are ordinal variables, but can be approximated as interval/ratio variables (Bryman, 2008). Ideally, analysis of nominal variables with ordinal or interval/ratio variables would be carried out with chi-square analysis along with contingency tables. The data set was not large enough to allow this, however, as the chi-square test requires 80% of all cells to contain at least five cases and this condition was not met with the survey data.

Initial analysis was therefore carried out primarily with the Kruskal-Wallis test, a non-parametric analysis of variance for three or more groups. The Mann-Whitney U Test was carried out for question one only (gender) as the appropriate non-parametric test for differences between two groups. Both tests were applied with a null hypothesis of “there is no significant relationship between the demographic variable values and perception regarding student feedback”, and with two degrees of freedom since the direction of any variance is unknown. A confidence level of <0.05 was sought in order to reject the null hypothesis. A result would indicate that there is at least a 95% probability that there is a relationship between the reported values for a demographic variable and the opinions stated regarding student feedback.

Finally, Spearman’s Rank Order Correlation was applied to investigate further the strength and direction of associations, particularly those previously identified by the Kruskal-Wallis test, and where an assumption could be made that the demographic data could approximate continuous variables.

**Respondent gender**
Using the Mann-Whitney U Test, with a null hypothesis which states “there is no significant difference between gender and the opinions stated regarding student feedback”, and applying two degrees of freedom since the direction of any variance is unknown, a confidence level of <0.05 was sought in order to reject the null hypothesis. A significant result indicates that there is at least a 95% probability that there is a relationship between gender and perceptions stated regarding student feedback.

When tested against question 13, on whether student feedback data is useful for informing your practice, the Mann-Whitney U Test resulted in a significance of 0.041, meaning the null hypothesis was rejected. Male respondents had a mean (std.dev) = 2.70 (1.193) while females = 2.22 (0.917). Male respondents recorded higher values for this question, implying that they disagreed more with the statement. Female respondents agreed more strongly that student feedback was useful for informing their practice.

When tested against question 17, on whether student feedback includes responses which damage your confidence in yourself as a teacher, this test resulted in a strongly significant result of 0.003. Male respondents had a mean (std.dev) = 4.63 (1.043) while females respondents = 3.91(1.074). Male respondents recorded higher values for this question, implying that they disagreed more. Female respondents agreed more strongly that student feedback damaged their confidence.

When tested against question 20, on whether the teacher thoughtfully considers what the students have indicated about their teaching, another strongly significant result of 0.008 was obtained. Male respondents had a mean (std.dev) = 2.59 (1.072) while females = 2.07 (0.952). The larger value for males again indicated that they recorded higher values for this question, implying that they disagreed more. Female respondents agreed more strongly that they thoughtfully considered student feedback.

In summary, this data indicates that male and female teachers perceive and react to student feedback data in significantly different ways. Male teachers do not rate student feedback data as useful as female teachers, are less likely to have their confidence affected by student feedback, and do not consider student feedback data as thoughtfully after receiving it. None of these associations were evident in the literature reviewed in chapter two, implying that there is a gap in the literature on this issue. Further, none of the school managers interviewed
had noticed any difference in the way their teachers viewed and reacted to student feedback, although some of them predicted that there might be differences when prompted to think about this issue.

**Respondent age**

The Kruskal-Wallace test indicated a statistically significant association between respondent age and four of the questions regarding student feedback. These were the questions on whether the respondent observed that student feedback included vindictive responses, on whether student feedback included responses which damaged their confidence, on whether the respondent discussed student feedback with their line manager, and on the respondent’s concerns regarding the use of student feedback for summative purposes. Spearman’s Rank Order Correlation was then applied to these variable combinations in order to examine them further.

Of the four associations above, two also generated statistically significant results with Spearman’s Rank Order Correlation. These were the questions on whether student feedback had been vindictive, and concerns over the use of student feedback for summative purposes. In both cases, the value of the correlation was a positive number, meaning that as the respondents’ age increased, they agreed less strongly with these statements. In other words, older teachers were less likely to experience vindictive feedback, and less likely to be concerned regarding the use of student feedback for summative purposes.

**Respondent years of experience**

The Kruskal-Wallis test indicated a statistically significant association between the years of teaching experience reported by the respondent and five questions regarding perception of student feedback. These associations were further tested with Spearman’s Rank Order Correlation. Somewhat predictably, the same two questions outlined above regarding respondent age generated significant associations, and in the same direction – teachers with more years of experience were again less likely to be concerned regarding vindictive feedback or the use of feedback for summative purposes.
Respondent’s involvement in Appraisal

The Kruskal-Wallis test indicated significant associations between the contextual data on whether the respondent was involved in formal appraisal, and three of the questions on perceptions regarding student feedback. These were the questions on whether the respondent’s confidence had been damaged by receiving student feedback, whether student feedback had caused the respondent to consider resigning from their school, and on whether student feedback had resulted in benefits to the teaching and learning processes at their school. These associations could not be investigated further as the question on the respondent’s involvement in appraisal had only three options, meaning it could not be meaningfully analysed with Spearman’s Correlation. Therefore, it could be determined whether teachers involved in appraisal were more or less likely to indicate support for the statements in these questions.

Year levels taught by the respondent

Analysis of the survey revealed respondents agreed that older students were more capable of providing appropriate feedback than younger students. Therefore, Spearman’s Correlation was also applied to the question asking respondents to indicate which year levels they typically taught. A significant association was detected with three of the questions regarding perception of student feedback.

For the question on whether students were aware of the respondent’s teaching strengths and weaknesses, a correlation of -0.281 was returned, with a strong significance of 0.007. The negative value of this correlation indicates that as the average year level taught by a teacher increases, they agree more strongly that the students are aware of their teaching strengths and weaknesses. For the question asking whether student feedback included responses which damaged their confidence as a teacher”, the test returned a value of 0.301, with a strong significance of 0.005. The positive value of this correlation indicates that as the average year level taught by a teacher increases, they agree less strongly that student feedback responses damage their confidence. Lastly, a correlation with the question on whether the respondent generally discussed student feedback with their line manager” was identified, with a value of -0.280 and a strong significance of 0.008. The negative value of this correlation indicates that
as the average year level taught by a teacher increases, they agree more strongly that they discuss their feedback with their manager.

In summary, these analyses indicate that teachers who teach older students are more likely to value student feedback, less likely to have their confidence affected by student feedback, and more likely to want to discuss student feedback with their line managers. It is also worth noting that the question on the respondent’s primary subject area returned no statistically significant results. This question was expected to generate associations with perceptions on student feedback, as it was a theme identified in chapter two.

**Findings in the Open Ended Responses**

Questions 27 and 28 were open-ended questions, inviting respondents to write as much as they wished regarding their experience of student feedback.

32 respondents, or 33% of the total, chose to write responses, providing 64 responses. Reviewing these comments, it was possible to group the responses into categories of comments that were generally positive, generally negative, or neutral regarding student feedback as an appraisal tool. 34 comments, (59%) were positive, 7 (11%) were negative, and 19 (30%) were comments on some aspect of appraisal which could not be described as either positive or negative.

The small number of negative responses is a further indication of the overall support expressed by teachers at the target schools for student feedback as a part of appraisal. Only one issue was mentioned more than once in the responses categorised as generally negative, which was the experience of receiving critical or vindictive feedback. One respondent observed:

*On occasions a bit of negative feedback which is not well backed up can damage a teacher's moral for no good reason... they can make some damaging comments while not necessarily taking the situation that seriously.*

Other issues mentioned in the negative responses were that student feedback was not passed on to managers as the respondent wished, that responses from students were not consistent,
that students had too many opportunities to complain and the school was too frequently dealing with these, that student feedback took too much time, and that second language students did not understand the questions or how to indicate their answers. Given that these issues were only mentioned by one respondent each, it is not appropriate to consider these as themes.

Neutral responses did not indicate either clear support or criticism of student feedback. The most common theme emerging in this category was that the value of student feedback depended on how it was implemented. In other words, it was perceived by these respondents as a tool which could be useful if implemented properly. Several commented that the questions offered to students needed to be specific and appropriate, with one respondent noting:

> The use of feedback is limited to the questions set, much of the responses you received are not subject specific, they are generic questionnaires these might offer some ideas for areas for improvement but a better way to do it would be to create department feedback forms, or even individual questionnaires as part of a professional development plan. This is time consuming and I have seen little evidence of it in NZ

Another respondent observed that the timing of student feedback was of much importance, and that the responses received depended heavily on which point in the course the students were surveyed:

> I find that student feedback on my teaching changes dramatically as the year progresses. This is due to developing relationships. Also in Art students often take a while to understand the value of constructive criticism or feedback at the higher levels which will help them to push their ideas to gain Excellence and Scholarship marks. They often respond badly at the start of the year and have gotten used to it and can see the results of being pushed further by the end of the year.

59% of responses indicated a generally positive perception of student feedback. Many of these responses simply indicated that they liked or appreciated student feedback, without being specific regarding their reasons. An example was:
Always found it positive.

The most common theme that did emerge from the positive comments was that students are perceptive or astute in the feedback they provide. One respondent stated:

Students have generally been kind to me - I think I am a bigger critic. They give perspectives that I would never have thought of. Sometimes when I think I am doing well, I am not and vice versa. I think most students are pretty astute at summing up teachers.

Another agreed, observing that:

Students are generally very honest, forthright and pretty much on the spot when I consider their feedback. I think it is good practice to get such feedback, both verbal and written

Question 28 specifically asked respondents to indicate how they had used student feedback to inform their practice. Many respondents to this question indicated that they consciously modified their teaching methods or strategies in response to student feedback. One example of such a response was:

It’s always worth noting what students think about what you yourself think you do well (or badly). Marking books is a chore for me but that’s what students say they want and value so I have tried to mark books more often.

Another respondent commented:

I have taken on board some of the comments made and included them in lesson planning and general administration and teaching practice. As none of the criticisms were overly offensive or threatening but indeed quite honest and truthful I considered them to be a positive means to improve my teaching practice. A good exercise -
especially for someone who has taught for a long time and perhaps needs to look at new ways of doing things.

It was also evident that respondents believed their students had identified specific issues or concerns in their teaching practice that they had not previously been aware of. One respondent was concise:

students have identified weaknesses in my teaching that I was not aware of

Overall, the responses to these two questions were most notable in the strong level of approval and support indicated for student feedback. Respondents to these questions had already had the opportunity to express their support for student feedback in the Likert-scale questions immediately preceding questions 27 and 28, and were invited to write further comments only if they wished. That so many did take this opportunity and wrote positively can be considered as clear evidence to indicate that teachers who have participated in student feedback in their appraisal find it useful, worthwhile and valuable.

Interview Data

Introduction

Managers in each of the target schools were interviewed in the second phase of data collection as part of the mixed method approach to this thesis. It was intended that these interviews would strengthen the research and conclusions in the following ways. Firstly, issues of interest identified through analysis of the survey data could be further explored. These included general trends and opinions expressed by respondents in the surveys, associations between variables, and findings identified in responses to the open-ended questions. Secondly, links between school policy on the use of student feedback and teacher experience of it, and the methodology used by the schools to survey student opinion and teacher experience, could be identified and discussed. Thirdly, by utilising a semi-structured interview approach, it was intended that issues not anticipated by the researcher and not previously identified in the literature on student feedback could be identified.
Findings in the interview responses.

Questions in the interview schedule were grouped into three broad themes; the rationale and methodology of student feedback at the school, how different teachers react and respond to student feedback, and the impact of student feedback.

**Rationale and methodology of student feedback at the school**

All four interviewees indicated that student feedback had been a part of the school’s appraisal systems for some time, and was not a new development, with three interviewees stating that it had “always” been used. A second finding on this theme was a clear link made, by all four interviewees, to specific, relatively recent professional development initiatives within each of their schools. Interviewee one referred to a recent school wide focus on “teaching by inquiry”. Interviewee two outlined described recent changes to a “staff improvement cycle” that was carried out at their school. Interviewee three referred to recent initiatives, in some departments only, to the use of student feedback in order to encourage reflection and development. Interviewee four outlined their school’s “Teacher Reflection Process” which had included student feedback in the past, but which now used it to a much more comprehensive extent. Interviewee four outlined the overall process in this way:

*The school now follows a Teacher Reflection Process which starts with a review of each teacher’s student results, compared with the students’ other subject results, and class averages across the school. This identifies issues and needs (specific students who are not performing well) and is then aligned with student feedback data to clarify things the teacher could possibly do better.*

It was also considered significant that all four interviewees referred to “reflection” as being a major reason for implementing student feedback at their schools. Interview two commented:

*It (student feedback) helps teachers to evaluate their effectiveness. It is a form of feedback which provides very useful data for reflection.*

The four target schools all proactively encouraged teachers to reflect on their practice and therefore, to consider changes and improvements to their teaching practice.
Question five asked “To what extent is student feedback data considered summatively at this school?” Three of the interviewees were definitive in stating that student feedback was only used for formative purposes, while the fourth, interviewee three, indicated that it was used in class or subject allocations each year, to align teachers with the year groups they appeared to be most effective in. The interviewee explained:

*Student feedback allows the school to “realign” teachers, to maximize effectiveness in important areas. Teachers are moved to different year levels because of student feedback data, where they are most effective. Student feedback would not be used for disciplinary procedures, it is only for formative purposes.*

In all four cases, the interviewer added an extra question to the schedule, asking if student feedback data would be used in the event of disciplinary action being taken against a teacher. All interviewees acknowledged that student feedback data would not only be used in such a case, but would be useful. Interviewee four clarified their position in this way:

*Data is only stored to show that appraisal has been done. However, it could be used in case of incompetence issues, as required.*

The key finding emerging from this question can be summarised in stating that the primary intent of the target schools is to use student feedback for formative purposes, but that the data is stored and can be used for summative purposes as required.

Question six asked “To what extent is student feedback data used formatively at this school?” This question proved to be somewhat redundant, as it had been well answered in previous questions. Responses were brief, stating that formative development of practice was the primary, if not the sole purpose of utilising student feedback.

Question seven asked “How do you reassure your teachers regarding their concerns on how feedback data is used by school management?” Interviewees did not see this as a significant issue, and two general findings emerged from the responses. Firstly, interviewees noted that student feedback had been utilised for some time, and was therefore not generally an issue for teachers. Interviewee four explained:
Since the school has “always” had student feedback, it has not been much of an issue. Teachers in fact want data on their performance.

The quote above also highlights the second theme emerging from this question, which is that of teachers, and especially good teachers, wanting data on their teaching strengths and weaknesses. In contrast, some teachers did have concerns regarding the use of student feedback, as interviewee three noted:

Reluctant, lazy, ineffective teachers – those who need improvement – need reassurance that student feedback will be used to support and help them, not to cause employment issues... (the) School needs to state up-front what student feedback is for, in planning meetings.

How different teachers react and respond to student feedback

Questions on this theme were generated from consideration of the survey data. The survey indicated that different teachers reacted to and experienced student feedback in statistically different ways. This issue is not addressed in the literature and more data was sought in order to develop a clearer basis on which to make conclusions.

Question three asked “Do you notice any association between teachers’ years of experience and their approach to student feedback? The survey data indicated that less experienced teachers were more likely to find negative comments from students a concern to them. All four interviewees interpreted the question differently, and none mentioned that any group of teachers was more easily offended by student critique. Instead, they tended to comment that they had expected or anticipated that more experienced teachers would be reluctant in accepting student feedback as a part of their appraisal data. Interviewee two recalled:

No. It could expected that this would be the case, particularly expecting more experienced teachers to be more negative, but this is not observed: they are as enthusiastic about it as anyone.
Despite these expectations, and as indicated in the response quoted above, three of the interviewees reported that they had not actually observed this, noting that experienced teachers were just as positive once the process had begun. Two interviewees then went on to contradict this generalisation, reflecting on their observations that inexperienced teachers were in fact the most open and enthusiastic to new forms of input regarding their practice. Interviewee one stated that:

*Most younger teachers respond with enthusiasm and excitement and motivate the older teachers to use student feedback.*

Overall, the findings resulting from this question were that no groups of teachers were more affected by critique that any others, and that young teachers, in particular, are more enthusiastic in adopting student feedback as a data source regarding their practice.

Question four asked “Do you notice any association between teacher gender and approach to student feedback?” This question was also generated from associations identified in the survey data, but responses from interviewees were categorical. None had observed any significant difference between the genders in their approach to student feedback, although two interviewees commented that while they expected male teachers might be somewhat less open to student feedback than female teachers, but had not actually observed this. Interviewee four put it this way:

*Female teachers might be more comfortable with student feedback data – but it has not been clearly observed.*

Overall, it can be concluded that the school managers interviewed were not aware of the different experiences of student feedback described by teachers in the survey. Managers were able to anticipate that some differences between different demographics on their staff might be expected, such as female teachers being more vulnerable to critical feedback, but that they had not actually observed this. They were able to identify other associations that were not evident in the survey data, such as younger teachers being initially more open and enthusiastic to student feedback as an appraisal tool.
The impact of student feedback

Question two asked “How do your teachers use the feedback they receive from their students?” Interviewees described self-reflection as one of the primary ways in which teachers use the feedback provided on them by students. Interviewee three explained it in this way:

There have been several focused changes implemented for specific classes which had specific needs which were not being met. Teachers are encouraged to “look into themselves”.

Question eight asked “Has the inclusion of student feedback resulted in any improvements to the teaching and learning process at your school?” This question generated the most enthusiastic and detailed responses in the interview. All four interviewees stated categorically that student feedback had resulted in improvements to teaching and learning in their schools. Further, it was significant that all interviewees then attempted to justify their beliefs with evidence, and that the evidence they quoted was of specific cases in which teachers had identified, focused on and improved areas of weakness in their practice. When questioned regarding measurable changes in academic outcomes, interviewees acknowledged that it was either difficult or impossible to identify such changes, or any link between them to the use of student feedback. Therefore, two clear findings can be drawn from responses to this question. Firstly, that managers in schools which use student feedback in appraisal are convinced that its use does result in significant, observable improvements to teaching and learning in their schools. Interviewee one was enthusiastic in response to this question, explaining:

Definitely, yes – but cannot prove this with hard evidence. This last year has been wonderful with an exciting “vibe” amongst the staff and in meetings regarding SF and appraisal. PD Sessions have a definite “buzz”. Everyone is busy sharing examples of SF and personal teaching development. It is assumed therefore, that this energy and positivity is transferred to the classroom and that teaching and learning is positively affected.
Secondly, that student feedback is identified by managers in these schools as being responsible for specific cases of teachers identifying and improving areas of weakness in their practice. Interviewee three was specific on this theme in explaining:

*Yes, without hesitation. Improvement is evident in a concrete form. Teachers who have had teaching issues and were unaware of them have had these made clear to them, enabling them to be addressed. Student feedback provided hard data on what needed to be addressed, which had previously only been suspected. There is visible improvement in teaching and learning in the school.*

**Summary**

This chapter has described the data obtained during the data collection phase of the thesis. A summary of the survey responses for each question is presented, with statistical associations between questions in the survey explored and briefly discussed. Findings in the written responses to the open-ended survey questions are identified and presented with specific quotes as examples. Finally, data obtained in the interview phase is presented and summarised, with findings outlined.

The next chapter will discuss these findings in more detail, within the context of the major issues identified in the literature review and with the associated research questions in mind.
CHAPTER 5 – DISCUSSION AND IMPLICATIONS

Introduction

The data gathered during this thesis led to a number of findings which are outlined in chapter four. Some of these findings are directly related to issues arising from the literature review as outlined in chapter two, while others appear to be new issues not previously identified in the literature. Nonetheless, the research questions and the research problem generated from issues identified in the literature are all within the context of performance appraisal and the discussion of findings in this chapter returns to appraisal as the underlying practice and reason for student feedback to occur in schools.

The review of the literature in chapter two outlines the main purposes of appraisal as being two-fold – those of professional development, a formative purpose, and of a management function, a summative purpose. The difficulties in appraising teachers were then summarised, with the difficulties in establishing exactly what a good teacher should look like made clear. The growing demand for appraisal was described, with reasons given to propose that this increase in demand is likely to continue. The place of student feedback as an appraisal tool, or as a source of data for use in the appraisal process, was examined in detail, and the dominant schools of thought regarding this were outlined. The controversy regarding the validity and usefulness of student feedback for appraisal purposes was then summarised and critiqued. Gaps in the literature on student feedback at the secondary level were described, including the minimal mention of student feedback in New Zealand’s Ministry of Education guidelines on appraisal (Ministry of Education, 1997) and its total absence in the Best Evidence Synthesis on professional development (Timperley et al, 2007).

Student feedback was therefore shown in the literature to be a potentially useful but highly controversial method of obtaining data for teacher appraisal, itself a complex, challenging, but essential process. This evidence from the literature on staff appraisal in education led to the definition of the research aim and questions which form the core of this thesis. The research aim, which focuses on an issue that is not well researched or understood, is to investigate the impact of student feedback as a part of the formal appraisal process in a school on the teachers being appraised.
The research questions were:

1. How are teachers affected by student feedback received as a part of the appraisal process in high schools in New Zealand?
2. How do teachers use the feedback they receive from students during the appraisal process?

The remainder of this chapter discusses the findings of this thesis as they relate to the research problem and research questions, and comments on the implications of these findings.

Findings regarding the research questions

Research Question One: How are teachers affected by student feedback received as a part of the appraisal process in high schools in New Zealand?

Teachers responding to the survey report that they are, in general, encouraged, affirmed and assisted by the feedback they have received from students. It is evident from analysis of the survey and interview data in chapter four that teachers are benefitting from, and strongly positive in their perceptions of the use of student feedback in their appraisal. It is also evident that managers also rate student feedback as a source of data for appraisal purposes in their schools highly. This support for the practice offered by teachers and managers surveyed reflects the beliefs of authors such as Marsh (1987), who states that “student ratings… are seen to be useful by students, faculty and administrators” (p.392). Teachers indicated in their responses to the survey questions that they agreed with all of the statements which described student feedback in a positive light, and disagreed with all of the statements which were negative. In particular, responses to survey questions 15 – 18 which focused on the effects respondents felt they had experienced from receiving student feedback showed that most teachers were encouraged and affirmed by feedback from students, and were not discouraged by it. Specifically, few respondents indicated that they had considered leaving a school or the profession as a result of critical feedback. Their responses to open-ended questions at the end of the survey were also strongly positive regarding their experience of student feedback, and the small number of cautionary comments regarding the validity and variability of student
feedback only strengthens the overall support indicated by the respondents. If the respondents are aware there are problems inherent in querying student voice on their professional practice, but still rate it positively and describe it as useful, then they must surely have experienced many positive outcomes from student feedback in their appraisal systems. School managers reported only positive outcomes for the teachers in their schools who had participated in appraisal programmes involving student feedback, and none commented on or recalled cases in which teachers experienced a negative outcome.

The literature provides evidence of considerable support regarding student feedback as an appraisal tool. Scott et al, 2008 suggest that one of the key reasons for the support of student feedback is that students provide information regarding a teacher’s practice that other sources seldom can, such as:

- the development of motivation in the classroom;
- the degree of equity shown to students;
- the amount of rapport developed with students; and
- the frequency of homework.

In the open-ended survey responses, teachers mentioned most of these aspects of student feedback. Regarding appropriate levels of homework, one teacher wrote:

I've listened when students tell me they are getting too much homework etc and adjusted things accordingly.

A different teacher commented on feedback enabling the teacher to be more equitable:

I have used student feedback to help identify needs more within a particular student group or class such as areas they feel they need more help in.

Another teacher reflected on how they attempted to build a better rapport with their students by listening to their opinions:
I have used student feedback in the planning of my lessons and structured them accordingly to try and incorporate the student's point of views and new learning methods.

Some teachers, however, disagreed with the authors above. Regarding the belief that students could provide information that other sources cannot, one teacher noted:

Personally, the comments I get from student feedback are rarely surprising. I know my strengths and weaknesses as a teacher and I am mindful of them in my planning and teaching...

However, the same teacher went on to indicate that the responses they received from students were valuable nonetheless, continuing:

... but there is always room for improvement. I think constructive feedback from students is vital - since our whole purpose as teachers is to provide a service to the students, it’s a pity that many teachers forget this too easily.

In stating “there is always room for improvement”, this teacher has identified a key theme arising in the data in this thesis, which is the pursuit of continuous improvement. In agreement with Moses (1998) who declares “there is no doubt that students can give valid feedback that can help teachers evaluate the effectiveness of their teaching strategies” (p. 21), the theme of continuous improvement appears on multiple occasions in chapter four, and most clearly in the interview with managers. A finding emerging from the interview data describes how all four target school managers referred to specific, recent, professional development initiatives within their schools, all focusing to some extent on reflection and continuous improvement. Senior managers in these four schools have independently made self-reflection and continuous improvement the professional development targets in their schools, and all have chosen student feedback as a source of data in order to achieve these targets.

A number of concerns regarding the implementation of student feedback are identified in the literature, as well as the arguments in its favour. These include that teachers are threatened by the idea of students commenting on their practice, whether the implementation of student
feedback results in improvements in teaching, and whether students are capable of providing meaningful feedback on teachers. These issues provided catalysts for many of the questions in the survey and interviews, and much data collected was focused on attempting to validate or discount them.

Andrews (2004) and Richardson (2005) both question whether student feedback necessarily contributes to improved instruction in the classroom. This concern is responded to by teachers in question 24 of the survey, which asked whether student feedback had resulted in benefits to the teaching and learning process in their schools. It was also addressed in questions in the interview phase. Teachers and managers surveyed are both strongly of the opinion that teaching and learning has benefited from the use of student feedback in their schools, and managers in particular went to some lengths to try to support this opinion with evidence. The difference between the opinions expressed by respondents in this thesis and the authors mentioned above is possibly due to the evident care and attention to detail in the planning and implementation of student feedback in the target schools. As mentioned previously, all four schools were conscientious and proactive in developing professional development programmes. The methodology, planning and preparation used were emphasised by managers as being of vital importance if the feedback process was to be of any value. These comments align very well with Scott and Dixon (2009) who believe that teachers need to come to an understanding of the value of reflecting on student input before the feedback process occurs.

A number of authors question whether secondary students are appropriate to survey in teacher appraisal because they do not know enough about the subject, and younger secondary students in particular (Cashin, 1988; Rowley, 2003; Richardson, 2005; Peterson 1995). This concern was examined in the survey. Overall, teachers were confident that students, in general, provide information which is useful for informing their practice. Responses indicate that teachers agree with these authors’ concerns, by agreeing with the statement that older students are more capable than younger students at providing meaningful feedback. This issue was not mentioned in the open-ended questions, however, which would seem to indicate that student age is not a significant concern for teachers when considering feedback from them.
The likelihood of trivial or unfair issues influencing the feedback students provide is a cause for concern to many authors. Expected or received grades (Worthington, 2002), whether courses are elective (Boland et al, 2001 and Darby, 2006), age, gender, personality and appearance (Koh & Tan, 1997, Coles, 2002), class size (Liaw & Goh, 2003) and the time of day a class is taught (DeBerg & Wilson, 1990) are all cited as unfairly influencing student opinion. Investigating all of these variables was beyond the scope of this thesis, but the link between grades and feedback was explored briefly in the survey. Teachers tended on average to disagree that feedback depended on grades received, although a significant number did agree to a limited extent. One teacher supported the idea that both the subject taught and a teacher’s personal popularity were key factors in the feedback they received:

Also, popularity of favourite subjects give bias results or teachers that are slack on discipline get better feedback normally as students like them more.

Although the issues outlined above focus on the suitability of student feedback as a data source for appraisal purposes, the essential focus on this thesis and of this research question revealed a gap in the literature. Few authors have commented on the effect or impact of student feedback on teachers. Peterson (1995) touches on this issue and recommends avoiding open-ended questions in student surveys. He believes that teachers are likely to focus on one or two negative written comments rather than the more meaningful statistical average of closed responses such as multi-choice answers. This thesis attempted to explore this issue in the teacher survey. Responses to question 11 which surveyed the type of feedback used at the school were examined for statistical association with any of the questions relating to perception regarding student feedback. Only one association was identified, with question 22 on whether the respondent discussed feedback with their line manager. The direction of the association could not be established. The absence of any association with other perceptions regarding the suitability of student feedback or its impact suggests that, in the target schools, teachers do not agree with Peterson’s suggestions, and that the type of questions used in student surveys have no effect on the impact on the teachers.

In summary, therefore, it can be concluded in response to this research question that:

- teachers in the target schools report that, overall, student feedback reaffirms their confidence in themselves as teachers;
very few teachers in the target schools indicate that student feedback has negatively affected them to the point of considering resignation, or retiring from teaching;

- teachers and managers in the target schools report a range of positive professional development outcomes arising from the implementation of student feedback in the appraisal process;

- teachers and managers in the target schools believe that student feedback has resulted in improvements to the teaching and learning processes at their school;

- Managers in the target schools report an atmosphere of enthusiasm, energy and positivity when discussing and reflecting on student feedback during their appraisal processes.

Research Question Two: How do teachers use the feedback they receive from students during the appraisal process?

A number of questions in the survey focused on how teachers used student feedback data received during appraisal. The resulting data indicates that a strong majority of respondents agree that student feedback provides useful data for informing their practice (81%), that they thoughtfully consider what students say about their teaching (77%), and that they create or update an action plan after they receive the feedback (79%). Respondents also agree, although less strongly, that they discuss the students’ opinions and comments with their line managers (69%). These data match observations of the managers at the target schools who are categorical in supporting the implementation of student feedback at their schools, and who describe a number of cases in which their teachers and line managers have applied student feedback in a formative sense with positive outcomes. Teachers wrote the following comments regarding the way they had used student feedback data in a formative sense:

I have used student feedback in the planning of my lessons and structured them accordingly to try and incorporate the student's point of views and new learning methods.

Have improved areas found wanting (such as marking feedback and desire for more group work).
I have taken on board some of the comments made and included them in lesson planning and general administration and teaching practice. As none of the criticisms were overly offensive or threatening but indeed quite honest and truthful I considered them to be a positive means to improve my teaching practice. A good exercise - especially for someone who has taught for a long time and perhaps needs to look at new ways of doing things.

The last comment is particularly informative. Highly experienced teachers find it easy to fall into a routine in which they follow the same systems and pedagogies year after year. This respondent found student voice to be a positive stimulant for reflection and change, in order to improve.

Some respondents indicated that they had not been able to place as much focus on their feedback as they would have liked. One teacher wrote in response to the question on how they implemented student responses in informing their practice:

I haven't really - I need to spend more time reflecting and improving the teaching but time for this is a luxury at times. I have only been at this school for a short time and they have only introduced the student feedback component of performance review this year.

This response confirms a theme emerging from much of the data in this thesis, which is that teachers do want data to inform their practice, but that practical problems such time constraints get in the way of reflection and the improvement of practice, rather than any underlying prejudice regarding student input.

Therefore, it can be concluded in response to research question two that:

- teachers in the target schools indicate that they are open to receiving input on their practice from students, even if they do not have the time to use it formatively;
- teachers in the target schools do reflect on the information they receive from students regarding their teaching practice;
• teachers in the target schools are proactive in attempting to modify and improve their teaching practice based on the data received from students; and
• teachers in the target schools do discuss student feedback data with their line managers, which assists managers both to appraise them summatively, and to understand their professional development needs.

Findings regarding the research aim

The research aim underlying this thesis is to investigate the impact of student feedback, as a part of the formal appraisal process in a school, on the teachers being appraised. It is suggested that the impact of student feedback on teachers should be considered within the context of the two principal purposes of appraisal which were outlined in chapter two. The Ministry of Education provided guidelines in the Performance Management Systems document (1990), stating appraisal’s two main purposes as:

• Professional development: this includes goal achievement; individual development and growth; and improvement of the institution;
• A management function: appraisal relates directly to the school’s accountability in terms of individual performance and its achievement of its charter objectives (Ministry of Education, 1990a, p.31).

The impact on professional development

Responses from both teachers and school managers reveal that the implementation of student feedback in their schools is largely focused on the formative side of appraisal, that is, on professional development. The managers interviewed placed minimal emphasis on the data provided by students being used for summative purposes, and teachers indicated that they appreciated this data for informing their own practice. Analysis of the data revealed the extent to which teachers valued student feedback as a source of data for formative purposes, and to how important school managers see student feedback as a means of identifying areas of concern in their teachers. It is evident in this data that teachers enthusiastically employ student feedback as a source of data for formative improvement of their professional practice, and that these improvements result in improvements to the teaching and learning at their
schools. It is also evident that teachers want data which they can use to inform their teaching practice. More than one respondent indicated that they would seek student opinion on their practice whether it was mandated by the school’s appraisal systems or not. The interview responses also demonstrate that, in general, the teachers who are most willing to embrace student feedback data in their appraisal are also those who are already considered to be the most effective in the school. Conversely, teachers who were known to resist change and the development of their skills tended to be those who opposed the inclusion of student voice in the appraisal systems. The direction of this relationship is unclear but either good teachers tend to welcome data from students, or teachers who welcome data from their students tend to become good teachers, or some combination of these effects. It can therefore be stated with some confidence that professional development activities in schools are very likely to benefit from the implementation of student feedback within appraisal systems. Furthermore, school managers can expect that the teachers who oppose the implementation of student feedback are highly likely to be those who need to reflect more on their practice, and to consider the opinions of students.

A number of reasons for the enthusiasm demonstrated by teacher respondents towards student feedback in the data collected for this thesis can be identified in the literature. Appraisal in general has attracted a significant amount of criticism (Mertler, 1997; Hafeale, 1993; Scriven, 1989), and the implementation of student feedback within the appraisal process appears to offer many solutions and potential improvements which teachers are likely to appreciate.

In the literature regarding the state of play of appraisal, the so-called ‘dominant model’ of appraisal (Hafeele, 1993) in which managers visit classrooms once or twice a year receives considerable criticism by that writer and others (Scriven, 1989, Mertler, 1997). The use of students as an alternative source of data for appraisal avoids some but not all of the problems identified with the ‘dominant model’ and it can be suggested that many teachers would find this a welcome improvement. The literature also suggests that appraisal is considered to be “purely ceremonial, with little or no intent to improve instruction” (Fraser & Streshly, 1994, p. 50), while Scriven (1980) declares appraisal procedures to be “shoddy at the intellectual and the practical levels” (p. 1). Mertler (1997) observes that appraisal “has been used to select and retain teachers, but seldom has it been used for the development of qualified teachers” (p. 2). Student feedback used sensibly and constructively defuses all of these criticisms and aligns very well with action research and double-loop learning”. The advantages of incorporating
student feedback within appraisal reported by Mills (2007), Raymond (2001) and Hoban (2004) are all evidenced in the data in this thesis.

**The impact on summative issues**

The data presented in chapter four shows that the schools targeted tended not to consciously or deliberately use student feedback for summative purposes. One school used the results of student feedback for planning year level and class allocations in subsequent years, but this strategy is more about aligning various teachers’ strengths with the teaching needs in the school, and is not an action closely related to accountability or performance management. Data analysis in this thesis reveals that school managers did, however, indicate that their schools would refer to student feedback data in the event of a competence or employment issue. This is unsurprising as such processes are notoriously difficult to carry through and schools would tend to consider all possible data sources in order to build a strong foundation for any employment action.

Appraisal is a difficult process, however, and some of the difficulties in teacher appraisal were outlined in the literature review. One of these difficulties is defining good teaching performance, or exactly what a good teacher is (Danielson & McGreal, 2000; Stiggins and Bridgeford, 1985; Ramsden, 1979). A question that was left unanswered in this thesis is how the target schools might react to strongly negative student feedback on a teacher whom managers thought was operating effectively. Such feedback would presumably not be ignored, meaning that student feedback would assume summative significance as the problems identified by students were considered more closely.

With this possibility in mind, it is unsurprising that teachers at the target schools are somewhat divided on their concerns regarding the use of student feedback data for summative purposes, as shown in Figure 4.11. However, there were almost no comments made on this issue in open-ended responses, and managers did not report that their teachers had any real concerns. It can be concluded then, that student feedback has a minimal impact of the summative issues associated with the appraisal process at their school.
Summary of Findings

The only study focused on the issue of the impact of student feedback on teachers that was identified in the literature was carried out by Smith and Welicker-Pollack (2008), in tertiary education in Israel. As noted in chapter two, the context of this study is very different to the New Zealand secondary environment. Nevertheless, a comparison with the findings of this thesis can be made and the alignment is strongly evident. Smith and Welicker-Pollack (2008) found that educators have a generally positive attitude towards student feedback of their teaching; that the educators believe that their students were capable of assessing their teaching and responded honestly, and that the educators took the feedback they received seriously and applied it in a formative sense to their own practice, that is to say, as a source of professional development. The writers conclude that the teacher educators surveyed did reflect on the feedback received, and did take action based on this reflection.

These conclusions closely match those that can be drawn from the results of this thesis and serve as an appropriate framework for an answer to the research problem underlying this thesis. Teachers in the schools targeted are open to receiving feedback from students, are positive regarding the ability of students to provide meaningful feedback and about the feedback they do provide, and proactive in applying student feedback in their practice. Further, school managers are positive regarding the positive impact of student feedback on teachers as individuals and on their schools in general, and particularly on teachers identified as having specific areas needing development.

Implications for theory

Theory supported by conclusions in this thesis

A number of beliefs and suggestions identified in the literature review are strengthened by the conclusions drawn from analysis of the data in this thesis. The data in this thesis supports the view that student feedback is useful for both managers and teachers in terms of providing data for reflection and formative improvement. Authors who support this view include Scott et al (2008), Rowley, (2003) and Peterson (1995). Other authors propose that student
feedback data is both reliable and valid (Cranton & Smith, 1990; Hooper & Page, 1986; Toby, 1993; Moses, 1998). This claim was not specifically examined in this thesis, but the tacit approval given to student feedback as an appraisal tool by the managers interviewed would indicate that they had no concerns regarding the quality of the data provided by students in their schools. Marsh (1987) also supports the validity of student feedback data, but in stating that it is “seen to be useful by students, faculty and administrators” (p. 392), his view closely aligns the results of this thesis. Marsh (1987) also receives support from this thesis in his view that the benefits of student feedback are difficult to prove. Managers interviewed agreed that they had no data to support their opinion that student feedback had resulted in benefits to the teaching and learning processes at their schools.

Marsh (1987), Shannon et al (1993) and Moses (1989) all concur in believing that student feedback data is more appropriate for formative purposes than for summative. Their views are supported in this thesis, with all of the schools targeted identifying formative purposes as the primary, or only reason to include student feedback in their appraisal processes. Finally, the study by Smith and Welicker-Pollack (2008) produced conclusions on the impact of student feedback on teachers in the tertiary context that are very strongly supported by the conclusions to this thesis.

**Theory contradicted by conclusions in this thesis**

The data collected during this thesis has not resulted in any specific contradictions of relevant theory. A survey response from a teacher does disagree with a belief identified in the literature, namely, that students are able to provide information on teacher performance that other sources seldom can. However, this is a single response and was not a recurring theme in the data. Moreover, the use of the term ‘seldom’ by the relevant authors (Scott et al, 2008) shows that they are generalising rather than being categorical.

**New theory generated from conclusions in this thesis**

The lack of theory relevant to the core issues examined in this thesis is highlighted in chapter two. As Peterson (1995) notes on the subject on student feedback, compared to the vast number of tertiary studies, “the literature for schoolteachers… is much less available” (p. 87). The complete lack of mention in the *Best Evidence Synthesis Iteration on Teacher*
Professional Development and Learning by Timperley et al (2007), and the single bullet-pointed reference in the Ministry of Education guidelines for appraisal (Ministry of Education, PMS 1, 1997) both point to an issue that could be described as well below the radar, both in this country and internationally.

In the relative absence of literature or studies on the issues addressed in this thesis, therefore, findings emerging from analysis of the data in this thesis which do not appear in the literature can be seen as generating new theory for reflection and further consideration. Firstly, the data indicates that secondary teachers who have experienced student feedback as a source of data for appraisal purposes agree that it is relevant data, appropriate for appraisal purposes, useful for informing their practice and affirming. Secondly, this thesis shows that secondary teachers who have experienced student feedback as a source of data for appraisal purposes agree that students tend not to be particularly critical or vindictive in their feedback. Thirdly, it appears that secondary teacher perceptions regarding student feedback are significantly associated with a number of demographic variables, including, gender, age, years of teaching experience, and whether the teacher is or has been an appraiser. Fourthly, it is evident from data in this thesis that managers are unaware of the associations identified above, and are therefore not involving any consideration of these issues in planning, presenting and implementing student feedback with their staff. Fifthly, it appears highly relevant that schools in New Zealand which employ student feedback data as an appraisal tool are also schools which are actively pursuing up-to-date, focused, professional development initiatives. Sixthly, the thesis demonstrates that managers in schools which implement student feedback as an appraisal tool are supportive of its use and strongly believe that it has resulted in benefits to the teaching and learning processes at their schools.

Implications for Policy and Practice

It is suggested that there are a number of implications stemming from this thesis for school policy and practice in the New Zealand secondary education context.

Implications for Ministry of Education Policy and Guidelines
Firstly, there appears to be sufficiently strong support from the managers and teachers in the schools surveyed on the subject of student feedback as an appraisal tool to imply that student feedback deserves more attention in Ministry of Education policy and guidelines than it currently enjoys. As identified in the literature, appraisal is a complex and difficult task, and one that is often not done well in New Zealand schools. Also, schools have been required to strengthen their appraisal process in recent years, and it is reasonable to predict for several reasons such as increased professional accountability and market forces that this requirement will continue to strengthen. Similarly, and also for reasons of increasing accountability, it can be predicted that appraisal processes will need to be based on more clear data, and data from multiple sources. For these reasons, it is likely that the Ministry of Education will be focusing on developing and clarifying appraisal guidelines and expectations in the future, as well as seeking alternative sources of data to utilise for appraisal. This thesis demonstrates that student feedback provides a rich and useful source of data usable by schools for both summative and formative appraisal purposes.

Other findings emerging from analysis of the data in this thesis may proffer further implications for Ministry of Education policy and guidelines. Recommendations from the teachers and managers surveyed regarding the implementation of student feedback within their schools could well provide useful starting points for the preparation of extended guidelines in Ministry of Education documentation on the subject of appraisal. Specifically, the following themes emerging from this thesis are suggested as worthy pointers for future planning and guidance for schools.

Firstly, it is suggested that the success of the implementation of student feedback within the appraisal process in a school depends on the care and extent of planning that is carried out, and the degree of consultation with the teaching staff. All of the school managers surveyed indicated that this was an important reason for the success of the practice within their schools, and a likely reason for the lack of dissent or concern amongst the teaching staff. Furthermore, it would appear that school managers tend to be unaware of the differences in perception regarding student feedback in various sections of their staff. Male teachers perceive and react to student feedback differently to female teachers, and younger teachers differently to older teachers. Specific guidelines from the Ministry of Education on how to structure and implement student feedback in a manner which maximises its success and minimises
concerns relating to it amongst particular demographics amongst the teaching staff would appear to be both useful and relevant.

Secondly, it is evident from data collected in the interview phase that one of the reasons for the highly successful implementation of the student feedback procedures in the target schools was the fact that it had been carried out in these schools for some time. Although none of the target schools had recently implemented student feedback as a practice to provide a comparison, this data would tend to indicate that student feedback is a practice that becomes successful over time, and once it has become embedded to some degree in the culture of the school.

**Implications for practice within schools**

Since the implications for policy and practice described above are considered to be relevant for Ministry of Education policy and guidelines for schools, they are also by definition implications for practice within schools. School practice is less abstract and more specific than Ministry of Education guidelines, however, and the following findings revealed in this thesis can be summarised as possible implications for practice within schools.

**The implementation of student feedback within the appraisal process in a school is an effective and proactive professional development practice**

It is very evident from the interview data that the four target schools demonstrated a high degree of organisation and focus towards professional development for their staff. All four schools were implementing strategic initiatives focused on or including teachers reflecting on their practice and seeking to improve it. One school in particular was planning ahead and had aligned its professional development programmes in this regard with planned changes to teacher attestation by the Ministry of Education, and to certification by Teachers Council. It is considered significant that schools which demonstrate such an impressive level of initiative regarding professional development are also those which are utilising student feedback as a data source for appraisal activities. Student feedback receives a remarkable low profile in Ministry of Education advice and guidance regarding appraisal, but was an important source of data in these schools.
School managers need to be aware of significant differences in perception towards student feedback in certain groups in their staff

The associations identified in the survey data between gender and age, and perceptions towards student feedback were not evident to school managers responsible for its implementation. Best practice in the event of implementing a new methodology regarding appraisal would be that those teachers less open to a new system would have it explained and introduced in a particularly clear manner. More importantly, those teachers who are more likely to find the outcomes of the new methodology threatening or damaging should have support and follow-up from their managers. Ideally, all teachers should have the opportunity to participate in the design of student feedback systems and questionnaires, so that they assume ownership of them and can tailor them to their own personal preferences and needs.

Schools do need to use student feedback data for summative purposes, but can use it if and as required for competency or employment issues

The four managers interviewed indicated that student feedback data was almost entirely used for formative purposes. The exception was interviewee three, who noted that class and year level allocations were closely linked to student feedback data each year. However, all four managers agreed that student feedback data could and probably would be used in the event of a competency issue. It is suggested that best practice would include clarifying this to teachers in the schools in which student feedback is utilised, in order to avoid complaints regarding the collection of information for purposes other than those explained.

Teachers want data from students for their professional development

It is strongly evident in the data collected for this thesis that teachers want more data, and data from different sources, on their teaching practice. It is also significant that it is the highly regarded and proactive teachers who are most enthusiastic regarding the incorporation of student feedback data in their appraisal processes. Teachers who have participated in student feedback are strongly positive regarding its use, and will seek it themselves on an informal basis whether it is a part of the formal appraisal processes in the school or not. Therefore, schools considering the implementation of student feedback in their appraisal
systems can plan it with some confidence rather than approaching with a sense of uncertainty regarding how their teachers will respond.

The implementation of student feedback as a source of data for appraisal system is likely to result in benefits for the teaching and learning process within the school

This theme was given the strongest possible emphasis by managers in the interviews, and must be seen as a very positive recommendation for the more widespread and frequent use of student feedback in appraisal systems in New Zealand schools. Although it was acknowledged that hard data regarding the outcomes of the application of student feedback systems on academic results was impossible to ascertain, managers were prepared to be definitive in their answers on this issue. All four managers could quote specific examples where teachers had been identified as needing development in a specific area, or had received focused support in an area of weakness. It is evident that student feedback does identify teachers with specific weaknesses in their practice, and who are in need of focused professional development. Therefore, schools need to be prepared to provide professional development support once student feedback is implemented. Other forms of data reflecting improvements were also quoted by managers, and there was clear indication of a positive energy regarding appraisal that could be linked to student feedback, particularly in the responses from interviewee one.

Managers within schools need to be aware that some teachers are significantly discomfited by student feedback

Schools are recommended to be aware that a small percentage of teachers do find the feedback provided on them by students discomfiting or threatening, to the point that they would consider resigning from their positions or the profession. The possibility of losing even a single teacher must be treated as a significant concern by schools, and this point emphasises the need for the careful planning, consultation and planning identified above when implementing such a change to the appraisal process.
Implications for Further Research

Topics considered worthy of further research

One crucial issue worthy of further research is an investigation into how many schools in this country utilise student feedback as a part of their appraisal processes. This research has identified student feedback as a valuable source of data for appraisal purposes in schools and one which is seldom discussed in the literature on appraisal, or mentioned in the relevant guidelines from the Ministry of Education. It would seem essential, therefore, to seek clear data on how many schools in this country have utilised student feedback in their appraisal processes in the past, how many currently use it, and how many are considering using it in the future. Furthermore, schools which deliberately avoid the implementation of student feedback, that is, those which have considered and rejected it as a data source for appraisal, could be surveyed to investigate the reasons for their dismissal of student feedback.

The impact of student feedback on students as stakeholders in the education system must also be viewed as a topic worthy of investigation. The impact of being involved in a feedback process on students as learners is an issue that has attracted discussion in the literature outlined in chapter two. There are a range of views on the extent to which students benefit, but the concept of student voice is an increasingly popular one (Mitra, 2008). Writers in support of student feedback in the literature believe that students benefit in a number of different ways when asked to provide feedback on their teachers (Moses, 1989; Morse, 2007; Chang et al, 1998). These claims deserve consideration and further understanding within the New Zealand context.

An apparent paradox discovered in analysis of the survey data presents another issue possibly worthy of further research. A question in the survey asked if respondents discussed their student feedback data with their line managers. It was expected that this question would generate significant associations with other questions regarding the suitability and usefulness of student feedback, but it did not. As mentioned in chapter 5, this may indicate that teachers at the schools surveyed used student feedback data largely for their own reflection and development, rather than as a starting point for appraisal discussions with their managers. Research into the reasons to use, or not use student feedback data as something to discuss
with line managers in summative appraisal discussions is therefore presented as an issue for further research.

Lastly, the claim made in chapter two of this thesis regarding an anticipated increase in the requirements regarding appraisal in schools deserves further research. In chapter two, appraisal was linked closely to accountability and the clearly described increase in professional accountability over recent years was predicted to continue, resulting in an increased demand for more data, more reliable data and more sources of data in the processes of appraising teachers. Therefore, student feedback was predicted to attract more interest and attention, from the community level through to Ministry of Education policy. This is an issue deserving of more attention.

**Methodologies considered worthy of further research**

Further research involving a wider spread of schools from across New Zealand is likely to provide highly useful information on the subject of student feedback in this country. Such research would serve to eliminate at least one of the delimitations outlined in section 1.7. As discussed in that section, this research was carried out in a small sample group of only four co-educational urban Auckland schools. Wider-reaching studies on a larger number of schools from a range of socio-economic backgrounds, geographic locations and cultural mixes would provide more representative data which could assist in informing policy and practice more meaningfully than this small-scale investigation. A wider-ranging study would also provide more responses. As discussed in section 4.2.2.2, the data set obtained from the survey did not provide enough responses to facilitate the use of chi-square in the analysis. In addition, the use of purely qualitative case study research surveying small groups of teachers from a range of New Zealand schools can be recommended for consideration. The methodology used in this thesis stemmed to some extent from the researcher’s strengths and preferences, but it is acknowledged that case study research on the questions investigated herein would likely provide rich and useful data from a different perspective.
Delimitations of the research

This thesis attempts to provide answers to a research problem concerning secondary teachers in general. The thesis explores this problem within the context of secondary teachers in Auckland, New Zealand, and specifically, within four secondary schools in Auckland. This is a small sample size, determined by the practicalities of part-time research. The generalisations and conclusions made regarding secondary teachers in the broader sense must be read with this in mind. Since most secondary schools in New Zealand do not employ student feedback on a formal basis, the experiences and opinions of the survey respondents and the school managers of the target schools can not be seen as truly representative of secondary schools across the country – for one thing, the managers and teachers in these schools have jointly decided to add a controversial data source to their formal appraisal systems, so on this issue alone they are not typical of most New Zealand secondary schools.

Limitations of the research

A small number of limitations to this research were revealed as the research process unfolded, in addition to the delimitations outlined above. Firstly, it was evident from analysis of responses to the survey questions that a disproportionately large number of teachers of language and humanities subjects responded to the survey. As described in the data analysis, section 4.2.1, the proportion of respondents who indicated that language or humanities were their primary teaching subjects was not representative of teachers across New Zealand when compared to Ministry of Education data. This disproportionate response may have biased the data in some way. Secondly, data analysis revealed associations between demographic data and perceptions regarding student feedback which could not be explored any further due to restrictions in the types of questions used and the number of options available in the questions. In a number of cases, the Kruskal-Wallace test determined that the null hypothesis, which stated there was no significant association between the variables tested, had to be rejected. In several of these instances, the direction of the association was unable to be determined as the data was not suitable for further analysis or correlation. A different methodology could be employed to investigate the clear associations evident between some of these variables.
Conclusions

This chapter has reviewed and discussed the findings outlined in chapter four. With reference to the core issues relating to student feedback identified in the literature, answers to the research questions and the research aim have been proposed, along with the presentation of a number of new findings on issues not identified in the literature. Within the context of the formal appraisal of secondary teachers, the role of student feedback as a source of data for appraisal has been examined in terms of its impact in a summative, and formative, sense. A number of potential implications for theory have been addressed, including theory which has been supported, and that which has been contradicted by the findings in this thesis. Finally, a range of implications stemming from the findings of this thesis have been outlined, firstly for education policy and guidelines as established by the Ministry of Education, and secondly for practice within schools. The implications outlined are relevant both for schools considering implementing student feedback into their appraisal systems, and for schools already utilising student feedback.

This thesis arose from observations made in the researcher’s professional practice regarding the implementation of student feedback as an appraisal tool within the secondary school environment, and from a subsequent investigation of the literature on this topic at the secondary level. The researcher’s observations suggested that some teachers seem to benefit greatly from student feedback, while others can be discouraged and angered by it. The investigation into the relevant literature revealed a significant lack of studies on student feedback at the secondary level compared to those focused on the tertiary environment, and a yawning gap on the impact of student feedback on teachers in either context. In the literature that does exist, there appears to be considerable disagreement and a wide range of opinion regarding the efficacy of student feedback as a tool use in appraisal.

Summary statement

The researcher acknowledges a feeling of some trepidation in embarking on a social science project of this magnitude, based on a realisation of the often indefinite and frequently conflicting theories inherent in the social sciences. The immiscibility of social science theory
with the researcher’s basic training and instinctual preference for hard science meant there was an anticipation of some difficulty in finding clear and definitive answers to the aims and questions of this thesis. This anticipation was amplified by the inclusion of a modest content of qualitative research in the research design. It was therefore a pleasing and rewarding revelation to discover data in both the qualitative and quantitative sections of this thesis which lead to clear, unambiguous conclusions.

This research has explored the issue of the impact of student feedback as a part of the appraisal process in secondary schools on the teachers appraised. The research has revealed strong support for, and minimal negative consequences of, student feedback as a source of data for appraisal. Few teachers report being negatively affected by student feedback, and most report that they reflect on the data provided by students and seek to apply the feedback to their practice in a formative sense. Therefore, this thesis submits that the impact of student feedback as a part of the formal appraisal process within a school, on the teachers at that school, is overwhelmingly positive.
REFERENCES


Hello there. Please accept my sincere thanks for taking the time to complete this survey.

This study will look at the impact of student feedback on teachers. I hope that it will provide useful data for schools which use (or are thinking of using) student feedback as an appraisal tool.

This survey is voluntary and anonymous. You cannot be identified and neither can your school.

You can exit the survey at any point and your computer should bring you back to the same point if you use the link again - be aware of this if you use a shared computer. Questions are mostly multiple-choice, with two open questions at the end for you to add comments and observations if you wish. I trust it will take you around 5 minutes to complete.

There are 28 questions in total. After you have finished, please click "done" and your answers will be submitted. Any questions regarding this survey can be addressed to me, or to my supervisor, at the contact details below.

Once again, my sincere thanks for your participation.

Researcher: Michael Kelso mkelso@aic.ac.nz
Supervisor: Prof. Carol Cardno ccardno@unitec.ac.nz

1. Please indicate your gender.
   Female  Male

2. Please indicate your age.
   20 - 29  30 - 39  40 - 49  50 - 59  60+
3. Please indicate the number of years you have been teaching.
<2 < 5 6 - 9 10 - 15 > 15

4. Please indicate the number of years you have taught at your current school.
<2 3 - 5 6 - 9 10 - 15 > 15

5. Please indicate the subject area you primarily teach in.
Art Humanities Languages Mathematics Music Sciences Sports/Physical Education Technology

6. Please indicate the year levels that you normally teach.
Year 9 Year 10 Year 11 Year 12 Year 13

7. Please select the type of school you currently teach in.
State school Integrated school Private school

8. Please select the gender mix taught in your current school.
Co-educational Boys only Girls only

9. Please indicate whether student feedback is used as a part of the formal appraisal of teachers at your school.
Always Usually Sometimes Never I don't know

10. Please indicate if you formally appraise other teachers at your current school.
I am an appraiser of other teachers
I have previously appraised other teachers, but I don't do this at present
I do not appraise other teachers

11. Please indicate which type of feedback the students provide on you at your school.
multi-choice answers to statements
multi-choice answers and open-ended comments
open-ended comments only
students do not provide feedback on my teaching
12. Your students are aware of your teaching strengths and weaknesses
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

13. Student feedback provides information which you find useful for developing and improving your teaching practice
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

14. Your students' feedback on you depends on the grades they receive in your subject
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

15. Student feedback you receive includes responses which could be described as vindictive.
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

16. Student feedback you receive includes responses which reaffirm your confidence in yourself as a teacher.
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

17. Student feedback you receive includes responses which damage your confidence in yourself as a teacher.
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

18. Student feedback you receive includes responses which have caused you to consider resigning from your current school.
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree
19. Student feedback you receive includes responses which have caused you to consider quitting the profession.
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

20. When you receive student feedback, you thoughtfully consider what the students have indicated about your teaching
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

21. After receiving student feedback, you create or update an action plan for improving your teaching practice
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

22. After receiving student feedback you generally discuss the feedback with your line manager
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

23. Student feedback provides meaningful data that is appropriate for your professional appraisal
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree

24. The use of student feedback on teachers has resulted in benefits to the teaching and learning process at this school
1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree
6 Strongly disagree
25. Older students (such as Years 12 and 13) are more capable of providing meaningful feedback on teachers than younger year levels.

1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree 6 Strongly disagree

26. It concerns you that your school management could use your student feedback as summative data i.e. for hiring/firing/disciplinary action, etc.

1 Strongly agree 2 Agree 3 Agree to some extent 4 Disagree to some extent 5 Disagree 6 Strongly disagree

27. In the space below, add as much as you wish regarding your personal experience of receiving student feedback at your school.

28. In the space below, add as much as you wish on how you have used student feedback to improve your teaching practice.
APPENDIX B

Interview Schedule

1. Why does this school include student feedback as a part of the appraisal process?
2. How do your teachers use the feedback they receive from their students?
3. Do you notice any association between teachers’ years of experience and their approach to student feedback?
4. Do you notice any association between teacher gender and approach to student feedback?
5. To what extent is student feedback data considered summatively at this school?
6. To what extent is student feedback data used formatively at this school?
7. How do you reassure your teachers regarding their concerns on how feedback data is used by school management?
8. Has the inclusion of student feedback resulted in any improvements to the teaching and learning process at your school?