

The use of digital tools in effective
primary school teacher appraisal

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Abstract

In New Zealand schools, appraisal for teachers and leaders is a complex process involving *Professional Standards* (Ministry of Education, 1998) and *Practicing Teacher Criteria* (Education Council, 2015) that are measured and observed within a performance management cycle. The balance between accountability and development functions within the appraisal process requires the establishment of an effective, robust appraisal system. The use of digital tools within appraisal in schools is a relatively new phenomenon internationally and within New Zealand. The use of digital tools and platforms in schools is becoming a standard method of gathering evidence of professional practice to attest against *Practicing Teacher Criteria* (Education Council, 2015). Recently, specialized digital platforms have been designed to complement appraisal activities and include not only evidence of practice but also tools for reflection and discussion such as blogs, webpages and diaries. It is important to investigate how this new phenomenon has changed the appraisal context and process and, furthermore, the expectations that are placed on teachers and leaders to be ‘digitally engaged’.

Although the use of such digital tools and platforms for appraisal can create efficient systems for accountability, the purpose of this research is to explore how digital tools are used to build teacher capacity and promote reflection on professional practice, as well as how such tools influence the professional relationships and productive dialogue between appraisers and the appraisees within schools in New Zealand. The two research questions guiding this study were: How does the use of digital communication tools and platforms influence effective appraisal practices in New Zealand primary schools? What factors contribute to the perceived effective use of digital tools and platforms in appraisal? In this qualitative study nine educators (principals, deputy principals and teachers) participated in semi-structured interviews regarding the influence of digital tools and platforms within their schools’ appraisal system and practices.

Using an interpretive approach, the findings of this research indicate that the overall effectiveness of digital tools and platforms in appraisal is dependent upon an established appraisal system with embedded practices of reflection and productive dialogue. Digital tools and platforms support the compliance driven accountability measures of appraisal by providing easy to access tools that make the gathering of

professional evidence more efficient. When appraisal systems and practices are embedded throughout all professional interactions and engagements, digital tools and platforms are beginning to support the practices of reflection and productive dialogue.

This research emphasises the need for schools to establish the processes, practices and behaviours required to engage effectively in the twenty first century workplace prior to adding a new digital platform into their appraisal system. Digital tools and platforms only support effective professional practices; they do not create them.

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Chapter 1 Introduction

Digital technology in schools is ubiquitous. Recently, digital tools and digital platforms have been designed to capture the essence of appraisal practices. Digital platforms provide a system for gathering evidence to meet the *Practicing Teacher Criteria* in order to be registered by the Education Council Education Council (2015). Therefore, it is important that school leaders implement effective appraisal practices in digital environments as part of their leadership practice. It is important to understand how digital communication tools influence appraisal and how teachers and leaders use these platforms as a means of gathering evidence of their professional practice. This research is important from a New Zealand perspective, as there is little international literature that addresses this issue from an educational perspective and none specific to the New Zealand primary school environment.

Rationale

In New Zealand, appraisal for teachers and leaders is a complex process involving the *Professional Standards* (Ministry of Education, 1998) and the *Practicing Teacher Criteria* (Education Council, 2015) that are measured and observed within a performance management cycle. Appraisal has two different purposes: teacher registration attestation and improving professional practice (Ministry of Education, 2011). The balance between accountability and development within the appraisal process requires the establishment of an effective, robust appraisal system in education. Performance appraisal uses professional standards to shape the expectations held of the teacher (Piggot-Irvine & Cardno, 2005). Appraisal systems in schools are complex and provide measures of accountability for performance as well as activities to develop and improve teacher practice.

The use of digital tools within appraisal is a relatively new phenomenon internationally and within New Zealand. Recently digital platforms have been designed to complement appraisal activities and include not only a space to collect evidence of practice but also tools for reflection and discussion such as blogs, webpages and diaries. Digital portfolios are used in appraisal to gather and collate evidence of teaching practice and used as accountability measures of performance for attestation. Although the use of such platforms for appraisal can create efficient systems for accountability, the purpose of this research is to explore how digital

tools are used to build teacher capacity, promote reflection of professional practice and how such tools influence the professional relationships and the productive dialogue between the appraiser and the appraisee within schools in New Zealand.

Research aims and questions

The aims of this research study were:

1. To investigate leaders' and teachers' experiences of using digital tools and platforms within appraisal practices; and
2. To identify factors that contribute to effective appraisal practices in regard to the use of digital tools.

The research questions asked were:

1. How does the use of digital communication tools and platforms influence effective appraisal practices in New Zealand primary schools?
2. What factors contribute to the perceived effective use of digital tools and platforms in appraisal?

Thesis organisation

This thesis is set out in six chapters.

Chapter One

Chapter one is an introduction to the research study. It describes the rationale for the study and lists research aims and questions that guided the aims.

Chapter Two

Chapter two presents a literature review that examines what has already been stated about the research aims. Definitions of appraisal, effective appraisal systems and practices and use of digital tools and platforms in teacher appraisal are the basis of the literature review.

Chapter Three

Chapter three explains the rationale in selecting a qualitative methodology and the data collection method of the semi-structured interview. The data analysis procedures used, aspects of validity, reliability and ethical considerations are also discussed.

Chapter Four

Chapter four presents the research findings from the semi-structured interviews. Emerging themes from the data collection are identified.

Chapter Five

Chapter five presents a discussion of findings based on the emerging themes. The key findings of the research study are critically examined and connected to the literature reviewed in chapter two.

Chapter Six

Chapter six completes the thesis with a summary of overall findings of the research study. The strengths and limitations of the study are discussed. The final recommendations for future appraisal practice and possibilities for further research complete this chapter.

Chapter 2 Literature review

This chapter presents a review of the existing local and international literature that I have identified, in regard to the appraisal process and the use of digital platforms and digital tools within the appraisal process. Effective appraisal is a comprehensive and complex process involving multiple purposes and activities that benefit both the organisation and the individual (Cardno, 2012). Digital technologies have been identified as a key element of future focused education in the New Zealand Curriculum (Ministry of Education, 2007), but the use of digital technologies to support appraisal processes is a relatively new phenomenon within the educational context. The establishment of digital platforms as a way of supporting professional learning is now ubiquitous, and this had identified a need to further explore leadership in a virtual setting (Harris, Jones, & Baba, 2013). It is important to investigate how this new phenomenon has changed the appraisal context and process and, furthermore, the expectations that are placed on teachers and leaders to be ‘digitally engaged’ in this way. This chapter begins with an overview of teacher and leader appraisal, defining appraisal and explaining the dual purposes of appraisal: accountability and development. The chapter then explores the activities and processes within an effective appraisal process. The chapter is completed by a discussion of digital technologies and platforms and the implications of the use of these digital tools for educational leaders and teachers.

Teacher and leader appraisal – an overview

Effective appraisal systems

In primary schools in New Zealand, the appraisal of teachers and leaders includes activities that involve the observation, evaluation and discussion of professional practice against the relevant *Performance Standards* (Ministry of Education, 1998) and *Practicing Teacher Criteria* (Education Council, 2015). In practice, appraisal involves analysing the individual’s performance with reference to their job description and goals as well as professional standards (Piggot-Irvine & Cardno, 2005). In addition, there is a non-negotiable expectation that the appraisal cycle documents evidence of effective teaching practice, professional learning and reflection (Piggot-Irvine & Cardno, 2005).

Appraisal processes need to be developed and managed in such a way that the dual needs of accountability and development are met by both the individual and the organisation. Although it is the responsibility of the school and school leaders to develop the policies and procedures for appraisal, teachers have the responsibility for data collection and evidence gathering. The collation of evidence for appraisal is a summary of performance specific to a job description, targets and performance standards (Piggot-Irvine & Cardno, 2005). School leaders have a pivotal role in establishing the conditions for teacher appraisal, the quality and implementation of teacher appraisal procedures, and the use of the appraisal information for goal setting and improvement (Ministry of Education, 2011). It is the role of leadership to ensure appraisal tools are aligned to the core aim of improving teacher practice and outcomes (Robinson, Hohepa, & Lloyd, 2009). It is the organisation's responsibility to establish appraisal policies, processes and activities that meet the accountability requirements of the Ministry of Education. Individual teachers are responsible for gathering quality evidence and required to participate in appraisal processes that enhances their professional practice. Educational leaders and teachers need to have shared clarity about the criteria for acceptable evidence that demonstrates effective professional practice.

The foundation for all effective appraisal activities is a culture which promotes productive, meaningful and critical dialogue, and discusses not only the performance but also the development of the professional. Appraisal discussions are prime opportunities for evaluating professional practices that are crucial to improving student outcomes (Robinson et al., 2009). Cardno (2012) notes that effective educational leaders focus on developing the climate and conditions that enhance the quality of teaching and learning. Robertson (2015) further states that a 'listening and learning' culture that uses coaching conversations, builds the cycle of collegiality and robust learning about quality teaching practices.

Engaging in productive dialogue within appraisal requires a culture of learning and trusting relationships between staff members within the educational organisation. Robinson et al. (2009) state that, in order to engage in open to learning conversations, leaders need interpersonal skills and values that will enable them to not only give and receive feedback, but also respectfully give and receive the more difficult messages that are sometimes necessary as part of the appraisal process. To

establish such a community, leaders may need to challenge or change cultures that are not focused on collegial discussions of the relationship between what is taught and what is learnt (Robinson et al., 2009). Fox, Gong, and Attoh (2015) believe that leaders build integrity through engaging, sharing information and divulging perspectives, feelings and opinions. Cardno (2012) explicitly explains how productive cultures in learning organisations are an arena for complex problems solving that provides opportunities for genuine collaboration through productive dialogue. Professional relationships that value trust and integrity develop a professional climate for productive learning conversations.

Effective appraisal requires leaders who are willing and able to engage in deeply reflective conversations about teaching practice and improving student learning opportunities and outcomes. For the appraisal process to be effective, respect, openness, honesty and trust need to be established through all professional interactions, situations and encounters within a school (Piggot-Irvine & Cardno, 2005). The nature of productive dialogue is characterised by openness to learning, honest communication, evidence based judgement and a genuine commitment to change (Cardno, 2012). By engaging in productive dialogue, a professional learning environment is created that allows teachers to explore values, beliefs and practices in a way that goes beyond reflections by the individual (Grey, 2011). Appraisal involves teachers and leaders in continuous conversations about practice which then provide a basis for making judgements and considering ‘next steps’ for learning and professional growth (Cardno, 2012). Robertson (2015) further describes how deep learning conversations develop from activities of deep reflection on professional practice. The ability to participate in learning conversations is dependent upon both parties forming a strong, trusting professional relationship where open, honest dialogue is present not only within the appraisal cycle but within everyday encounters across the organisation.

Accountability functions of appraisal

The framework for performance appraisal in New Zealand incorporates both accountability in regard to performance standards, and also meeting goals for development. The accountability function of appraisal is the process, sometimes known as ‘attestation’, that is undertaken by principals to evaluate and measure teachers against various government standards and criteria. The attestation process

in appraisal is the evaluation against a set of standards to ensure the competency of teacher practice (Mackenzie, 2014). The term ‘appraisal’ is used to describe evaluative activity that involves making qualitative judgements about performance, once competency is established (Piggot-Irvine & Cardno, 2005). Piggot-Irvine and Cardno (2005) further explain that the intention of an effective appraisal system is to benefit those professionals who are already competent within their practice. School leaders have a pivotal role in establishing the school conditions for teacher appraisal, the quality and implementation of teacher appraisal procedures and the use of appraisal results for improvement (Ministry of Education, 2011).

Recent changes to the certification criteria for teachers has placed a stronger focus on student learning outcomes, including teachers’ analysis and use of student achievement information (Ministry of Education, 2011). The effective analysis of practice within an appraisal cycle should encourage professionals to reflect upon and improve their educational practices. A framework of standards used for teacher appraisal focuses on professional values, knowledge, practices and relationships and includes an expectation that teachers analyse and reflect on evidence to improve their practice (Ministry of Education, 2011). An effective appraisal process clearly documents effective teaching practice to support teachers in meeting their professional standards.

As educational leaders and teachers seek to improve the quality of pedagogical practice, the focus of standards has moved from specific individual performance to the individual’s engagement in a process of professional learning and the impact of this learning on practice (Forde, McMahon, Hamilton, & Murray, 2015). There is a need for policies and processes to improve teacher quality through building teacher capacity including the need for valid methods of evaluating teacher quality (Ingvarson & Rowe, 2008). *Performance standards* (Ministry of Education, 1998) and *Practicing Teacher Criteria* (Education Council, 2015) are an important element in promoting professional learning. Performance appraisal uses professional standards to shape the expectations held of the teacher (Piggot-Irvine & Cardno, 2005). Effective appraisal should demonstrate the evidence of improving valued outcomes.

Development functions of appraisal

Although policies and processes may meet accountability functions, effective appraisal can also provide a scaffold of support and resources towards developing professional learning of teachers. Teacher evaluation is the ideal opportunity for educators to give attention to their own particular context and improve their practice, and ultimately their own students' learning (Sinnema & Robinson, 2007). The developmental function of appraisal is to support teachers to improve their practice, not just prove their competency. Appraisal should not function solely as a compliance driven policy and process; instead it should perform as an opportunity for teachers and leaders to inquire into their professional practice and the influence of such practice on student performance (Robinson et al., 2009). Cardno (2012) states that an effective appraisal process gains staff commitment and is valued by allowing colleagues to engage in dialogue that leads to learning and change within teacher practice. Forms of appraisal dialogue include discussions about practice and improvement, reviewing assessment results, factors affecting performance, planning for changes and professional learning as well as formal discussions using models of coaching and mentoring (Piggot-Irvine & Cardno, 2005).

Effective educational leaders create conditions that make it possible to improve teaching and learning as their core work lies within influencing teaching and learning in ways that improve student achievement (Cardno, 2012). Performance appraisal is intended to benefit both the teacher and the organisation by leading to attestation that expectations are being met and to the identification of goals and areas for improvement (Piggot-Irvine & Cardno, 2005). It is important that leaders who are responsible for appraisal have skills, knowledge and understandings of ways to build teacher capacity within their organisation (Robinson et al., 2009). Cardno (2012) continues to explain that, in essence, appraisal consists of a continuous conversation using performance data which provides a basis for evaluation and ideas for improvement. Cardno (2012) further states that both the organisation and the individual benefit from effective appraisal because it can affirm expectations are being met as well as identify areas for development. Sound appraisal practice is pivotal for teachers and leaders to carry out their roles effectively, develop their professional practice to raise student learning outcomes.

Strengthening and developing teacher practice is the second key function of effective appraisal. Sinnema and Robinson (2007) argue for an alternative approach to appraisal that promotes teacher capacity to inquire into and strengthen their understandings of the connection between their practice and student learning. Effective developmental appraisal processes include job descriptions linking performance standards to specific areas of practice, observation of practice, data gathering as well as formal opportunities to discuss, reflect and review (Cardno, 2012). Appraisal should include a focus on practice and performance of the individual teacher as well as how the organisation is accountable for supporting and developing its teaching staff (Cardno, 2012). The model described by Sinnema and Robinson (2007) explains that the key purpose of teacher evaluation is to improve teaching and learning through inquiry, action and improvement. An effective appraisal system reflects on the quality of individual professionals as well as the quality of the organisation (Piggot-Irvine & Cardno, 2005). The key to effective appraisal is developing a systematic process that encourages reflection, discussion and the development of effective teaching practice that enhances student learning and achievement.

Ownership and agency are important development functions of effective appraisal. Robinson et al. (2009) suggest that one way in which leaders can use appraisal to promote professional inquiry is to ensure the tools are designed to challenge assumptions about effective teaching and develop the teachers' capacity to inquire into the impact of their practice. Robertson (2010) believes that the deepest learning occurs when teachers are encouraged and supported to locate their own areas of professional development and learning. Grey (2011) explains that professional dialogue allows teachers to self-assess practice, to ensure practice is consistent with policies and considers new possibilities that may renew or refresh teaching practice. To relinquish bureaucratic control of appraisal, teachers must demonstrate that they are competent in assessing student needs and able to make data based decisions on how their practice can influence student outcomes (Tschannen-Moran, 2009). Providing teachers with opportunities to discuss their professional practice within appraisal builds teachers' agency and ownership of their professional learning.

To build the capacity of teachers, leaders need to have knowledge of the principles and practices of andragogy to support teachers in their professional learning.

Andragogy focuses on the adult learner and the development of an independent, adaptable individual (Forrest & Peterson, 2006). The assumptions of andragogy are that the adult learners are aware of their learning needs and their readiness to learn is intrinsic and oriented towards improving performance (Forrest & Peterson, 2006). Adults need the capacity to take charge of change and learn continuously themselves (Stoll, 2011). Leaders are expected to lead the learning of adults within their organisation because this is a cornerstone of building productive relationships (Cardno, 2012). Appraisal leaders will benefit from knowing and understanding what works in relation to adult learning because their influence on changing teacher practice is at the heart of educational leadership (Cardno, 2012). Effective appraisal is developed and led by educational leaders who have a clear understanding of all their learners within their organisation and provides opportunities for robust inquiry into the improvement of professional practice.

Effective appraisal requires teachers and leaders to have joint accountability and responsibility towards developing teacher practice that improves student learning and achievement. The greatest power of leadership is enhancing student learning through their involvement in and commitment towards the learning of teachers (Robinson et al., 2009). Professional learning within appraisal should focus on facilitating the acquisition of and critical thinking about practice (Cardno, 2012). It is important for both teachers and leaders to have shared clarity and understandings of what is considered effective practice within their educational organisation.

Appraisal activities and processes

Overview of appraisal processes/activities

In primary schools in New Zealand, the appraisal of teachers and leaders includes activities that involve the observation, evaluation and discussion of professional practice against the relevant *Performance Standards* (Ministry of Education, 1998) and the *Practising Teacher Criteria* (Education Council, 2015). In addition, there is a non-negotiable expectation that the appraisal cycle documents evidence of effective teaching practice, professional learning and reflection (Piggot-Irvine & Cardno, 2005). School leaders have a pivotal role in establishing the conditions for teacher appraisal, the quality and implementation of teacher appraisal procedures and the use of the appraisal information for goal setting and improvement (Ministry of Education, 2011). The collation of evidence for appraisal is a summary of

performance specific to a job description, targets and performance standards (Piggot-Irvine & Cardno, 2005). There are three main practices in an appraisal system; the initial meeting, the monitoring and observation of practice and data collection and the final appraisal interview (Piggot-Irvine & Cardno, 2005).

Recently in New Zealand, many schools have used the Teaching as Inquiry (TasI) cycle (Ministry of Education, 2007) as the foundation of their appraisal practices. The Teaching as Inquiry cycle is a cyclical model which involves teachers inquiring into and evaluating their own practice based on evidence. This cycle can be used for both accountability and developmental functions of appraisal. Through linking appraisal and teaching as inquiry, schools can show standards are being achieved, provide teachers with opportunities to evaluate and improve their practices, and allow evaluation against the practicing teacher criteria (Ministry of Education, 2016).

It is important that leaders construct reflective practices within their appraisal system to encourage teachers to think deeply and actively about their own professional practice and growth. Mandated regulations regarding performance appraisal in New Zealand stipulate that the element of self-appraisal must be included in the appraisal process (Ministry of Education, 1998). Reflection is associated with notions of deep, critical consideration of one's own practice through hindsight and contemplation of theory against practice (Cardno, 2012). Mackenzie (2014) found that using reflective questions supported and encouraged teachers to develop the habits of reflection within appraisal. Larivee (2000) posits that a critically reflective teacher can both self-reflect and inquire critically as well as challenge assumptions and question existing practices. It is vital that both the digital platform and the appraisal process include authentic opportunities for reflection and dialogue. Robertson (2010) states that sometimes it is not easy for teachers to adequately reflect on their experiences and this is where coaching techniques and conversations can be useful. Reflection and experimentation should be strongly held values in an organisation and leaders must make both time and resources available for teachers to engage in these practices (Cardno, 2012). Reflection is a critical area of all aspects of teacher practice.

An effective appraisal process needs to include activities and practices that support the collection and presentation of evidence. It is the role of educational leaders to

ensure that the tools and procedures actually benefit the teachers to achieve the intended purposes (Robinson et al., 2009). The responsibility for the data collection lies with the teacher who is being appraised (Piggot-Irvine & Cardno, 2005). This collation of evidence is usually presented within a file or portfolio, and more recently using digital tools within a digital platform. Portfolios are an effective method to encourage teachers to evaluate their own abilities and enhance their professional skills because portfolios provide opportunities for teachers to engage in self-assessment and reflective practices as they frequently review and update their evidence (Gelfer, O'Hara, Krasch, & Nguyen, 2015). The use of portfolios encourages teachers to take responsibility for their own learning and reflect on professional practice and experiences which then increases pedagogical knowledge and understanding of professional standards (Gelfer et al., 2015). The evidence gathering process can provide a summary which can not only measure performance against the *Practicing Teacher Criteria* (Education Council, 2015), but also demonstrate the professional development of the teacher against targets and goals related to both the individual and the organization.

Overview of the use of digital technologies and platforms

Appraisal policies and supporting documents can be integrated within smart tools which can then influence every practice within the appraisal process (Robinson et al., 2009). The aim of a digital platform for appraisal is to encourage teachers to build their own evidence and create a strong sense of ownership towards their professional registration requirements. The technical design of digital technologies for appraisal creates an opportunity for feedback, discussion, inquiry and enables collaborative learning amongst participants (Tang & Lam, 2014). Digital tools within the platform provide an opportunity for the teacher and appraiser to review data and evidence as well as reflect on their professional practice.

The aim of a digital platform for teacher appraisal is to encourage teachers to build their own evidence and create a strong sense of ownership towards their professional registration and progression of professional standards as well as provide a consistent, transparent outlet to continually review and reflect on their practice and learning. Forde et al. (2015) state that standards can be used by teachers is to plan their professional development as they progress through their careers as standards provide a framework for professional learning. Digital tools can demonstrate

examples of authentic teaching, provide opportunities for analysis and reflection through gathering evidence to meet professional standards (Forde et al., 2015). Digital tools can support and scaffold all Cardno's (2012) three components of appraisal by providing a template for the documentation of evidence against specific professional standards. Digital tools can provide evidence across standards by demonstrating authentic teaching as well as providing opportunities for analysis and reflection (Ingvarson & Rowe, 2008). Digital portfolios create ownership for teachers as they determine the context of their portfolio, select the evidence against the criteria and have input into their professional development path (Mackenzie, 2014). Appraisal within a digital platform is a critical source of collective and independent learning.

Using a digital platform for appraisal can provide clarity and school-wide consistency between all teachers and leaders involved in the process. The digital network (or platform) can be used not only for the exchange of ideas but also for the co-construction of learning and generating a mutual understanding (Harris et al., 2013). Digital teacher portfolios provide an interactive online forum where teachers and their appraisers can engage in discussions about teaching practice and professional learning (Tang & Lam, 2014). In order to support appraisal activities, the digital platform should offer enhanced opportunities for dialogue and feedback, sharing, long term activities and collaborative knowledge construction (Tsiotakis & Jimoyiannis, 2016). Digital platforms build teacher capacity by providing opportunities for ownership, engagement and reflection of professional practice within the appraisal process.

Digital collaboration within the appraisal process provides a platform for teachers and leaders to discuss, reflect upon and find solutions to educational issues and encourage change and professional growth. Jones (2010) found that a portfolio which requires experienced teachers to select, annotate and reflect on evidence of practice is a powerful tool for the development of reflective practice. The role and status of digital learning in the twenty-first century by both students and teachers has moved into the forefront of thinking about pedagogy and practice (Benade, 2015). Digital portfolios provide teachers with an opportunity to develop their practice and professional learning whilst reflecting on the complexities and contexts of teaching more accurately than completing a standards checklist (Mackenzie, 2014). A digital

platform for appraisal is not just a repository of evidence, it is about selecting the right evidence to tell the professional learning journey of the educationalist. In taking ownership for their professional development, teachers gain a greater sense of independence and agency. Using digital tools within appraisal involves new ways of reflecting and interacting with teachers and leaders. The reflective and collaborative aspects of appraisal allow a teacher to learn and develop with a sense of ownership and accountability.

The implications of these digital tools for teachers and leaders

The integration of digital technologies to support, measure and improve teachers' professional capacity within the appraisal process has significantly changed from past appraisal conversations, observations and meetings. The establishment of digital technologies as a way of supporting professional learning is now ubiquitous, and this has underlined a need to further explore and understand leadership in a virtual setting (Harris et al., 2013). Codd (2005) states that with the new accountabilities introduced to the education system and greater expectations placed on teachers, the appraisal system is under pressure to evidence the value and efficacy of teachers. The ability of teachers and leaders to stay attuned to the emerging platforms and digital trends is a crucial capacity that must be integrated into teacher education and practice (Ahlquist, 2014). Professional learning has moved from transmissive models to models that allow teachers to engage with others in knowledge rich environments (Forde et al., 2015). Digital networks are a critical source of collective and independent learning (Harris et al., 2013). DasGupta (2011) stated that these new skills are required for leadership in a digital world: stronger communication skills, stronger social networking skills, global mindset and a 24/7 orientation towards online connection. Professional learning in education has changed with the advent of new digital technologies used within appraisal.

Fox et al. (2015) state that leaders are increasingly called upon to create open, collaborative learning communities within education. Tschannen-Moran (2009) concluded that organisational structures such as appraisal need to include collective inquiry, reflection to promote teacher professionalism and that such structures would be more likely to evolve when the professional relationships are grounded in trust. Reflecting on actions and experiences helps educational leaders and teacher become more receptive to trying new strategies and behavior (Robertson, 2010). For

appraisal to be effective in a digital context, leaders and teachers will need to adapt to these new digital ways of interacting, evaluating and reflecting within their professional practice.

Teachers and leaders increasingly find themselves challenged to become more collaborative and reflective about their practice and beliefs. It is somehow taken for granted that teachers know how to collaborate and reflect without any models or *modus operandi* (Harris & Jones, 2015). Robertson (2015) believes that many leaders do not have the necessary skills to provide quality feedback to their peers or the ability to reflect upon their own practice. Benade (2015) states that it is important that critical reflection be ethical within the context of a radically technologized twenty-first century. Benade (2015) found that when the reflective activity is an imposed activity, there was little evidence that such reflections created intellectual discourse amongst the participants. He concluded that it was less clear that teachers' pedagogical practice changed from a result of deep, critical reflections or as a result of wider changes of educational policy and practice (Benade, 2015). Harris and Jones (2015) also found that when collaboration was mandated, there were issues of low level buy in, feeling imposed upon and that it was just another demand expected from leadership. Within the stages of their career, educators often have not been taught how to reflect critically on their practice (Robertson, 2015). Teachers cannot be simply expected to evolve into communities of practice and reflection without clear models and the right conditions to make it work effectively (Harris & Jones, 2015). Robertson (2015) further explains that learning to respond to the "why" questions builds critical reflective practice and that ongoing coaching dialogue deepens our thinking and challenges our mindsets. Piggot-Irvine and Cardno (2005) state that for reflection in appraisal to be effective, individuals require the knowledge and skills of building productive relationships. The challenge for appraisal within the digital age is not only mastering the technology but also building the confidence and capacity of leaders and teachers to openly discuss, question and reflect honestly and critically about their practice and their professional learning needs.

Developing learning conversations within digital appraisal platforms creates challenging new layers of engagement and trust between teachers and leaders. In leading digital collaboration, the facilitator has to depend on coaching rather than

supervision because the digital interactions are usually time delayed (Harris et al., 2013). The concept of conferencing as part of appraisal involves opportunities for teachers to engage in dialogue about pedagogy, professional discourse as well as daily practice (Cardno, 2012). In order to work successfully in an online community, teachers need a shared understanding of personal and organisational goals, commitment towards goals, trust to share knowledge and a sense of belonging and accountability towards their professional learning community (Tsiotakis & Jimoyiannis, 2016). Effective digital collaboration amongst teachers is dependent upon several factors including a focus on learning rather than teaching and building trust whilst remaining open to new ideas and knowledge (Harris et al., 2013). Grey (2011) postulates that professional dialogue provides opportunities for teachers to engage in analytical discussion about teaching that extend beyond the everyday recount conversation. Active participation and high quality interactions within a digital conversation requires collaboration, commitment and support from all team members to make the learning process more meaningful and sustainable (Tang & Lam, 2014). Cardno (2012) states that it is only through a commitment to utilise the skills of productive conversation in everyday situations that this will then pervade into the essence of appraisal conversations. Effective appraisal within a digital platform involves high quality conversations and an engagement with professional learning to improve teaching practice.

The introduction of digital tools within appraisal involves not only a change in professional practice but also a change within the collaborative nature of the relationship between the appraiser and appraisee. The e-leader may need to make more efforts to build relationships because digital interactions lack in physical interaction as well as miss cues from body language or tone of voice (Savolainen, 2014). Benade (2015) explains that while digital tools and the online world provide significant opportunities within education, these same opportunities can be:

alienating, leading to a loss of identity, undermining notions of self and others, face to face encounters mediated by keyboards and screens. Ironically, although such digital interactions provide opportunities for collaboration, they can also lead to a loss of responsibility. (p. 51)

The challenges for communication and conversations within effective appraisal are heightened with the use of digital tools. Ensuring that effective appraisal practice is

scaffolded through the digital tool or platform is a new challenge for school leaders. Harris et al. (2013) states that when leading digital collaboration, the leader should depend on coaching rather than supervision because the interaction is time delayed. It is vital that the organisation and leader establish clear protocols and expectations before engaging digitally so that there is minimal possibility of participants opting out (Harris et al., 2013). The performance appraisal cycle needs to be transparent not only in the expectation of what constitutes evidence of teaching performance but also in the expectation of what constitutes appropriate digital engagement.

Sharing experiences of professional practice online may create personal issues of trust, privacy and security. Piggot-Irvine and Cardno (2005) state that appraisal conversations may evoke defensive routines as teachers feel vulnerable as they open their practice to the scrutiny of leaders and colleagues. The authors also state that when others have access to self-appraisal information it may affect the detail, honesty and critique of the actual practice (Piggot-Irvine & Cardno, 2005).

Tschannen-Moran (2009) posits that teachers must be willing to honestly identify and openly discuss difficulties to be able to engage in a collective inquiry practice such as appraisal. In order to work successfully in an online forum, teachers need to develop a shared understanding of the goals they are trying to achieve, as well as trust to share knowledge with others (Tsiotakis & Jimoyiannis, 2016). A close, trusting relationship between the mentor and the teacher deepens and enhances the quality of the portfolio discussion (Tang & Lam, 2014). For appraisal engagement to be open and honest, confidentiality issues must be addressed at the onset by the organisation, leader and individual (Piggot-Irvine & Cardno, 2005). Effective digital engagement for appraisal requires relationships based on trust, honesty and ability to critically reflect on professional practice.

For appraisal to be effective, the relationships between staff is crucial. True and lasting collaborative relationships can develop from careful, strategic, evidence-based practice (Harris & Jones, 2015). With blog-based teaching portfolios, the selection of mentors requires a close relationship as the quality of discussion will be enhanced since they are more likely to be honest and critical when sharing with someone they trust and respect (Tang & Lam, 2014). Savolainen (2014) also states that the digital interactions between leader and follower are dependent upon the situation, device, relationship, and the quality and frequency of interaction. Research

by Grey (2011) indicated that when seeking to engage professional reflective dialogue, a trusting context was needed to create a safe forum for discussing practice and for teachers to be comfortable giving and receiving constructive, honest feedback. The collaboration within a digital platform between the appraiser and appraisee benefits from a culture of trust where both individuals are respected and can engage in constructive, critical dialogue not only within the appraisal process but within every professional encounter.

It is important to be cognisant of the relationship when engaging in appraisal discussions about professional learning and practice. The deeper the relationship the easier it is to ask challenging questions and feel supported and encouraged to find areas of development and learning (Robertson, 2015). Interacting with digital tools in appraisal activities requires professional relationships based on trust and respect for others and explicit procedures in place to ensure confidentiality.

Conclusion

It is possible to achieve both the accountability and development purposes of effective appraisal when relational trust is valued in professional relationships, productive dialogue is embedded in all professional encounters and the quality of teacher practice is paramount. Cardno (2012) states that when systems and processes for performance appraisal and professional development are well established and well operated they shape the culture of the organisation. Cardno (2012) continues to clarify that an effective appraisal system allows colleagues to engage in dialogue that leads to learning and change and is the pivot for creating professional learning that meets the needs of the individuals, teams and the entire organisation.

How leaders embed digital technologies within their school's appraisal policies and activities is vital for its success. For schools, the success of digital technologies appears to depend on having a group of leaders who complement each other with regard to digital abilities (Hauge & Norenes, 2014). Forde et al. (2015) found that the success of an appraisal model depends on "teacher ownership, on the role of school leadership in fostering cultures to support this model and at a systems level where professional learning is placed as central to school improvement" (p. 32). Establishing an effective digital platform for appraisal requires transparent policies and clarity of purpose of appraisal activities to ensure the successful evaluation of teaching practice.

Effective appraisal using digital tools requires more than an efficient digital tool or platform, it requires robust systems, authentic professional practices and behaviours that focus on building the teacher's capacity to raise student achievement. Digital tools can enhance the learning opportunities within appraisal if they are more than a suitcase of evidence, and rather as a mechanism to share, discuss, reflect and build professional capacity.

Summary

In this chapter, I have reviewed the literature on effective appraisal and how digital tools are used within appraisal in education. The literature review has developed the overarching research questions below:

1. How does the use of digital tools and platforms influence effective appraisal practices in New Zealand?
2. What factors contribute to the perceived effective use of digital tools and platforms in appraisal practices?

The next chapter outlines the research methodology which guided this research study and explains and justifies the selection of a qualitative approach to the methodology, data collection and analysis.

Chapter 3 Research methodology and methods

This chapter overviews the research methodology by presenting the rationale for adopting an interpretivist approach to this research study. It justifies and critiques the research positioning within an interpretive paradigm, using a qualitative approach. This chapter begins with a justification of the research design followed by an explanation of the research methods and how semi-structured interviews were used for data collection. This is followed by an explanation of the ethical and cultural considerations, data analysis techniques and validity considerations.

The aim of this research is to examine the experiences and perceptions of teachers and leaders using digital tools and platforms to engage in appraisal activities. The first research question in this study inquires into the influence of digital tools and platforms in effective appraisal practices. The second question in this research inquires into how digital tools and platforms contribute to the perceived effectiveness of appraisal processes.

The research questions that underpin this study are:

1. How does the use of digital tools and platforms influence effective appraisal practices in New Zealand?
2. What factors contribute to the perceived effective use of digital tools and platforms in appraisal practices?

Research design

Ontology

In educational research, ontology relates to the being in the world. The ontology of interpretivist research study illustrates how people make meaning in their worlds (Cohen, Manion, & Morrison, 2011). The ontology of this phenomenological approach is that the participants will share perspectives based on their relations and experiences with others (Somekh & Lewin, 2011). The interpretive paradigm of my research comes from a social constructivist ontological position. This fits the research model as it co-constructs the reality and seeks to understand the deeper implications of the participants' experiences (Somekh & Lewin, 2011). For this research study, the participants constructed meaning through describing their experiences using digital tools and platforms in appraisal. The questions that

underlie phenomenological research in education are what is the structure and essence of the leaders' experiences (Boudah, 2011). Questions for this research were formulated around how teachers and leaders use digital communication tools to engage in appraisal activities.

Epistemology

Epistemology is the philosophical question related to the nature of knowledge and truth (Somekh & Lewin, 2011). The epistemology of interpretive research explores the theory of knowledge and seeks connections between and amongst the elements within this context for these particular participants. Interpretivist research relates to the being as a being in their working world and explores how beings construct meaning of their relationships (Somekh & Lewin, 2011). This study is based in an interpretivist epistemology, as the analysis will seek to understand the relationships and connections between the elements of digital tools and platforms and effective appraisal practices. The interpretivist epistemological approach was chosen as the research questions are based on teachers' and leaders' experiences and perceptions of using digital platforms and tools within appraisal. The interpretivist position of this research study is a result of relating current theoretical knowledge regarding appraisal to the new practice of using digital platforms and digital tools in appraisal activities in schools.

This research study will explore how leaders describe and understand their experiences and how these experiences have impacted their professional practice (Gunter & Ribbins, 2003). As a middle-leader with the delegated responsibilities of appraisal, the introduction of digital tools for evidence gathering, reflection and discussion provides a new layer of engagement with my colleagues. I am interested in discussing other leader's experiences and perceptions of how the digital tools and platforms influence their appraisal practices and relationships with teachers. The outcomes of this research provide rich descriptions of how teachers and leaders use digital tools and platforms to reflect upon, discuss and improve their professional practices within the context of appraisal.

Paradigm

The researcher worked together with the participants to identify patterns through their shared experiences of using digital tools and platforms within appraisal

processes and activities in primary schools. As this study investigates the use of digital tools for the purposes of performance appraisal, it is vital to understand the perspectives of the leaders and teachers using such tools within appraisal activities. This research study explored how leaders and teachers describe and understand their experiences and how these experiences have impacted their professional practice. The research position from these approaches is that the participants studied are active contributors and expert interpreters of their own psychologies (Somekh & Lewin, 2011).

Qualitative study

Qualitative research uses methods to gather descriptive accounts of lived experiences to enhance the understanding of phenomena (Mutch, 2005). This research explored the participants' experience of their use of digital tools and platforms, and identified the implications of using these tools within their appraisal context. A qualitative approach assembles the evidence from the source and identifies patterns through inductive reasoning (Newby, 2010). The qualitative approach, therefore was appropriate for my research as it collects rich data in the form of words. In this study, leaders and teachers were asked to give their personal accounts of their appraisal experiences through interviews.

Within qualitative research, the researcher does not have to remain neutral as their purpose is to assemble the evidence and use inductive reasoning to identify commonalities and patterns of behaviour (Newby, 2010). As I am the researcher who developed the questions, conducted the interviews and considering my own ideas and experiences with digital tools in appraisal, I am not considered neutral. To address these limitations, it was important that I maintained a neutral disposition by avoiding leading questions during the interviews. Further discussion of validity will occur later in the methodology chapter.

A qualitative research approach closely aligns with my epistemological, ontological stance and the paradigm underpinning for my research. Qualitative research is interested in the 'whys' and 'hows' of the beliefs and opinions of people (Morrell & Carroll, 2010). Mutch (2005) states that qualitative research gives the full picture of what experiences are really like. Qualitative research links with interpretivist world view as the purpose is to discover how people interpret the world in which they live (Bryman, 2012). The qualitative design of my study fits in well with the identified

epistemology, ontology and paradigm because the influence of digital tools and platforms on the professional interactions and experiences of leaders and teachers can best be studied by identifying and examining participants' perceptions, experiences and views.

Research methods

This section explains the methods used for the collection and analysis of the data gathered from the semi-structured interviews in this research study. Data collection methods and the analysis that was undertaken is discussed.

As the purpose of this research is to inquire into the professional practice and experiences of school leaders and teachers, consideration was given towards the methods for data collection, approaches to sampling and selection of participating schools and individuals and data analysis. The following section will describe the data collection methods, including the selection of participants, the steps involved, and the use of semi-structured interviews for data collection.

Selection of participants

The sampling method chosen for this research was non-probability, purposive sampling. Purposive sampling has been chosen for this study as the choice of participants needed to align with the purpose of the research and the research questions (Somekh & Lewin, 2011). Purposive sampling is when the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics (Johnson & Christensen, 2012). The participants were chosen using a purposive sampling of a targeted group of school leaders and teachers in Auckland, New Zealand. Ten schools were identified from the Auckland Primary Principals' Association website as being a large school of more than 450 students. I selected schools with more than 450 students as their deputy principals would more than likely be released full time and allocated with roles and responsibilities regarding appraisal. Each of the ten schools were approached via email and invited to participate in this research if they currently used digital platforms and tools within appraisal activities. Four replies were received: three accepting and one declining. There were eight female participants and one male participant. Eight participants were New Zealand European and one participant was Asian. Once the principals accepted the invitation to participate, I emailed the participant information sheet (Appendix A) and the consent form (Appendix B) to

the principal and provided dates of availability for interviews. The principals were asked to invite their deputy or assistant principal who was involved in leading and managing the appraisal practices and invite experienced teachers who were familiar with their school's appraisal system to participate and respond to my email.

Qualitative research interviews attempt to understand the world from the participants' point of view, to unfold the meaning of their experiences and to uncover their lived world (Kvale & Brinkman, 2009). The methods used within this research study have been chosen to provide participants with the opportunity to share detailed accounts of their personal professional experiences using digital tools within their appraisal activities. Through these interviews, I explored digital tools and platforms used by school leaders within appraisal and probe the leaders' actions, behaviours and perceptions of tool use for appraisal purposes.

Semi-structured interviews

The purpose of semi-structured interviews is to obtain descriptions of the professional, lived world of leaders in order to interpret their meaning of their actions in the workplace (Kvale & Brinkman, 2009). A semi structured interview is the most appropriate tool for data collection when the researcher seeks qualitative information and a range of responses (O'Toole & Beckett, 2013). Semi-structured interviews give the opportunity for unexpected insights to be collected and for the interviewer to seek clarification, invite expansion or explore a response further (O'Toole & Beckett, 2013). Hartas (2010) supports the benefits of semi-structured interviews as being that they ensure the coverage of the researcher's agenda while also providing opportunities for interviews to describe what is significant for them, in their own words. Semi-structured interviews allowed me to focus on the use of digital tools to support the overarching concept of performance appraisal, yet at the same time allowed some flexibility to uncover further information related to the relationships and professional dialogue not only within the appraisal cycle, but also within the school culture.

The interview process prompted the teachers and leaders to share their appraisal experiences, opinions and ideas about how digital tools influence the appraisal process in terms of relationships and conversations. Hartas (2010) explains the advantages of an interview method is that the researcher or participant can explain the meaning jargon that either cannot understand.

A semi-structured interview method was selected as it allowed for further probing or supplementary questions to be given dependent upon participants' responses. Pre-determined questions allow for varied responses from the participants but also further probing by the researcher if necessary (Boudah, 2011). Pre-determined questions allow for researchers to establish commonalities such as age, gender, and familiarity with digital tools (O'Toole & Beckett, 2013). Boudah (2011) suggests the types of questions asked for educational research using interviews include: background questions to establish identifying characteristics of the participant, experience/behaviour questions, opinion/value questions to understand the participants cognitive and interpretive processes and feeling questions to understand the participant's emotional responses. Semi-structured interviews have the purpose of obtaining a description of the participants' world and allow the interviewer to actively follow up on the participant's answers to clarify or provoke further discussion (Kvale & Brinkman, 2009).

Strengths and limitations of semi-structured interviews

The interview method within research is not without problems or challenges. These challenges are addressed within this research through the establishment of pre-determined questions, purposive sampling and selection of participants as well as the ethical considerations. Challenges within interview methods include the responses from the participants with regard to their level of commitment, truth and reality as well as any hidden agendas (Somekh & Lewin, 2011). Although pre-determined questions may reduce some of the issues of bias, they do not allow for flexibility or spontaneity from the participant (Boudah, 2011). Pre-determined questions will focus the participant on the purpose of research and encourage truthful responses (Somekh & Lewin, 2011). The semi-structured nature of the questions provided the interviewee with the opportunity to be honest and truthful with their perceptions of digital tool usage within appraisal. Trialing the questions with two separate colleagues enabled me to develop open-ended questions and prompts that assisted with the elimination of bias supported the participant to engage truthfully about their professional experiences. The trial also enabled me to test the recording device and the sequence of the questions. After the trial, I changed the order of the questions to encourage the participants to describe appraisal within their school, obtain specific examples, and ask the participants to elaborate on their previous answers if necessary.

Another issue that problematises interviews is that the meaning heard by the interviewer may not be the meaning intended by the interviewee (Somekh & Lewin, 2011). This issue was addressed through sending the transcripts to the participants for clarification and approval. Another challenge with interviewing revolves around the power structures that are within the context of the exchange between the interviewer/ee (Somekh & Lewin, 2011). This challenge was considered by ensuring that a warm, comfortable environment was available for the interviews with refreshments provided. I also reviewed the participant information sheet outlining the research purpose at the beginning of the interview.

The third limitation within the process of conducting interviews can create barriers for some participants. Somekh and Lewin (2011) identify three barriers against uncovering the real data within interviews: imposition, grounding, and emergence. Imposition is the barrier to ensuring that the research questions produce the most useful information from the interviews (Somekh & Lewin, 2011). Impositional strategies may also reinforce the power over the interviewee and create suspicion within the interview process (Somekh & Lewin, 2011). This was addressed within my research by providing a hard copy of the participant information sheet, and reviewing and discussing the information sheet prior to commencing the interview. Participants were also provided with a hard copy of the questions to preview before the commencement of the interview so they could understand the context of the research. The grounding barrier is described by Somekh and Lewin (2011) as ensuring the interviewee feels comfortable and safe to participate. This was addressed by providing beverages, a comfortable environment and the interviewer adopting the role of listener. Considering these impositions allowed the interview atmosphere to be relaxed and enabled the data to emerge as grounded in the experiences of the interviewee (Somekh & Lewin, 2011). Somekh and Lewin (2011) describe how the interview setting may produce an emergence barrier when the interviewee does not feel safe to share their opinions. The emergence barrier is addressed when the researcher adopting the listening role in a way that parallels the interviewee increases the possibility that they will feel comfortable enough for their views to emerge. (Somekh & Lewin, 2011). Establishing a relaxed interview atmosphere supported the participants to feel comfortable to share their professional experiences regarding using digital tools in appraisal.

Carrying out semi-structured interviews

The semi-structured interviews took place over two months across two school terms. Using purposive sampling, nine interviews were conducted with a principal, middle leader and teacher from three schools. The interviews were held within meeting rooms at each school at a time arranged between the school principal and the researcher. Data collection occurred between August 25 and September 11 2016. Participants were asked eight questions regarding their schools' appraisal system and how digital tools are used within the appraisal activities (Appendix C). A hard copy of the questions was given to each participant so they could review and reflect on the question during the interview. The interviews were transcribed by the researcher personally and this ensured a deeper knowledge and understanding of the responses given. The process of transcription provided opportunities to listen, review and reflect upon the responses before going further with data coding and analysis. To ensure accuracy of data recording, copies of the transcripts were given to each participant for their approval after the interviews.

Ethical considerations

Research ethics are a guiding set of principles that support researchers in conducting ethical studies (Johnson & Christensen, 2012). Research of any kind raises issues regarding the rights of others (O'Toole & Beckett, 2013). Cohen et al. (2011) suggest that the key to successful resolution of ethical dilemmas lies within establishing good relations such as the development of a sense of rapport between the researcher and the participants that will lead to a sense of trust and confidence.

Informed consent

Informed consent means protecting the participants and ensuring they are well informed about all aspects of the research so that they can give written consent, knowing what they have agreed to do. After agreeing via email to participate, all participants were emailed copies of the information sheet and consent form. Immediately prior to conducting the interview, both documents were reviewed verbally with each participant, and they were encouraged to ask any questions regarding the research purpose. Signed copies of the consent form were collected from each participant. Participants were also reminded that they could withdraw their involvement in the research at any time up until ten days after receiving their final transcript for approval.

Minimisation of harm

The next ethical principle considered was the minimisation of physical and emotional harm toward the participants. Researchers must consider whether their research could hurt, embarrass or in some way create a reaction that could influence the participants' willingness to participate (Johnson & Christensen, 2012). As a new interviewer, I needed to be aware of social cues of discomfort or dis-ease and address these within the interview setting (Kvale & Brinkman, 2009). Consideration was also given towards potential emotional harm as some of the questions evoked a negative response from recollecting an appraisal communication incident. Trialing the interview aided my role as researcher in terms of developing skills and experience with observing social cues of the participants. Providing information prior to interviews, selecting a quiet, comfortable place to conduct the interviews, and reviewing the information and consent forms immediately prior to each interview were additional measures taken to ensure the physical and emotional safety of each participant. To minimise the notion of power over participants, I selected schools where I had no existing personal or professional relationships. As a Deputy Principal myself, the issue of power I had was addressed through being on the same professional level with the majority of interviewees.

Truthfulness and the limitation of deception

Truthfulness was considered before, during and after conducting the research interviews. For interviews to be effective, a bond of trust needs to develop between the interviewees and the interviewer (O'Toole & Beckett, 2013). Before interviews began, all participants were informed of my role as a researcher, the nature and the purpose of my research. Whilst conducting the interviews, I assured the interviewees that there were no correct answers and that I was merely attempting to collate their perceptions of using digital tools within their school's appraisal system.

Deception within research means to mislead participants within the research study. An interview is not a conversation between equal partners because the researcher defines and controls the situation (Kvale & Brinkman, 2009). Deception was avoided through providing copies of the consent form and information sheet by both email and reviewing immediately prior to conducting the interviews. Addressing issues such as power and hidden agendas were considered through the purposeful selection of participants and the research methods.

Cultural sensitivity

Protecting the cultural safety of the participants was considered in the design and of this research. Cultural respect is important within this research in the context of New Zealand and the Treaty of Waitangi principles of partnership, protection and participation (TKI, 2012). The principle of partnership was addressed through establishing an honest, transparent rapport about the purpose of the research and how the results would be shared to the wider community. The principle of protection was addressed by ensuring that I showed respect and demonstrated active listening to throughout the research process, and particularly during the interviews. The interview questions were also trialed to ensure the content and quality of the questions were culturally appropriate. The participation principal was addressed through informed consent, confidentiality and ensuring a safe research environment.

Confidentiality and anonymity

Protecting the participants' confidentiality and privacy was important in order to prevent, as far as possible the likelihood of them being identified by readers of this thesis. Privacy refers to controlling other people's access to information about the participants. Confidentiality refers to the means the researcher uses to protect the privacy of the participants (Johnson & Christensen, 2012). Anonymity is another measure to protect privacy as the identity of the participants is not known to the readers (Johnson & Christensen, 2012). The participants' identities remained confidential through the collection of the consent forms and university ethical procedures. The participant's identity and school identity has not been revealed to anyone outside of this research study. The anonymity of using pseudonyms within transcripts will ensure the privacy of the participants to the reader. Anonymity was also granted by ensuring that any interview excerpts within the final thesis did not reveal the participant or the school's identity. The collection and storage of data was safeguarded through password protection of electronic data, and hard copies being stored in a locked cabinet.

Data analysis

Data analysis allows a researcher to examine, sort and interpret the data so that common themes and findings can be identified. Data analysis in qualitative research is described as an inductive process, developing descriptions and themes followed by the interpretation of the larger meaning and presenting overall findings (Creswell,

2012; Mutch, 2005; Newby, 2010; O'Toole & Beckett, 2013). The first factor of data analysis to be considered was how to analyse the responses of the participants.

Data analysis of the interview data searches for commonalities and patterns (O'Toole & Beckett, 2013), by using thematic analysis techniques as the researcher employs inductive logic to establish themes (Mutch, 2005). The qualitative approach assembles the evidence from the relevant sources and uses inductive reasoning to identify patterns and order (Newby, 2010).

Electronic recording data can be invaluable when analysing and interpreting (O'Toole & Beckett, 2013). All interviews were digitally recorded using the same device and transcribed. In order to provide confidentiality, a pseudonym (School X, Y, Z, Interviewee 1, 2, 3) was used throughout the transcription, data analysis and reporting process. It was important that the transcription of interviews was an accurate record of what was been said by the participants and the use of a recording device was essential within the context of one hour interviews. To ensure the correctness of the transcript, participants were provided a copy of the transcript to approve. All participants approved the transcripts.

The indexical transcription of these interviews involved generating a focussed selection of relevant themes and features of data, organising this data into clear and distinct themes relating to the research questions and then analysing these themes for developing relationships, possible connections and commonalities (Hartas, 2010). Managing the nine interview transcripts as data required a systematic approach to analysing the results. I used two key approaches - coding and concept charting (Bryman, 2012). As part of my transcription analysis, I followed two types of coding procedures referred to as initial coding and focused coding. Bryman (2012) describes open coding or initial coding as beginning to examine your interview and focus group transcripts line by line, identifying key words and ideas. When analysing the transcripts from the interviews, common themes were identified within each school, which provided opportunities for analysis and the emergence of 'whole study' themes that were used to inform the findings and recommendations. The steps involved in coding the data from my nine semi-structured interviews are outlined below.

Coding semi-structured interviews

In qualitative research, data analysis is the process of reducing statements to a core essence of the experiences described (Johnson & Christensen, 2012). To begin the analysis, I initially met with my supervisor to discuss my emerging hunches and insights from my overall view of the transcripts. Inductive codes are generated by the researcher by directly examining the data during the coding process (Johnson & Christensen, 2012). Coding the data involves searching for significant statements that have particular relevance to the phenomenon being studied (Johnson & Christensen, 2012). The next stage of the analysis involved highlighting the interview transcripts to sort data into themes and complete the initial coding. This allowed for easy grouping and regrouping of the themes. Johnson and Christensen (2012) state that once lists of significant statements have been constructed, the researcher then searches for themes within the data. I chose to organise and present my themes using my research questions. Each participant was given a number and each school was given a colour code. Then, each coded interview statement was grouped into the participant's roles under each research question. I then decided to analyse each question based on the participants' position within the school. Each transcript was printed with a four centimetre margin to identify key points, phrases or themes. The code names emerged from the repetition of ideas within each interview question. This process was continual as I read and re-read the transcripts searching for common experiences and perceptions. The final analysis of the data analysis involved narrowing the themes into the major data themes. This was completed using the 'focused coding' approach which is more selective. Once the coding was completed, the themes were presented in relation to each of the interview questions. A summary of findings that emerged from the coding process are presented in chapter four.

Validity and trustworthiness

Validity is the term used to claim that the research has investigated the questions that it set out to answer (O'Toole & Beckett, 2013). Validity refers to the correctness or truthfulness of the inferences that are made within the research (Johnson & Christensen, 2012). In qualitative research, validity is addressed through the honesty, depth, richness and scope of the data produced, the quality of participants, the extent of triangulation and the objectivity of the researcher (Cohen et al., 2011). To achieve strong validity within this study, strategies were developed to address

issues of selection bias, researcher bias, descriptive validity and interpretive validity. At the beginning of the data analysis phase of this study, I actively engaged in a critical self-reflection process with my supervisor to identify and articulate any potential bias on my part. Continually reviewing the data and re-engaging with the overarching research questions whilst analysing the transcripts ensured that I maintained as neutral stance as possible.

Selection bias was resolved through the purposive sampling process where schools were selected by size and use of digital tools and platforms within appraisal processes. Researcher bias results from the selective observation and recording of information and also from allowing one's personal views to affect how the research is conducted and how the data are interpreted (Johnson & Christensen, 2012). Sources of bias that can occur during the interviews process are interviewer characteristics, respondent characteristics, and the content of the questions (Cohen et al., 2011). Somekh and Lewin (2011) further explain the challenges with conducting research interviews to be trust, the guarantee of accuracy, and the understanding meaning by both the participant and the interviewer. As both the researcher and the interviewer, the depth of my involvement within this process needed to be considered. Testing the research questions helped to clarify the intended meaning and reduce ambiguity and also ensured the data gathered could be grounded in the experiences of the interviewee, not the pre-conceived notions of the interviewer. As a middle leader, I could easily relate to the participants and their experiences, but I needed to control my influence and contributions whilst conducting the interviews. It was easy to establish a rapport with the participants as a fellow teacher and leader, and this helped to minimise any power relationship within the research setting.

Researcher bias, descriptive validity and interpretive validity was continually addressed throughout the data analysis stage of this research. Descriptive validity is the factual accuracy of the account as reported by the researcher (Johnson & Christensen, 2012). Descriptive validity was ensured through the participants reviewing the transcripts and engaging in a reflective analysis with my supervisor. Interpretive validity refers to the degree to which the participants' viewpoints and experiences are understood by the researcher (Johnson & Christensen, 2012). Interpretive validity was addressed through the review of the participant information sheet and the final transcript approval by the participant. Descriptive and interpretive

validity was ensured through the transcription process of seeking participant validation and approval of the final transcript.

The concept of trustworthiness was considered and addressed. Trustworthiness means that the data is plausible, credible and therefore defensible (Johnson & Christensen, 2012). Bryman (2012) proposed that researchers use the term trustworthiness to establish the reliability of the study. Trustworthiness was defined by Bryman (2012) as a set of conditions used by qualitative researchers for assessing the quality of research. These conditions are credibility, transferability, dependability, and confirmability. The condition of credibility was applied in this research by returning completed transcripts to the participants for approval. Davidson and Tolich (2003) describe the condition of transferability is not about generating whole population data but more to provide an accurate account of participant responses and behaviours. The aim of my research was to provide a thorough account of my findings so that readers would be able to make their own judgements about the transferability of my research findings to their own contexts. Davidson and Tolich (2003) explain the dependability of the study is closely linked to reliability which refers to the consistency of a measure. Lastly, confirmability is the process of not allowing personal opinions or beliefs to influence the process of the study (Bryman, 2012). Within my study, I ensured confirmability through ensuring the methods used to collect the data were consistently applied as well as carefully and accurately recorded in all settings where the research was conducted.

Triangulation

Within the data analysis, triangulation was used within the individual school data as three responses provided three perspectives of each school's appraisal system. (Cohen et al., 2011) describe investigator triangulation as the use of more than one participant which can lead to more valid and reliable data. The triangulation process was continued by examining each set of information to find supportive evidence, themes or contradictions. Dependability was assured through the transcription approval, triangulation and the debriefing with peers (Cohen et al., 2011). Within this research method the combined levels of triangulation from three separate schools and three participants from each school, supports the validity and trustworthiness of these findings.

Summary

This qualitative research study seeks to explore and understand leaders and their communication processes within schools. This chapter explained the research methodology and design, data collection and analysis used within this research study. The interpretivist paradigm and qualitative approach was justified throughout all aspects of this chapter. The data collection through semi-structured interviews was clarified and explained. Finally, the data analysis, validity and ethical considerations for this research were outlined. In the next chapter, I will present my findings from the nine interviews

Chapter 4 Presentation of findings

In this chapter data from nine interviews are analysed and presented. The chapter begins with a section describing the research participants, followed by a description of the ways in which the data are presented. The research findings are then presented. The chapter is completed with a summary of these findings. The purpose of the semi-structured interviews was to investigate principals', deputy principals' and teachers' experiences of using digital tools within their appraisal practices; and, secondly, to identify the elements of these practices that are perceived to be effective.

Research participants

Purposive sampling was used in this research study in that all selected schools used digital tools within their appraisal practices. Participation in this study was voluntary. Each school used different digital tools and platforms as part of their appraisal system and practices. Within the past two years, each school had developed their own unique system for appraisal using such tools and platforms such as Google Docs or One Note, rather than using commercially available appraisal software or online packages such as Appraisal Connector or Arinui. In all, a total of nine people participated in the research - eight female participants and one male participant. All participants were experienced leaders or teachers and used digital tools within elements of their appraisal practices.

Structure of the data presentation

The findings are presented in the following way:

1. The interview questions are stated;
2. The key sub-themes are identified and presented in a table. The participants' responses are grouped according to their position at the school - either Principal, Deputy Principal or teacher. To further differentiate between participants the following pseudonyms have been ascribed to the participants P1, P2, P3, DP1, DP2, DP3, T1, T2 and T3; and
3. A discussion of the findings is presented.

Throughout the interviews each participant used educational acronyms to describe events and processes within their school's appraisal system. Within this chapter, at

first use, the title or term will be written in full followed by the acronym in brackets. Subsequently, only the acronym will be used.

Findings

Question One

Question One asked: Tell me about your school's appraisal system. Which digital tools are used within your school and appraisal system?

The data gathered in relation to this question are summarised below in Table 4.1.

Table 4.1 Participants' explanations of appraisal systems in their schools

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
The dual purposes of appraisal are identified.	3	3	1	7
Appraisal is linked to and spirals down from the school's strategic plan and goals, end of year data and into individual teacher's inquiries.	3	3	2	8
The Teaching as Inquiry cycle is the foundation of appraisal.	3	3	3	9
Appraisal is purposively planned and embedded within meeting structures and professional development for the year.	3	3	1	7
Appraisal procedures are identified, explained at beginning of year meetings, usually teacher only days.	3	3	3	9
Appraisal includes inquiry, target learners, goal setting meetings, observations of practice and summative meetings.	3	3	2	8
Appraisal evidence is collated against the Practicing Teacher Criteria (PTC).	3	3	2	8

This table shows that participant responses emphasised the importance of the appraisal cycle and practices being directly linked to the school's strategic plan, school-wide goals and establishing an inquiry group of target students using the

Teaching as Inquiry Cycle [TasI] (Ministry of Education, 2007). Participants identified the TasI cycle as the foundation for all appraisal practices and appraisal activities. The TasI cycle was embedded into the appraisal cycle through individual and staff meetings and inquiry teams, and used within the final summative report against the PTCs. This is reflected in the following sample of comments:

Principal One: Our appraisal system is based on the teacher inquiry process in its essence. When we looked at redeveloping our appraisal process from being “done to a teacher” by a senior leader to teachers being very much a part of it and driving their own accountability processes and portfolios of evidence we consulted with staff on a teacher only day. We looked at the platform and how we could use it as a frame, a base for their inquiry, their accountabilities in their measures against the PTCs and also within our whole professional learning programme so it is a one stop shop.

Principal Two: On our platform, we have many things for appraisal; teachers’ inquiry self-review, the PTCs and other templates. Our whole appraisal system revolves around that target group of students and what the teachers are going to do to move them within their practice.

These comments suggest that principals and deputy principals identified the dual purposes of appraisal as being both the development of staff through the TasI cycle as well as demonstrating accountability in regard to the relevant Professional Standards (Ministry of Education, 1998) and the Practising Teacher Criteria (PTCs) (Education Council, 2015). Principals clearly indicated that their overarching responsibility was to establish an effective appraisal cycle or process and to provide the final ‘sign off’ of all staff against the PTCs; that is principals were responsible for attesting to the teachers’ performance for their professional registration.

Deputy principals identified the accountability purpose of appraisal as one of their clear delegated responsibilities. Deputy principals saw their role as supporting appraisal through accountability checks such as planning checks, data checking and quality assurance through classroom observations. The comments below explain how the TasI cycle is used within the appraisal cycle as evidence against the PTCs:

Deputy Principal One: In 2014, we realised our teacher inquiries were not explicitly being mapped onto the criteria. So, we thought if we are going to have a rigorous appraisal system, we need to have the evidence, or at least have that line of sight to the PTCs. So, last year we changed the summative report to include a list of the PTCs.

Deputy Principal Two: We've done a lot of work to upgrade our appraisal system over the past 18 months – two years. We use a system where teachers have 3 goals, or personal inquiries over the year related to; target children, and two strategic goals of e-learning and inquiry. We try for these inquiries to not be completely separate but related to our charter, our needs and our Professional Development (PD) schedule.

Deputy Principal Three: I look at the planning format for all our teachers, they know I do that. I go through their sites and their planning, you know their actual learning intentions, success criteria, the assessment, how they work collaboratively etc. I go through that process with them and discuss it on the site as well as face to face. The second part is that actual inquiry part based on the school goals and their inquiry and this year the principal oversees that because we are reviewing our appraisal system.

Teachers identified their TasI work as the foundation of their appraisal cycle and also linked their inquiry back to specific, wider school goals from the strategic plan. Teachers identified the dual purposes of appraisal by explaining their responsibility towards the collation of digital evidence against specific Practicing Teaching Criteria as well as their responsibility to create professional development goals that linked to their TasI work. Teachers saw digital tools as ‘part and parcel’ of their everyday practice and the addition of digital tools used for evidence collation towards PTCs as no different from what they were already doing. For example:

Teacher Three: My practice is just embedded, it just is. It's just embedded within what I do, it has to be. Probably for me the biggest change I've seen is just access, that is massive.

Question Two

Question Two asked: How has it been made clear about how digital tools are to be used within the appraisal process within your school? What are you required to do? Do you have regular meetings for this?

The data gathered in relation to this question is summarised below in Table 4.2.

Table 4.2: How expectations are made clear within appraisal processes

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
Expectations of the appraisal process are outlined at the beginning of the year to all staff.	3	3	3	9
There is a folder or handbook available that contains the expectations, calendar, templates, checklists.	3	3	3	9
All appraisal meetings and observations are planned at the beginning of the year.	3	3	1	7
The PTCs are linked to the appraisal activities and the teaching inquiry.	3	3	2	8
Meetings are allocated specifically for inquiry and appraisal documentation updating.	3	2	2	7

The importance of establishing clear, explicit appraisal expectations was mentioned by all nine participants. They responded by identifying clear systems and expectations within their schools that were outlined and reviewed at the beginning of each school year. For example:

Teacher Two: Within the platform there are various pages and sub sections with things like our inquiry, our goals, our target group inquiry, the whole performance management system is on there. All the PTCs. All that information is on there, as well as our PD in on the platform ready for us at the start of the year.

Question Three

Question Three asked: Can you estimate the percentage of time you interact with digital tools for appraisal? Are you given time for this?

The data gathered in relation to this question is summarised below in Table 4.3.

Table 4.3 Time spent interacting with digital tools

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
Time is given during meetings to pause, reflect and establish actions.	2	2	1	5
Release time is given to update inquiries and other appraisal documentation throughout the year.	1	2	0	3
Release time is given to prepare for appraisal meetings and summative meetings.	3	3	1	7
The TasI cycle ensures that I am reflecting on my practice regularly.	1	2	3	6
The amount of time spent using digital tools and platforms for inquiry and appraisal purposes.	3 said quarterly	3 said 1-2 hours per week	Daily	9
I update my digital tools for appraisal in my own time.	3	2	2	8
Digital practice is embedded in my daily professional practice.	2	3	3	8

Given the ubiquitous nature of digital tool use within their practice, the amount of time varied for all participants. Again, participants noted various amounts of time being allocated towards updating the digital evidence for appraisal within either termly meetings, within a staff meeting or release time being provided to each teacher. Six participants stressed the importance of allocating time to update appraisal evidence and inquiries regularly. The importance of time allocation is reflected in the following comments:

Deputy Principal Two: We schedule time across the year for all inquiry and appraisal meetings. We've built reflection time into our PD meetings, we will stop meetings so we have time to write our reflections and action. Also, twice a term teachers get a targeted look at their inquiry with their learning buddy. We've build in reflection times into all those kinds of sessions so people know the expectation but also so they know they have an opportunity to do it, rather than just sending people off and expecting them to do it because we know we are busy.

Deputy Principal Three: It's about allowing and ensuring that we have built time into our appraisal process each term. They are given time to work on appraisal, on their inquiry, we release them for that.

The importance of time was emphasised by both leaders and teachers within each school.

All three teachers felt that using tools was embedded into their daily professional practice. The addition of digital tools such as digital folders, pages or tabs for appraisal simply meant another way to gather and reflect upon evidence. The ubiquitous nature of digital tool use within a professional capacity is explained in the following comment:

Teacher Two: There's much more engagement from my point of view. It's the little things, like popping in a reading you've done, a video like a TEDtalk, all of that can be popped in there and it's really useful. But this percentage of time, I can't even begin to answer that because it's daily. Because we use it for all our planning, for everything.

Each principal was appraised by an outside consultant or their Board of Trustees. The principals stated that their interaction with their own appraisal documentation was quarterly and in preparation for the meeting with the outsider, as reflected in the following comment:

Principal One: The whole personnel committee from the board of trustees has access to my appraisal site and we review it quarterly. I spend probably 10-15 minutes after each PD meeting and then update the entire site each quarter, which takes 4-5 hours. Then at the end of the year it's more as I bring everything together.

Whilst many participants acknowledged the additional idea of time spent on using digital tools within the appraisal process, they saw the use of technology as a component of the changing nature of their profession. Eight participants stated that digital engagement with tools and platforms was embedded within their daily professional practice, and their appraisal evidence and inquiries were updated regularly. For example:

Deputy Principal Two: What we've tried to do is embed it so that it just part of what we do here, all the time. It's not about I'm having to set aside this amount of time to do it. We are a flexible learning environment, our laptops are always with us, people are reflecting all the time. That was the aim this year was to make the inquiries really part of what we are doing on a daily

basis by really focusing teachers in on reflecting on that, what actually happened, what they're going to do next.

Although the introduction of digital tools and platforms within appraisal was a new practice for all three schools, leaders emphasised their efforts in embedding digital practice into all areas of professional practice.

Question Four

Question Four asked: How do digital tools support the reflection process within appraisal? How do digital tools support authentic, deep reflection of your professional practice?

The data gathered in relation to this question is summarised below in Table 4.4.

Table 4.4 How digital tools and platforms support reflection

Sub theme	Number of participant responses			Total
	Principal	Deputy Principal	Teacher	
Reflection is a part of our school culture.	2	1	2	5
We use a school tool with identified prompts to encourage reflection in appraisal activities using digital tools.	1	1	1	3
Professional development such as inquiry and coaching has built the reflection capability amongst our staff.	1	1	2	4
Digital tools support the reflection process because the evidence is easily accessible.	1	2	3	6
Release or meeting time is allocated to teachers to reflect directly against the PTCs and/or other appraisal activities.	2	1	1	4

A key finding from the responses to this question is that, overall, reflection is an embedded practice within these schools due to the professional development opportunities and existing support structures and appraisal practices. Building the quality of reflection was a current focus for two schools. As each school was at the beginning of their transition to digital appraisal processes, it is understandable that

the focus was on the practice of reflection and the purposes of reflection, rather than how the tools can be used to promote reflection and their impact.

The summary of responses for this question identified support structures such as inquiry groups, professional learning buddies and allocated meeting time as well as the efficient nature of the digital tool or platform that supported authentic reflection processes. The challenges of authentic reflection practices are reflected in the following comments:

Principal One: I agree that sometimes reflection is that we're just going to do it because we have to as opposed to getting into really deep, authentic reflection. For those staff who have been doing TasI for a while, I think they get the deeper reflection because they know how powerful it is for their own learning. I think it is up to us as senior leaders to ensure there is that deeper reflection and more authentic inquiring into their practice and what it means.

Principal Two: I don't think we do that very well. I don't think we are very good at authentic, deep reflection, I think it's recounts. But it's something we are working towards within our meetings, with our prompts, with our buddies. I think the prompts we are using is a vehicle for deepening that reflection.

Overall, participants had less to say about the use of tools for reflection purposes, but understood the importance of reflection in regard to improvement of their own practice.

Deputy Principal Two: We have a school review tool template in our platform that has prompting questions to get teachers to think deeply about what is the learning problem, why is it happening and thinking really deeply about what you're going to do about it.

Deputy Principal Three: In terms of reflection, they are using tools that show a bit more depth and analysis of data to inform their practice. In terms of their professional practice, I think it's seeing that visual nature of the tool that often leads to thinking about next steps, things we need to put in place. The further discussion that takes place in our Professional Learning Community (PLC) groups supports that analysis too.

The ways in which digital tools are used to reflect and discuss practice and education with a wider community was beginning to impact professional learning. Engaging with colleagues and the community using digital tools was explained in the following participant comments:

Principal Three: Teachers' blog posts are hugely powerful reflections as they are thinking about their own professional learning and they've linked those blogs to their appraisal. You follow those links and look at their learning and its really just outstanding collegiality and thinking.

Teacher Three: I love twitter for its intellectual conversations and for the opening up of research and professional learning. Twitter has been the most influential both for me personally and as an educator.

Question Five

Question Five asked: How do digital tools enhance your learning conversations about appraisal? How do these digital conversations influence your practice and reflection?

The data gathered in relation to this question is summarised below in Table 4.5.

Table 4.5 How digital tools and platforms enhance learning conversations

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
This is still an area for development in our school.	2	1	0	3
Learning conversations happen all the time because it is embedded in our culture, our meeting structures, and our inquiry groups.	2	2	3	7
Digital tools enhance our conversations with the wider community.	1	1	1	3
Shared access to digital tools encourages the conversations to continue throughout the year.	3	3	2	8
The efficiency of the tool enhances the quality of our conversations because we have more time to discuss practice in depth.	3	3	3	9

The responses for this question indicated that fostering a culture of learning conversations was a common practice at all three schools with many comments regarding the open, collaborative engaging culture of each school. Seven

participants stated that learning conversations already occurred at school and that this professional dialogue was modelled everywhere. Comments included:

Principal One: I think this is still an area for development here but in particular to actually have the challenging conversation as well. Our leaders and team leaders are getting better because of our PD from last year and our coaching course this year.

Deputy Principal Two: We have such a high level of professional conversation here anyway, we always have. It's modelled everywhere, it's something that we pride ourselves in here. By having those prompts in front of you while you're having those conversations it pulls you together, to support and ask questions. Because we're honing it down with the coaching questions we are really looking at why the problem is actually happening.

Teacher Two: There's always been lots of professional learning conversations taking place all the time. We've been good at that. But this process formalises it and gives you a place to put that stuff.

Digital tools are beginning to influence learning conversations across a wider community. This influence is described in the comments below:

Principal Three: The tools have meant that we have been able to open doors to our practice a bit more effectively so your tweets, blogs, all those tools are utilised as authentic evidence as part of our appraisal process. Our blogs are shared with the wider community and its really just evidence of outstanding collegiality and thinking.

Teacher One: The tool makes it all easier because it keeps us on track. It's a really good process because it's a much more interactive and engaging process. There's more engagement from my point of view.

Digital tools and platforms are interactive and support a wider community of engagement beyond the appraiser and appraisee relationship.

All participants responded that the tools and platforms enabled them to have all of their evidence, planning and assessment stored in one place. This easily accessible storage allowed the conversations in practice meetings to analyse data and their own practice in more depth. The efficiency of the tools and platforms provide more time to get to the heart of the practice within learning conversations. The ability of the tool to support learning conversations is highlighted in the comments below:

Deputy Principal Three: I think it has definitely made the conversations and the communication clearer. Having the data there, right in front of you, you

can't argue with it because it is the evidence, it is what's come out of the inquiry and what you've collated. I think it has highlighted and made staff more aware of what we need to do. I think the tools have highlighted the gaps, what is missing, what we should be doing within our discussions.

The ability to access data and evidence easily and efficiently supports learning conversations about student achievement and learning.

Question Six

Question Six asked: Can you describe how you use digital tools to interact with your appraiser? Can you describe how digital tools support, build or influence your relationship with your appraiser or appraisers.

The data gathered in relation to this question is summarised below in Table 4.6.

Table 4.6 Engaging with digital tools and the appraiser/ee

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
Digital tools allow me to access and engage (write comments anytime) more regularly/frequently with my appraiser/ee.	3	3	1	7
Tools and platforms have encouraged us to be more collaborative and open with our planning, data and goals.	1	2	3	6
Tools and platforms have encouraged us to share our inquiries and practice with others.	2	3	3	8
Digital tools and platforms provide me with learning opportunities.	1	2	3	6

The responses for this question highlighted the importance of purposeful, face-to-face meetings within the appraisal process. Digital tools are a mechanism for gathering evidence to support teachers and leaders to tell the story of their professional practice to their appraisers. Eight respondents indicated that the digital tool/platform allows inquiries (TasI) to be shared with a wider audience such as colleagues, parents rather than just their appraiser. In terms of efficiency comments about the ease of use the platform, access to a range of tools and the ability to

comment at any time (particularly for the leaders) were regarded as practices that build the appraiser and appraisee relationship. The ‘anytime access’ was noted by seven respondents who commented on their abilities to view, comment on, prompt or question their appraiser/ee within the platform before the meeting. Comments included:

Deputy Principal Three: The tool kind of highlights and makes you aware of how much you’ve actually done. I think when you just talk through it, which is the old process of appraisal; when you just met your appraiser and went through what things you’ve done over the year. I think this new way highlights, through your PTCs, what you’ve actually accomplished. I think far too often we discuss the classroom and that’s it. But now, all your knowledge, your Professional Development, the things you go to, what you pick up from other people, is discussed with your appraiser and really highlights how much the job encompasses and how much time we spend working and how hard we work, to be honest. It’s a nice record of what we do.

With regard to developing the conversations and relationship between the appraiser/ee, the use of the tool and the ease of access allowed the appraisal meetings to have more rich, purposeful discussions. How the tools support the appraiser/ee relationship through a more engaging, purposeful meeting is reflected in the comments below:

Principal Three: Although I share my site with my appraiser, it is the quality of the discussion we have that is most important for me. I know I am a competent principal, but I am still growing my learning and that’s the important part to me. The rich discussion of my inquiry happens at every meeting.

Deputy Principal Three: I value being able to talk to my appraiser. I show her the data, she’s able to look at it off site, she doesn’t have to come in and sit with me to go through things. When we do sit down to meet it’s more purposeful. The paperwork is easy and fine to do, and they can go through that at any time on a digital platform, but that’s not what I need my appraiser to be doing. She has already looked at it and is asking me questions, listening to me describe my process, my thinking. We are actually going in and talking through what it is we need to do to grow.

Teacher One: The relationship I had with my appraiser at my previous school was friendly but there was nothing really that I found that was valuable and made me think this is going really well or here’s my next step. It was valueless and didn’t impact on my practice at all. Whereas now, it’s ongoing and I know that my appraiser will question me in the right things rather than making a yes/no checklist. Now they will question me and say what are you going to do? What is your next step? Rather than saying this is your next step. So she’ll draw out of me the thing I need to move forward.

This is real. This is future focused. I know that's a buzz word but that's it. It is moving you along in an authentic way that at the same time is impacting your classroom practice. So this is authentic, it's real.

Digital tools and platforms support the appraisal process by having all the data and evidence in an easily accessible space which then supports meeting times to be more focused on the practice and learning of the appraisee.

Question Seven

Question Seven asked: Have you experienced any problems or dilemmas with digital tools in your appraisal system?

The data gathered in relation to this question is summarised below in Table 4.7.

Table 4.7 Problems and dilemmas with digital tools and platforms

Sub theme	Number of participant responding			Total
	Principal	Deputy Principal	Teacher	
The technological capability of staff, and upskilling new staff is a problem for our school.	3	2	1	6
The maintenance and set up of platform, ensuring evidence is collated properly within the platform and the transfer of data when a staff member leaves is an issue for our school.	2	0	0	2
IT training for all our staff has been provided to ensure and improve capability.	1	2	1	4
We've built in times within our meeting to support and remind people to engage with the tools for appraisal activities.	2	1	0	3
A problem is with external agencies still wanting appraisal evidence in paper form.	2	1	1	4
There are no problems for me personally, digital engagement is part of my practice.	2	3	1	6
We are not given enough time to reflect.	1	1	2	4

There were mixed responses to this question. Seven participants identified the key problems using digital tools and platforms within appraisal practices to be related to the digital literacy skills of staff, particular new teachers as they may have to adapt to new systems and practices. Support structures were in place in all three schools. Three leaders identified that their strategies to resolve these issues included specific skill training sessions and allocating time within meetings to support digital engagement. Other technological issues identified by the participants included the initial stages of set up of the platform with templates, processes for copying the templates and ensuring that the platform has the capability to gather evidence which meets the PTC requirements. The technical problems with digital tools and platforms in schools is reflected in the comments below:

Deputy Principal One: The main one, the simple one to address is people's digital literacy. We provide just in time support to help them. The bigger problem is making sure teachers have a sense of what is expected and that's not that they're not doing enough, it's that they're doing too much. The other part to the problems is the mindset shift which is not so much about the digital tools but it's more the idea that appraisal is done by yourself, not to you and that's a mindset shift that schools, nationwide, are working on.

Teacher One: When I first started here, I didn't really know how to work it. It was very different to what system I had previously. It's such a new idea and a lot of school we know haven't even touched it yet. So that first year was hard and meant a lot of catch up time and probably not using it as well as you could but really just getting it done because you have to get it done. But there was a lot of PD and support. This year has been more about my practice and where I am going.

Five respondents indicated they personally had no problems with digital tools and it was just part of their day to day professional practice.

Principal Three: We use social media a huge amount here at School Z. So thou shalt tweet, thou shalt blog it's all part of our work now. You know you're a professional, and this is a really important part of our work. It's really powerful learning for us.

An interesting element of this question was the statement that external agencies, which measure the accountability aspect of the teaching profession do not access the appraisal evidence digitally. Five respondents highlighted concerns that some staff from external agencies are not digitally literate and still require paper (PDF) copies as evidence. This mis-match of professional expectation and accountability is explained below:

Principal Two: I worry that when you have ERO they want to see things on paper. I suspect that if you are asked to send your portfolio to the Education Council on applying or renewing your practicing teacher certificate, that they will want it on paper. So that becomes frustrating because some of these overarching agencies are not accepting the digital way. So that frustrates me.

Teacher Three: My problem with using digital tools for appraisal is the idea of storage and having to print evidence in PDF. I can understand that if we are audited we have to show evidence, but what about schools that are totally digital? A classic was when we were recently ERO'd and they wanted to see paper!

Teachers and leaders expressed their frustration that the expectation to be digitally literate did not appear to be held by external agencies who measure teacher capability.

Question Eight

Question Eight asked: Are there any other comments you would like to make that pertains to how digital tools have influenced your practice as a leader or teacher within the appraisal context?

The data gathered in relation to this question is summarised below in Table 4.8.

Table 4.8 Other comments

Sub theme	Number of participants responding			Total
	Principal	Deputy Principal	Teacher	
Digital tools have made our accountability practices easier and more efficient.	2	2	1	5
Digital tools and platforms have provided opportunities and increased ownership for teachers.	1	3	3	7
Professional development such as coaching is important to develop capabilities of staff, quality of conversations and reflections.	1	2	3	6
The culture of our school made the transition to digital tools and platforms easier.	1	2	2	5

The summary of the responses from this general question are that the majority of deputy principals and teachers felt that digital tools and platforms supported the accountability aspect of providing evidence of practice during an appraisal cycle as well as giving opportunities for their ownership of the appraisal process. How digital tools and platforms build teacher agency in the appraisal process is reflected in the comment below:

Principal Three: It's about having an evaluative mindset and taking that little bit of learning and doing something with it, and then the next bit of learning and so on. I think it's giving us opportunities to be more reflective and giving us opportunities to be have greater ownership of the process. So it's not me driving the process, it's the notion of you as the learner developing your own body of evidence.

Two deputy principals discussed the ability of the tool and platform to provide a clear picture of their job performance and professional learning. The use of digital tools and platforms supports collaboration as explained in the comments below:

Deputy Principal Three: I think it gives them ownership because it belongs to them. They know it's something that is interactive so the conversations you have can be quite useful. It's so much more than a site, it's collaborative and it's so much easier. The documents are evolving all the time and I think that's the beauty of it. Now everyone just keeps adding to it, it doesn't matter who started it, but you feel as if you own it and I think that's a strength of this process.

Deputy Principal Two: I think the platform we use is helping us to really show that we are doing a really great job. It's easy because it's all in one place. The process enables us to use really powerful tools actually, like videos and photographs to help us reflect on our practice. Sometimes there are things you can't put into words; you can show in a video. And the fact that you build on it over time, I think is fantastic. The tool has actually helped drive appraisal because everybody knows that everyone else is learning how to use the same tools. We've built appraisal into our PD sessions, our meetings, so now the platform and tools are just embedded in what we do on a daily basis.

Principal One: Some of our teacher's portfolios of evidence are just amazing. It is just the professionalism of our teachers, and the genuine commitment to make change for students, the genuine commitment to inquire and the fact that they realise it's about their practice.

Using digital tools and platforms to collate evidence of practice supports the collaborative nature of the teaching profession.

The importance of coaching to support appraisal interactions and reflection is outlined in the following comment:

Deputy Principal One: There's one more thing I haven't said and that's the importance of coaching. Coaching is something we pushed this year so it's another aspect of the sea of inquiry. To innovate, to make a difference, you need a sea of inquiry. Digital tools allow us to have a sea of inquiry much more easily because they just have to show what they've done. In my inquiry group we coach each other on what you are stuck on, where to next? Then we bring it back and share it together. That way, everyone gets the benefit of a bit of one to one but everyone also gets the benefit of the insights that come out of that.

Participants noted the need for additional professional development in coaching and learning conversations to support the collaborative nature of their appraisal process.

Summary

This chapter has presented the data collected through semi-structured interviews regarding leaders and teachers' experiences using digital tools and platforms within their appraisal systems. Upon grouping the sub-themes as identified in this chapter, the following themes emerged: (i) effective appraisal practices are linked to the schools' strategic plan, professional development plan, target learners and the Teaching as Inquiry cycle (TasI); (ii) the development function of appraisal is addressed through purposeful, planned appraisal activities within a constructive school culture that develops authentic reflection practices and engages in productive learning conversations; and (iii) that the use of digital tools and platforms has made the accountability functions of appraisal easier and more efficient. The next chapter will discuss the themes in more detail and link them to the literature reviewed in Chapter Two.

Chapter 5 Discussion of findings

This chapter will discuss the findings presented in Chapter Four by making connections to the literature reviewed in Chapter Two. The discussion will be organised by the themes that emerged from the research questions:

1. How does the use of digital tools and platforms influence effective appraisal practices in New Zealand Primary Schools?
2. What factors contribute to the perceived effective use of digital tools and platforms in appraisal practices?

Three themes emerged from the data:

- (i) that effective appraisal practices are linked to the schools' strategic plan, professional development plan, target learners and the Teaching as Inquiry cycle (TASI); and
- (ii) that the development function of appraisal is addressed through purposeful, planned appraisal activities within a constructive school culture that develops authentic reflection practices and engages in productive learning conversations; and
- (iii) that the use of digital tools and platforms has made the accountability functions of appraisal easier and more efficient.

These three themes will structure the discussion in this chapter. This chapter will also explore the connections between the themes, sub-themes and the literature reviewed. This chapter will also explore the connections between the themes, sub-themes and the literature reviewed.

Theme One:

Effective appraisal practices are linked to the schools' strategic plan, professional development plan, target learners and the Teaching as Inquiry cycle.

The key idea within this theme are: effective appraisal practices are linked to the schools' strategic plan, professional development plan, and target learners and the Teaching as Inquiry cycle (TasI) (Ministry of Education, 2007).

Effective appraisal processes and practices

The findings of this research concur with the literature that states the purpose of performance appraisal is to focus on the practice and performance of both the individual and the organisation (Cardno, 2012; Piggot-Irvine & Cardno, 2005; Robinson et al., 2009). Cardno (2012) states that appraisal has the dual purposes of accountability and development. The appraisal systems at each of the three participating schools in this research were designed to meet both the accountability and development functions of appraisal. Each appraisal system met the accountability requirements by adhering to current appraisal regulations set by the government as well as ensuring that teachers met the relevant Performance Standards (Ministry of Education, 1998) and Practising Teacher Criteria (PTCs) (Education Council, 2015). Each appraisal system was operated over a yearly cycle, and completed the process with a final summary meeting with the principal and teacher, reviewing the teachers' practice against the PTCs. Each of the three schools' appraisal systems met the development function through their alignment with the strategic goals and achievement goals for target learners, professional development plan and the Teaching as Inquiry cycle. Within each appraisal system, all three schools implemented the suggested practices from the Ministry of Education (2011) by placing a focus on student learning outcomes through the teachers' analysis of student achievement information. This finding is supported by the work of Piggot-Irvine and Cardno (2005) who state that appraisal systems ensure the needs of the learner are met and the staff are given support and acknowledgement for effective teaching practices.

The findings indicate that the three schools were competently following Ministry of Education guidelines and regulations (Ministry of Education, 1998, 2016). The literature reviewed for this study cautions against the use of compliance-driven approaches to appraisal, particularly in regard to how such approaches influence the practice of goal and target setting (Piggot-Irvine & Cardno, 2005; Sinnema & Robinson, 2007). The three schools in this study implemented the TasI cycle to support goal setting of targets for student learning. The challenge these schools now face lies within the clarity of the goals and the depths of their evaluative practices. Sinnema and Robinson (2007) state that a potential challenge of goal evaluation is that even negligible improvement could represent achievement of the goal. These authors found that the perfunctory and compliance orientated nature of appraisal led

to teachers and leaders setting vague goals rather than specific and challenging goals. Sinnema and Robinson (2007) state that a new model for appraisal should prescribe inquiry, action and improvement rather than prescribe sets of checklists or qualities. Cardno (2012) similarly explains that the new model for appraisal should aim to improve teaching and learning and that all appraisal activities should concentrate on making connections between teaching practices and student learning and achievement.

The key finding from this data collection was that all three schools had appraisal structures and practices that concurred with the literature and with government regulations and guidelines. Piggot-Irvine and Cardno (2005) identified the three key practices as an initial meeting between the appraiser and appraisee, observation and monitoring of practice and the final summary meeting. Each of the three schools studied in this research began the school year with teacher-only days that enabled the staff to review the appraisal cycle and practices and established timeframes, meetings schedules and alignment with the school's strategic goals. This practice confirms Cardno's (2012) research that effective leaders create conditions that make it possible to improve teaching and learning. The strategic planning of appraisal practices by all three schools supports the work of Robinson et al. (2009) which identified the importance of educational leaders in high performing schools establishing goals and giving priority to communicating goals and expectations.

Sinnema and Robinson (2007) and Hatcher (2008) caution that conforming to government agendas and appraisal regulations may lead to a culture of conformity and compliance. Hatcher (2008) explains that when leaders use government agendas as foundations for school policies and practices, their leadership style becomes technocratic and managerial focused. Sinnema and Robinson (2007) similarly caution that the perceptions of teacher evaluation as a summative task can lead to a compliance driven approach to appraisal. Although accountability measures are a function of appraisal, they should not be the primary practice within an effective appraisal system.

The use of the Teaching as Inquiry cycle (TasI) as the foundation of practice within each school's appraisal process is consistent with the recommendations from the Ministry of Education (2016) - that the TasI cycle should support teacher development as teachers reflect on their own capabilities and improving student

learning outcomes. Through connecting appraisal and TasI, the three schools studied in this research demonstrated their strategic goals and learner targets were achieved by providing teachers with opportunities to reflect on practice and evaluate against the PTCs (Ministry of Education, 2016). The TasI cycle is being used for both accountability and development functions of appraisal within these three schools which is consistent with the best practice literature as outlined by the Ministry of Education (2016). A challenge for schools and leaders using TasI within appraisal is how to deal with individual needs such as alternative inquiries and differing ideas of professional development which may not conform to the overarching strategic goals or targets or support individual professional development needs. This approach then simply becomes a vehicle for the transmission and implementation of government agendas (Hatcher, 2008). In other words, this practice becomes another mode of conformity that leaders need to consider when setting strategic goals and learning targets alongside their professional development plans.

With regards to specific appraisal practices, these varied across the three schools. This research found that the schools' appraisal systems were based not only on evidence based practice, but also developed and reviewed in consultation with staff. This finding is reflected in the work of Cardno (2012) who states that it is the educational leaders' responsibility to establish conditions to support change through professional development practices that incrementally engage all participants in appraisal processes that can create and support productive relationships. The participant data confirmed the notion that appraisal practice should include a focus on practice and performance of the individual teacher, as well as how the organisation can support and develop its staff (Cardno, 2012). This practice is also supported by the Ministry of Education (2011) review findings that school leaders have a role to play in creating the practices for teacher appraisal, the quality and implementation of these practices and the use of appraisal information for improvement. Although the practices varied across schools, the foundations and basis for such practices are supported by a variety of educational research literature. As the three schools studied for this research have recently introduced digital tools into their appraisal systems, the selection of the digital tool and platform was carefully considered by each principal and senior leader. Each school selected tools and platforms that supported teacher practice, capability and agency.

While consultation with staff is promoted in the literature of Piggot-Irvine and Cardno (2005) and Robinson et al. (2009), other research continues to question the effectiveness of collaboration and the impact of collaboration on student achievement and learning. Harris and Jones (2015) believe that collaboration is only effective when it makes a difference to the engagement and achievement of the learners. The authors continue to explain that the true and lasting advantage comes from careful, strategic and meaningful collaboration. This kind of collaboration requires clear rules of engagement and a model to ensure that the collaborative learning is fundamentally improving teaching and learning (Harris & Jones, 2015). As these schools' appraisal systems have been restructured and redeveloped over the past few years, the next research step would be to investigate whether these new digital tools and platforms support professional learning and influence student achievement.

The consistent finding within the appraisal practices across the three schools was that they were using their appraisal practices to identify areas for growth and development for leaders and teachers. Cardno (2012) states that effective appraisal can benefit both individuals and the organisation as it identifies areas for development. The participant responses demonstrate this capacity by explaining not only the development of their appraisal systems, but the continual development of the capacity of the leaders and teachers. Robertson (2010) explains that educational leaders focus on not only improving learning opportunities but also work to develop their own leadership capacity and that of their institution. The findings of this study indicate that growing and developing teacher capabilities was an ongoing part of their appraisal systems. Each school had school-wide professional development plans that were linked to the strategic plan and goals for target learners.

Although each school differed on their implementation of digital tools into their appraisal system and practices, their practices were consistent with how the literature describes effective appraisal. Each of the three schools already had established effective appraisal systems that were reviewed regularly. The addition of a digital tool or platform into their appraisal system was identified as providing a new support mechanism or part of the evolution or growth of their appraisal practices. The participant data align with the work of Robinson et al. (2009), who state that the role of leadership is to not only select the tools, but to ensure the tools

and associated procedures actually help the users to achieve the intended purposes. This view is also evident in Cardno's (2012) work which states that when systems and processes for appraisal and professional development are well established and operated, they shape a culture of an organisation. As these three schools already had established, effective appraisal practices - introducing digital tools and platforms into their systems was viewed as a natural progression and evolution of their appraisal system.

Summary

The findings of this research align with the literature of Piggot-Irvine and Cardno (2005), Robinson et al. (2009) and Cardno (2012) as each school had established appraisal practices that were based on best practice as well as Ministry guidelines.

Theme Two:

The development function of appraisal is achieved through purposeful, planned appraisal activities within a school culture that encourages authentic reflection and engages in productive dialogue in all areas of work.

The key ideas included in this theme are: strategic professional inquiry and learning, developing reflection and productive learning conversations.

Strategic professional inquiry and learning

The development function in effective appraisal systems includes processes and practices that build leader and teacher capacity. The key finding from the data collection of this research suggests that school leaders strategically align target goals with the Teaching as Inquiry cycle (TasI) to improve and develop teacher practice. Robinson et al. (2009) state that the greatest power of leadership is enhancing student learning through their involvement in and commitment towards the learning of teachers. This is also supported by Cardno (2012), who believes that professional learning within appraisal should focus on facilitating the acquisition of and critical thinking about practice. Sinnema and Robinson (2007) explain that teacher evaluation is the ideal opportunity for educators to give attention to their own context and improve their practice, and ultimately, their students' learning. Appraisal should not function solely as a compliance driven procedure; instead it should be an opportunity for teachers and leaders to inquire into their professional practice and the impact of such practice on student achievement (Robinson et al.,

2009). The findings within this research align with the above literature. Each school used achievement data to identify target groups of learners for teachers to engage with the Teaching as Inquiry cycle (TasI). Over the course of the appraisal year, teachers engaged in a variety of practices that developed and discussed their inquiries and professional practices. Each of these schools' appraisal systems contained practices that supported and developed the professional learning of teachers.

The findings of this research in regard to how schools use the Teaching as Inquiry cycle, inquiry teams and groups and meeting structures within appraisal is consistent with this literature as each schools' appraisal practices support inquiry and professional discussion of practice. The participant data confirmed the Ministry of Education (2011) statement that teacher appraisal includes an expectation that teachers analyse and reflect on evidence to improve their practice. The participant data and the Ministry of Education (2011) review also aligns with the research by Cardno (2012) which states that the approach to all appraisal activities should concentrate on making links between teaching practices and student learning. Sinnema and Robinson (2007) explain that appraisal needs to develop teacher capacity to inquire into and strengthen their understandings of the connection between their practice and student learning.

A compliance driven approach within appraisal that requires teachers to use the Teaching as Inquiry cycle to document their practice as evidence against PTCs may lead to issues of performativity and resistance. Hatcher (2008) explains that this kind of systems leadership that drives school policies to align with government agendas results in the leader becoming the disseminator of knowledge because only they know which practices conform to the government policy. The problem with using the TasI as both an accountability measure and a developmental practice is that teachers may interpret the practice as a measure of conformity, not as inquiry or professional development. This kind of leadership contradicts not only the developmental function of appraisal but also the accountability requirement by the Education Council that teachers are to collect their own evidence of practice. The problem with the compliance driven approach is that it goes against the agentic nature of building teacher capacity because teachers are conforming to the organisational processes and procedures for appraisal rather than addressing their

own individualized professional learning. Whilst the three schools in this study were actively working on developing inquiry and other professional appraisal practices, the hard reality as described by Harris and Jones (2015) is making true and authentic collaboration happen. When there is real choice and freedom for teachers to work together on issues that are directly related to learners and learning, there is more authentic professional engagement (Harris & Jones, 2015). Requiring teachers to gather, collaborate and reflect on digital tools and platforms may impact authentic collaboration as teachers perceive the process as another measure of conformity to the organisation and the government.

Reflection and productive learning conversations

Another aspect of developmental appraisal practice includes promoting professional dialogue and reflection about practice and student achievement. In New Zealand, there are mandated regulations within performance appraisal that require an element of self-appraisal within the processes and practices (Ministry of Education, 1998). Effective appraisal provides teachers with opportunities to discuss their professional practice and professional learning. It is important the appraisal practices include the elements of dialogue and reflection to encourage teachers and leaders to think deeply about their own practice and growth as professionals. Appraisal dialogue includes discussion about improving practice, analyzing data and assessment, considering factors affecting performance as well as formal models of coaching and mentoring (Piggot-Irvine & Cardno, 2005). The findings supports the work of Cardno (2012), who describes how an effective appraisal system that allows colleagues to engage in dialogue and leads to learning and change which is the pivot for professional learning of individuals, teams and the entire organisation. Engaging in professional learning dialogue promotes the reflective thinking practices of leaders and teachers.

The key to developing reflection in appraisal lies within developing a system, specifically processes and practices that encourage discussion and analysis of effective teaching practices which enhance student learning. A critically reflective teacher is able to inquire and self-reflect upon practice as well as question and challenge existing practices (Larivee, 2000). Reflection and experimentation should be strongly held values in an organisation and leaders should make both time and resources available to develop these practices (Cardno, 2012). The findings within

the data collection support Cardno's (2012) work, as each school identified individual practices to support reflection within their appraisal process. The participant responses concur with Cardno's (2012) discussion of the practice of reflection includes the deep, critical evaluation of one's practice and the consideration of theory against practice.

The findings of this research also support the work of Robertson (2010), who states that it is not easy for teachers to deeply reflect upon their experiences. Robertson believed that reflection could be supported by coaching techniques and learning conversations (Robertson, 2010). The participant data is supported by the work of Piggot-Irvine and Cardno (2005) who explain that in order for reflection in appraisal to be effective, individuals require the knowledge and skills of building productive professional relationships. Reflecting on actions and experiences supports leaders and teachers to being more receptive towards new strategies and practices (Robertson, 2010). Grey (2011) found that professional dialogue in appraisal provided teachers with opportunities to self-assess their practice and consider new possibilities to renew teaching practices. All three schools acknowledged within their interviews that building the reflective capacity of leaders and teachers was an area of development for their organisation.

Although reflection is mandated appraisal activity which therefore functions as an accountability measure within the appraisal system, this research found that the reflection process is in the development stages across all three schools. The developmental function of reflection in appraisal is supported by the work of many authors (Benade, 2015; Cardno, 2012; Grey, 2011; Robertson, 2015). Teachers and leaders increasingly find themselves challenged to become more reflective about their core pedagogical values and beliefs (Benade, 2015). Robertson (2015) states that many leaders do not have the interpersonal skills or coaching techniques necessary to provide quality feedback to their peers or to be able to reflect critically on their own practice. The author further explains that many educators simply have not been taught how to reflect critically at any stage of their careers (Robertson, 2015). This notion is also supported by Benade (2015) who found that although imposed reflective practices meet accountability requirements, there is little evidence that the practice improves teachers' intellectual processes and practices. Benade (2015) continues to explain that the changes in professional practice are the

result of wider changes in the policies and practices in a twenty-first century educational environment. The findings concur with the literature that reflective practices are a challenge for teachers and leaders.

Another key finding of the research within this theme was the impact of school culture on effective appraisal practice. Each of the three schools had an established culture of learning in place that promoted and developed productive dialogue and reflection not only in appraisal but all interactions within the school environment. Piggot-Irvine and Cardno (2005) state that leaders who promote organisational learning environments strive to create conditions in which quality dialogue and exchanges are paramount and within the dialogue, truth speaking is a norm. Cardno (2012) notes that regular opportunities for dialogue throughout the appraisal cycle promotes monitoring and adjustments of practice. The participant responses provide examples of Cardno's (2012) work in that effective appraisal practices include conversations about practice and are embedded throughout all activities related to professional practice.

The findings of this study concur with the literature by providing evidence of a variety of appraisal practices which include opportunities to discuss professional practice with not only the appraiser, but also with colleagues in organised structures such as learning buddies, inquiry groups and teams. Grey (2011) found that professional dialogue in appraisal provided teachers with opportunities to self-assess practice and consider new possibilities to renew teaching practices. The findings are aligned with Cardno (2012) who states that effective appraisal fosters staff commitment and is valued because it allows colleagues to engage in dialogue that leads to learning and change within teacher practice.

Robinson et al. (2009) found that to engage in open to learning conversations, leaders and teachers need the skills and values to make critical reflection and engagement with practice possible. These authors note that the development of trust lies within the leaders' everyday engagement in situations by establishing norms of respect, personal regard for all members in the organisation, integrity and modelling of appropriate behavior. Piggot-Irvine and Cardno (2005) state that appraisal conversations may evoke defensive routines as teachers may feel vulnerable as they open themselves to the scrutiny of leaders and colleagues. The findings of this research concur with Benade (2015) and Robinson (2009) in respect that leaders and

teachers require professional development and support to learn how to critically analyse, reflect upon and discuss their professional practice.

The addition of digital tools and platforms within the appraisal system have provided online templates and forums for appraisal activities such as reflection and learning conversations. Although aspects of the digital tools and platforms require some additional training and development, most participants agreed that using technology within their appraisal practices was a normal aspect of their roles and responsibilities as professionals in a twenty first century environment. However, Benade (2015) cautions that whilst digital opportunities provide opportunities to learn and develop as professionals, these same opportunities can be alienating and undermine notions of self and others as face to face encounters are increasingly replaced by keyboards, monitors and screens. Savolainen (2014) posits e-leadership is not solely about sharing information digitally, it is about people and relationships. The author continues that within e-leadership, the interaction of the relationships provides a trust-forming foundation where knowledge sharing is based. Similarly, Savolainen (2014) explains that digital interactions are influenced not only by the device or tool, but also by the situation, the relationship and the matter under consideration. As these digital tools and platforms become more embedded in educational processes and practices such as appraisal, it is important for leaders and teachers to maintain positive interactions and working relationships.

Within this research, school leaders addressed the issues of authentic digital engagement by viewing the tools and appraisal requirements to use such tools and platforms as supplementary to their appraisal process. This participant data supports the work of Mackenzie (2014) who found that digital tools allow for the gathering of evidence and assessment materials. Tsiotakis and Jimoyiannis (2016) postulated that to support appraisal activities, the digital platform should offer opportunities to engage in dialogue, as well as share and develop collaborative practices. The data collected from the three schools indicated that appraisal activities within the digital tools and platforms supported the analysis of assessment data and teaching practice. Digital tools and platforms appeared to provide an efficient, easily accessible system to support teachers' and leaders' professional development within appraisal.

Although digital tools and platforms provide an efficient means for collating evidence, these tools and platforms must also provide opportunities for authentic

engagement and collaborative learning. Savolainen (2014) states that to authentically develop professionally, people must be willing to openly and honestly discuss challenges and difficulties within a digital environment. Implementing digital tools and platforms into appraisal systems effectively and authentically requires a professional learning culture that is grounded in trust. Bryk and Schneider (2003) state that to foster trust in professional relationships, school policies must demonstrate an expectation of trust-worthy behavior on the part of teachers and leaders. As digital tools and platforms become embedded in appraisal practices, it is important for leaders to consider how to use such tools to develop appraisal practices of authentic reflection and dialogue.

Summary

The development function of appraisal is supported through a constructive school culture that actively engages in productive dialogue and reflection. Developmental appraisal activities are supported through the school's use of digital tools and platforms. Engaging in productive dialogue and active, critical reflection in all aspects of professional engagement, including appraisal was identified as an ongoing area of development for all three schools within this research.

Theme Three:

The use of digital tools and platforms has made the accountability functions of appraisal easier and more efficient.

The three key ideas included in this theme are how digital tools: support the accountability and compliance aspect of appraisal, are efficient and easy to access and how digital tools and platforms support the developmental function within appraisal.

Accountability and compliance

The key finding from this research was how the use of digital tools and platforms support the accountability measures of appraisal practices. All three schools in this study were using digital tools and platforms within their appraisal systems to provide evidence of practice against the PTCs. Each school adopted their own digital tool and platform to support their accountability practices used to evaluate teacher performance and progress against the practicing criteria. These compliance measures were outlined at the beginning of every school year and presented to staff

on teacher only days. Although each school used different digital tools and platforms, their appraisal practices were consistent with the literature. This finding is reflected in the work of Forde et al. (2015) who states that digital tools can collate evidence of authentic teaching and opportunities for reflection and analysis of the evidence against professional teaching standards. Mackenzie (2014) states that digital tools provide an opportunity for teachers to reflect and develop their practice in a more authentic manner than simply completing a standards checklist. The participant responses confirm the use of digital tools and platforms to gather evidence for the practicing teacher criteria as well as how the tools support more meaningful, authentic evidence. The practice of mapping the evidence against the practicing teaching criteria is consistent with the research by Forde et al. (2015) who states that when seeking to improve pedagogical practice, the focus has to move from the specification of practice to the engagement in an ongoing process of professional learning and the impact of this on their practice.

Establishing appraisal practices at the beginning of the year ensures consistency and compliance by teachers engaging in the appraisal system. Embedding the PTCs within the appraisal practices using the digital tool and platform provides a consistent measure for leaders to apply when reviewing the teacher's progress towards the professional standards. The practice of using the PTCs as a framework within appraisal is supported by the literature. Piggot-Irvine and Cardno (2005) explained that performance appraisal uses professional standards to shape the expectations held of the teacher. This is also noted by Forde et al. (2015) who postulate that professional standards can support the development of teachers because they provide examples of best practice and scaffold goal setting for teachers. The three schools in this study indicated how digital tools and platforms supported the evidence of PTCs within their Teaching as Inquiry, appraisal practices and end-of-year summary meetings. These practices also align with the Ministry of Education (2011) policy that states that school leaders have a pivotal role for establishing the conditions for appraisal, the quality and implementation of appraisal practice and the use of appraisal information for improvement.

Research by Sinnema and Robinson (2007) and Hatcher (2008) cautions the use of too many accountability practices as this may create a compliance driven appraisal system rather than developmentally focused appraisal process. Streamlining

appraisal practices onto one digital system or using a specific set of digital tools may appear to simplify and make the appraisal system more efficient, but raises concerns of teacher autonomy, conformity and lack of authentic reflections. Benade (2015) found that when reflection was an imposed activity there was little evidence that such reflections aided critical analysis by the participants. Tschannen-Moran (2009) also cautioned that although bureaucratic structures in schools are useful, there is a danger that leaders could overemphasise these elements at the expense of cultivating professional learning. Savolainen (2014) found that micro-management techniques such as the over-specification of job requirements creates an environment lacking in trust. The over-specification of digital tool use and types of evidence required within appraisal practices may impact the professional climate of the school as well as cause feelings of resentment. Savolainen (2014) further explains that micro-managing keeps workers in a perpetual state of dependency and creates a culture of compliance which then interferes with the workers' needs for learning and growth. It is important to ensure that the schools' appraisal system has practices in place to develop professional learning and authentic reflection before implementing additional accountability practices with digital tools and platforms.

Access and efficiency

Digital tools and platforms provide consistent systems of practice for teachers and leaders in all areas of professional life. As twenty first century professionals, these educators believed that using digital tools and platforms for appraisal was an aspect of their daily professional work. This finding aligns with Harris et al. (2013) who state that the establishment of digital technologies as a way of supporting professional learning is now ubiquitous. The participant responses highlight the ability of the tools and platforms to be accessed by not only the teacher, but colleagues and the leaders of the school. This finding is supported by the work of Forde et al. (2015) who explained that professional learning has moved from transmissive models to models that allow teachers to engage with others in knowledge rich environments. However, the effective use of these tools and platforms for appraisal requires more than the latest technology; it requires robust systems, practices and behaviours that build professional capacity, not conformity. This finding is supported by the literature from Bolstad et al. (2012) who explains that it is not about the availability of the tools but what leaders do with the tools that is so important.

Participants in this research explained how the digital tools and platforms built on existing appraisal practices and made the gathering of evidence for accountability purposes easier, more efficient and more authentic. This finding is supported by the work of Tang and Lam (2014) who explained how the technical design of digital tools creates opportunities for feedback, discussion and inquiry as well as enabling collaborative learning amongst participants in the appraisal process. Although digital tools and platforms streamline practices and provide consistent measures of accountability, their ability to develop teacher capacity within appraisal remains to be explored.

Digital tools and platforms support the developmental functions within appraisal.

This final sub-theme explains how the digital tools and platforms support the developmental function of appraisal. Digital tools and platforms contained all the required documents and evidence; therefore, the appraiser and appraisee had more opportunity to discuss, reflect and analyse the data and their professional practice. Digital tools and platforms provide a support mechanism for teachers to gather a wide range of evidence of their practice against the performance standards and practicing teacher criteria. Using digital tools and platforms within appraisal encourages teachers to build their own evidence and creates a strong sense of ownership towards their professional registration requirements. Jones (2010) found that a portfolio of evidence is a powerful tool for the development of practice as it requires teachers to select, annotate and reflect on their practice. The participant data supports this research as participants indicated their selection of evidence supported their analysis of practice with their appraiser. In appraisal systems, digital tools and platforms provide a systematic method for gathering required evidence for accountability functions and provide opportunities for teacher agency and ownership.

These agentic opportunities build upon the effective appraisal practices of productive dialogue and reflection through the shared, open access of the digital tool and platform. Forde et al. (2015) concluded that the success of an appraisal model was dependent upon teacher ownership, leadership fostering a positive school climate and a system where professional learning is placed at the core. Blog-based teacher portfolios provide an interactive learning environment where teachers and

leaders negotiate, discuss, reflect and evaluate teacher experiences and practice (Tang & Lam, 2014). Mackenzie (2014) found that portfolios provided teachers with ownership of their appraisal through determining the content of their portfolios and the professional development path. The participant responses confirm the professional development opportunities and agency through using digital tools and platforms for all appraisal activities. Building teacher capacity within the appraisal practices are a key developmental function of effective appraisal. The findings from the three schools and the participant interviews confirm the literature by Cardno (2012) and Robinson et al. (2009) on effective appraisal practices.

The ease of access into the digital tools and platforms by all users supports the development function of appraisal as both the appraiser and appraisee are well prepared prior to the final summary meeting. The ability of the digital tools and platforms to scaffold productive dialogue is another element of effective appraisal as described by the literature. Harris and Jones (2015) explain how a digital network can be used for not only the exchange of information but also for the co-construction of learning and understanding.

Teachers accumulate and reflect upon evidence on digital tools and platforms over the course of the year which allows the final summary meeting to become an opportunity to deeply and critically discuss elements of practice with their appraiser. Digital portfolios provide a forum where teachers and their appraisers can engage in discussions about teaching practice and professional learning (Tang & Lam, 2014). Participant responses indicate the value digital tools and platforms add to their appraisal discussions. The findings concur with the literature of Cardno (2012) who describes the developmental purpose of appraisal is to facilitate agency and building teacher capacity.

Summary

The use of digital tools and platforms in appraisal provides a school-wide mechanism for the gathering of evidence for accountability purposes. The key finding for this sub-theme was the ability of digital tools and platforms to gather evidence in an easier and more efficient manner than previous systems. Participants noted their own professional growth in using such tools not only for appraisal but also within their daily professional practice. Digital tools and platforms provide a consistent measure of evidence against the practicing teacher criteria which meets

the accountability function of appraisal. The use of the tools and platforms also supported developmental appraisal practices such as productive dialogue and reflection as the tools provided additional time for more rich opportunities to evaluate practice.

Summary

The main finding of this research is that effective appraisal systems processes and practices need to be established in schools prior to adding new digital tools and platforms into the appraisal system. The findings have established that

1. Effective appraisal practices need to be embedded across school activities to have impact on the development of teacher capability.
2. Digital tools supplement the accountability process for gathering evidence.
3. Digital tools will not miraculously improve the appraisal cycle, relationships, school culture or student learning.

This chapter has discussed the three themes that emerged from the data in relation to the literature presented in Chapter Two. The discussion has been concentrated on the themes of: (i) effective appraisal practices are linked to the schools' strategic plan, professional development plan, target learners and the Teaching as Inquiry cycle; and (ii) that the development function of appraisal is addressed through purposeful, planned appraisal activities within a constructive school culture that develops authentic reflection practices and engages in productive learning conversations; and (iii) that the use of digital tools and platforms has made the accountability functions of appraisal easier and more efficient.

In Chapter Six I will summarise the key issues identified in the findings and draw conclusions in response to the research questions. Considerations in regards to the limitations of the study will be drawn and recommendations for future appraisal practice and research will be made.

Chapter 6 Conclusions and recommendations

In the previous chapter, the findings were discussed with support from the literature reviewed, and in relation to the aims of this research. This final chapter will provide an overview of the research study, draw overall conclusions, evaluate any limitations of the study and make recommendations for further research.

This study explored the use of digital tools and platforms in teacher appraisal in New Zealand. It considered the perceptions and experiences of principals, deputy principals and teachers in relation to their use of digital tools and platforms in their schools' appraisal systems.

An overview of the research study

The overall aim of this research study was to investigate the influence of digital tools and platforms on effective appraisal practices in schools and identify factors that contribute to the perceived effective use of such tools and platforms used in appraisal. Four conclusions are listed here which are connected to the research questions from this study.

Conclusions:

Research question one: How does the use of digital tools and platforms influence effective appraisal practices in New Zealand Primary Schools?

Conclusion one

The quality of the appraisal system, processes and practices appears to be still critical to its' effectiveness regardless of the use of digital tools and platforms.

This research findings suggest that the overall quality of the appraisal process is the critical element of effective appraisal practices. Participants agreed that ensuring clear expectations, structures and communication is fundamental to effective appraisal practices. Those in leadership positions of the schools studied provided a clear outline of the appraisal system and practices at the beginning of each school year. In each of the three schools, leaders ensured clarity of the process, clarity of the expectations of evidence and practice, as well as clear frameworks and examples of digital practice expected within their appraisal system. This research and related literature emphasise that when systems and processes are well established and well operated, they shape the culture of the organisation (Cardno, 2012). This research

found that each school had a well-established appraisal system that was complemented using digital tools and platforms within appraisal practices.

Conclusion two

The alignment of the schools' strategic plan with the professional development plan and linking these into the Teaching as Inquiry cycle is the core foundation of appraisal practices.

This research concludes that the foundation of effective appraisal practices was the connections between the school's strategic plan, professional development plan and the Teaching as Inquiry cycle. Participants from all three schools articulated the connection from the overarching strategic plans spiraling into professional development and teacher inquiry. This study found that when these elements were embedded into the appraisal system and practices, digital tools and platforms successfully supported the professional practice of teachers and leaders. Both this research and the related literature recognise that appraisal involves a continuous conversation about performance data by evaluating and considering ways to improve outcomes for all learners from every aspect of the educational organisation (Cardno, 2012).

Conclusion three

Digital tools and platforms support the accountability function of appraisal through providing a consistent framework and a system that is efficient and easily accessible.

This research concludes that digital tools and platforms influence appraisal practices by providing a systematic framework for gathering evidence of practice towards professional standards. This research highlighted that digital tools and platforms enabled schools and leaders to have school-wide consistency for the process of gathering and presenting evidence for appraisal and attestation practices. It was also highlighted that the use of digital tools and platforms to document appraisal processes and practices met the accountability requirements for effective appraisal systems.

Research question two: What factors contribute to the perceived effective use of digital tools and platforms in appraisal?

Conclusion four

Educational leadership practices are fundamental to ensure the effective use of digital tools and platforms to meet the development function of appraisal.

This research concludes that leaders of effective appraisal systems build a professional learning culture within all aspects of the school environment, not only with appraisal practices. Participants commented that reflection and professional dialogue were practiced and promoted across all professional engagements and structures within the school. This study found that these practices were visible and embedded in the school culture *before* the school adopted a digital approach to aspects of the appraisal and attestation systems.

This research concludes that the ease of access and the collaborative capacity of digital tools and platforms influenced productive dialogue and reflection within appraisal practices. This study found that reflection and productive dialogue were highlighted as areas of professional development for leaders and teachers at each of the three schools and that this professional development was current and ongoing.

Conclusion five

Structures within the school organisation of teams and meetings support the effective use of digital tools and platforms in appraisal.

This research concludes that to support digital tools and platform use in appraisal practices, each of the three schools had established professional structures that included the provision of time and allocated meetings to learn the how to use the tool purposefully for reflection and productive dialogue. This study found that leaders created schedules and opportunities to support teachers' use of the tools for appraisal practices such as providing allocated time during and after meetings to complete reflections on the digital tools and platform and timely release to update and reflect upon the evidence gathered. It was also found in this study that leaders created team structures to support the productive dialogue between colleagues such as professional learning buddies and TasI teams. These structures supported the appraisal practices of reflection and productive dialogue and were also facilitated by professional development in coaching.

This research concludes that for digital tools and platforms to positively influence both the development and accountability functions of appraisal, effective appraisal practices must be embedded into both the schools' existing appraisal system and the schools' professional learning culture.

Limitations of the research study

The primary limitation of this research is the small number of research participants due to the nature and the scope of the study. However, the findings may be transferable to other school contexts.

The second limitation of this study was the selection of participating schools resulted in accessing schools that had been 'digitally capable' for a long period and who were considered by ERO as high-performing schools with 4-5 year reviews. These schools already had established, effective appraisal systems in place before implementing digital practices within their systems. The leaders of each school were experienced and had periods of long service with their school as well as post-graduate qualifications. In addition, all principals acknowledged they had no concerns with competency of their staff. These factors created limitations on this study because they may be considered outside the norm. In 2013, the Education Review Office found that 20% of primary schools and 4% of secondary schools had high quality appraisal systems which contributed to improvements in teacher capability and which valued student outcomes. Robinson et al. (2009) found that only 30% of schools' appraisal policies referred to the improvement of teaching, 15% referred to student learning, and only 4.5% of teacher goals were about student learning. Therefore, it is possible that the schools selected for this study are not the norm within New Zealand.

Recommendations:

The findings of this study have produced three recommendations for school leaders within the primary education sector in New Zealand. These findings may also be of relevance for teachers, Board of Trustees and the Ministry of Education.

Recommendation one

That school leaders establish and embed their appraisal systems processes and practices that meet the accountability and development functions of effective appraisal to implementing a new digital platform.

Recommendation two

That leaders ensure that processes are established at the beginning of the year that provide scheduled times and opportunities for teachers to use the digital tools and platforms to upskill, reflect and update their appraisal evidence.

Recommendation three

That leaders choose digital tools and a platform that is accessible and appropriate for their staff in terms of their skills and needs, but also meets the school's vision of digital literacy and engagement.

Recommendations for further research

It would be beneficial to conduct a similar study in schools that use the purchased platform models such as Arinui or Appraisal Connector and compare these to school generated models. Further research could also be carried out in a larger sample of schools.

Final conclusion

This study has explored the use of digital tools and platforms in appraisal systems in three primary schools in New Zealand. The findings and recommendations add to the body of literature relating to appraisal systems and will be available to school leaders and schools who may be interested in adding digital tools or platforms to their existing appraisal systems or reviewing their appraisal systems. There is a need for school leaders to take a considered approach to implementing digital tools and platforms into their appraisal system to meet the dual purposes of accountability and development.

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Appendix A – Participant information sheet

The logo for AUT (Auckland University of Technology) is displayed in white text on a dark grey background.

TE WĀNANGA ARONUI
O TĀMAKI MAKĀU RAU

Participant Information Sheet

Date Information Sheet Produced:

27 May 2016

Project Title

The use of digital tools in effective Primary school teacher appraisal

An Invitation

My name is Dawn Marie Braithwaite and I am currently undertaking my Masters of Educational Leadership at AUT. My thesis research involves Principals, Deputy Principals and teachers from large Auckland Primary schools and is identifying and critically examining the use of digital tools in appraisal practices in primary schools.

I am inviting you to participate in this research as your input will be invaluable towards my research questions. Your participation is voluntary and you may withdraw from this research at any time prior to the completion of the data collection in August 2016.

What is the purpose of this research?

The benefits of this research is an increased understanding of the influence of digital communication tools within appraisal in the New Zealand educational context. This research is important from a New Zealand perspective, as there is little international literature that addresses this issue from an educational context and none specific to the New Zealand primary school environment.

The purpose of this research is to gain my Masters of Educational Leadership qualification by writing and submitting a 90 point thesis.

How was I identified and why am I being invited to participate in this research?

Your school was selected from the APPA list of Primary Schools within Auckland with a roll greater than 450.

Your school was selected as it was identified that you use digital tools within your appraisal system.

You have been selected for this research because you work at this school.

What will happen in this research?

This research involves a semi-structured interview containing questions regarding your digital tool usage within your appraisal system. Participants will be interviewed individually. Each interview will be audio recorded and transcribed. Transcripts will be sent to participants to gain approval of overall content. Transcripts will be analysed for themes within leadership regarding impacts and perspectives of digital communication tool use. The data collected will be used only within this thesis research and will be kept confidential.

What are the discomforts and risks?

Although there are no perceived risks for participants during the interview process, participants are encouraged to contact and inform the researcher of any concerns or discomforts.

How will these discomforts and risks be alleviated?

Should participants show discomfort or express concerns the researcher will provide any information necessary to the participant. The participant may withdraw from this research at any time until data analysis completion in August 2016. |

What are the benefits?

The benefits for the researcher is obtaining a Masters of Educational Leadership from AUT.

The overall benefits of this research is the contribution towards understanding the influence of digital communication tools in appraisal within an educational context in New Zealand. This research is important from a New Zealand perspective, as there is little international literature that addresses this issues from an educational context and none specific to the New Zealand primary school environment.

How will my privacy be protected?

Both school and participants' anonymity will be ensured through the use of pseudonyms within transcripts. Personal identities and school names will be kept confidential by the researcher.

What are the costs of participating in this research?

The interview should take no more than one hour of your time.

What opportunity do I have to consider this invitation?

From this email you have two weeks to consider this invitation. Selection of participants will be on a first come first serve basis from replying to this email.

How do I agree to participate in this research?

Consent form is attached and should be returned with your email of agreeing to participate.

Consent forms will also be available at the time of interviews.

Will I receive feedback on the results of this research?

Please indicate on the consent form if you wish to receive a summary of the findings of this research.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, *enter name, email address, and a work phone number.*

Alison Smith alison.smith@aut.ac.nz AUT University School of Education
64-9-921-9999 ext. 7363

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Dawn Marie Braithwaite dmbraithwaite@mac.com

Project Supervisor Contact Details:

Alison Smith alison.smith@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on June 10 2016 AUTEK Reference number 16/235.

Appendix B – Consent form



Consent Form

For use when interviews are involved.

Project title: The use of digital tools in effective Primary school teacher appraisal

Project Supervisor: **Alison Smith**

Researcher: **Dawn Marie Braithwaite**

- I have read and understood the information provided about this research project in the Information Sheet dated 27 May 2016.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant's signature:

Participant's name:

Participant's Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on *type the date on which the final approval was granted* AUTEK Reference number *type the AUTEK reference number*

Note: The Participant should retain a copy of this form.

Appendix C – Interview questions

1. Tell me about your schools' appraisal system. Which digital communication tools are used within your appraisal system?
2. How has it been made clear how digital tools are to be used within appraisal within your organisation? What are you required to do?
3. Can you estimate the percentage of time you interact with digital communication tools for appraisal?
4. How do digital tools support the reflection process within appraisal? How do DCT provide a platform for authentic, deep reflection of professional practice?
5. How do digital communication tools enhance learning conversations within appraisal? How do these digital conversations influence your practice and reflection?
6. Can you describe how you use DCT to interact with your appraiser? Can you describe how digital tools build/support/influence your relationship with your appraiser/appraisee?
7. Have you experienced any problems or dilemmas with digital communication tools in your appraisal practice?
8. Are there any other comments you would like to make that pertains to how digital communication tools have influenced your practice as a leader, or teacher within your appraisal context?

