How do innovative schools create the conditions for reflective practice?

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2021

ACKNOWLEDGEMENTS

ABSTRACT

A significant focus of innovative schooling is the requirement for teaching staff to engage in reflective practice to deeply investigate their impact on student outcomes and how they work effectively with their colleagues and collaborators. There is research evidence that reflection is an important part of the journey for educators. From Dewey in 1910 to more contemporaries such as Argyris and Schön in the late 1990s, models and frameworks have been published for subjects to engage with. The Teaching Council of Aotearoa (2020) has also engaged in the need for reflective practice through its creation of the 'professional growth cycle', a shift from a more formalised appraisal process. The Teaching Council has, however, produced a simplistic framework for school leaders to implement allowing for staff to demonstrate some levels of competence within their practice. My goal with this study was to establish a more robust process that synthesised the work of the Teaching Council, so compliance occurs, with the work of researchers and critical friends. The resulting artefact I developed provides a levelled process in its approach to allow multiple entry points. The levels are designed to develop complexity of cognitive engagement as staff work through them. Leaders must engage in the process and develop a high trust culture to allow staff to travel through the artefact at a pace that represents their experience and skills in critical reflection. The artefact supports the processes needed for successful critical reflection, educators can grow in their ability to be more effective and leaders will have a framework to link to the professional growth cycle (Teaching Council of Aotearoa, 2020) and maintain a level of compliance. While the growth cycle is new (Teaching Council of Aotearoa, 2020), reflection, through Teaching as Inquiry, has been part of the New Zealand Curriculum since 2007. The missing aspects of both the new professional growth cycle and the existing Teaching as Inquiry model, is the link to the educative purpose of the school, connecting the reflective practice to the vision, values and pedagogy, so reflection is targeted. My artefact brings that dimension to the fore.

The autoethnographical approach to this exegesis brings together my experiences as an experienced educator and the processes required to develop an artefact. This practice-based approach has, at its centre, an artefact that combines the work of researchers, practitioners and critical friends. The artefact is attached to this exegesis as a separate document, and this exegesis sits alongside the artefact. This exegesis collates relevant research from those educators and academics who have studied and used reflective practice for long periods of time as well as learnings from those who have been working in innovative spaces for many years, developing critical reflection through a high trust relational model. While the focus in this study has been on innovative environments, critical reflection should be a crucial aspect of all schools. The need we see for staff to make sense of their own practice is intertwined with the nature of how their school empowers educators to grow.

ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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INTRODUCTION

Reflection is part of who we are as humans, often looking back on where we have come from and reminiscing about what may or may not have happened. As educators, reflection is part of our daily work, whether we acknowledge it or have an awareness of it occurring. Educators are constantly looking for ways to improve, change or develop thinking and teaching processes so that they can impact positively and effectively on student outcomes. While my expectation of educators' capacity to reflect is from a place of hope, my experience of those I have led is that they can operate in reflective environments. The goal of education in New Zealand is to produce confident, connected, actively involved, life-long learners (Ministry of Education, 2007, p.10). What are schools and educators doing to achieve this? Reflective practice processes in schools should focus on schools' educative purpose and the pathway they are following to achieve this, rather than focus on a compliance-based approach to meet the requirements placed on schools. The requirement for there to be a connection to the purpose of the school allows for reflection to be more personalised and support the growth of staff in a targeted way. Added to this need for critical reflection, is the challenge faced by the rapidly changing landscape of learning and proposed learning outcomes.

The research question for this study asks: How do innovative schools create the conditions for reflective practice? In this study, 'innovative schools' are *schools which challenge the way learning is approached and engaging in current research to push boundaries*. For these schools and their teachers, the challenge lies with not just reflecting, but being critical reflectors. The OECD positioning paper *The Future of Education and Skills- Education 2030* (2018), details what students need when being challenged by a future filled with uncertainty and possibilities:

> To navigate through such uncertainty, students will need to develop curiosity, imagination, resilience and self-regulation; they will need to respect and appreciate the ideas, perspectives and values of others; and they will need to cope with failure and rejection, and to move forward in the face of adversity. Their motivation will be more than getting a good job and a high

income; they will also need to care about the well-being of their friends and families, their communities and the planet. (p. 2)

To embrace the children's future, reimagining education to meet these challenges must be the goal; therefore, the way in which teachers work needs to change from traditional approaches and models to ways which support teachers' ability to look at learning differently. Models of reflective practice could be a link to improving the actions of teachers which will challenge these more traditional approaches and outcomes. The most common model of reflection used in New Zealand schools is Teaching as Inquiry (Ministry of Education,, 2007, p. 35), which is a beginning point in the process into critical reflection; this work has, however, been challenged (Benade, 2015a) and interpreted differently by schools as they progress through the model. The introduction of the Growth Model (Teaching Council of Aotearoa, 2020a) has presented school leaders with the opportunity to challenge and support staff with modes of critical reflection.

Within my own experience, many educators who manage change and continue to innovate with purpose are those who write and share their thinking widely. This is not the rule, however by doing so it allows them to share their thinking and be challenged by others. Challenges lie within the culture of the educative environment as to whether this happens widely in a school or is the personal approach by a handful of educators. The significance of the question that drives this study lies within the generation of something new that aligns with the literature, however more importantly aligns to practice that is supportive of growth. Reflective practice is evident within schools by the use of a range of models; schools engage in it, teachers engage in it. I believe that with a structured approach that is multi-layered, all schools can have an approach that allows for personalised growth through different educative environments and experiences. This idea is a motivator for this current project, along with my strong beliefs about the need for critical reflection in a changing world which requires a new and practical approach. Benade, (2012) discusses the difference being the depth of thinking required beyond identifying a reflection, leading to informed practice. Further more Benade, (2015) identifies the importance of critical reflection in comparison to just reflection "as the ongoing, regular and persistent use of reflective tools….. in critical thinking about various aspects of practice, hence collaborative critical teacher reflective practice." (Benade,

2015. p.110) Using this thinking we can see that in relation to just simply thinking about what you did, critical reflection involves many more layers.

The ontological position taken in this study is based on the interpretation of the experiences and narratives of both research theorists and school leader practitioners through examining the individual interpretations and experiences in their understanding critical reflection. My lived experience is central to this exegesis, and my ontological position aligns with both theory and practice (Mack, 2010). My interpretation of Daniel and Harland (2017) connects with the notion, that all research starts with underlying beliefs and expectations about a phenomenon and states that these beliefs, conscious or subconscious, are framed by the researcher's ontology; the researchers' personal beliefs, views and values, and epistemology, that is, the procedures a researcher uses to come to know something (Daniel & Harland, 2017). My professional experience influences my ontological and epistemological position as a teacher and as a school leader. As qualitative data is often subjective, I play a role in the selection and findings and then take an objective stance when utilising the data to inform decisions.

This research took a contextual/conceptual approach, while I engaged in reflecting with both colleagues and critical friends as well as collating specific information about reflective practices within individual school contexts of reflective practice. While I understood that common themes and practices might occur, my aim was to explore effective commonalities of the processes schools were using. Some generalisations can be drawn from the findings; these are context-specific and are interpretive and valuable.

To investigate reflective practice, I reviewed the research literature and identified some of the global, national, and local influences on the creation of critical reflection in schools. I sought to clarify critical reflection and its function in innovative schools as described by research theorists, education, and society in general.

To challenge my lived reflective practice experience, I discussed my project with three critical friends, school leaders who engage in innovative practice. In this instance I view a critical friend as someone who provides challenge and support,

with whom there is already a trusted professional relationship. The critical friends were chosen because of my warm and demanding relationship with them and the challenge they would provide me. I was keenly aware of both the benefits and challenges with using trusted colleagues as critical friends. The challenge was the possible assumption that critique would not be part of the conversations as the relationship was existing, that a sense of support not challenge would be the result. The critical friend relationship was developed to provide challenge, critique and question. This hasn't changed over the years we have been colleagues. The process we use is a very robust one in line with that of Smyth, (1993)

The aim was to gather challenging insights regarding the conditions required to effectively manage critical reflection in schools. I enquired into their roles in creating reflective practice which is a part of the culture of improvement and growth, staff development, and the complexity of professional relationships (Campbell et al. 2004). The importance of having critical friends cannot be stressed enough. These colleagues with whom a trusting relationship has been developed will provide a critical lens over my thinking and the work supporting that thinking from a practice and personal knowledge basis.

There are six chapters in this exegesis. Chapter One is this introduction. The literature review (Chapter Two) considers thinking and research from various sources with a particular focus on practice and innovation. Chapter Three is the methodology. Here I discuss how practice-based research is formative within the education field and possible ways of making sense of educative practice through this method. This chapter explores ways of using lived experiences to form a document that supports the development of critical reflection in schools, promoted by leaders. Chapter Four explores the findings that arose from my process of developing the artefact and my reflection on the development of the artefact. Chapter Five is the discussion and explanation regarding the use of the artefact. Chapter Six concludes the exegesis by suggesting a model of critical reflective practice that could be utilised in a variety of educational settings.

LITERATURE REVIEW

Introduction

Appraisal came about as a response to the Performance Management Guidelines and the mandating of these guidelines by the MOE in 1996. The narrowness of this process was highlighted by the connection to pay scales. Piggot-Irvine (2000) believed the link to remuneration added to the negative perceptions of teachers to appraisal and its focus on accountability. Cardno & Piggot-Irvine, (2005) see appraisal as a form in which opportunities for self-evaluation and reflective practice are part of the process and should be supported. The influence of current thinking in relation to reflective practice in New Zealand schools, notably in the forms of Teaching as Inquiry (Ministry of Education, 2007) along with the reflective questions from the Teaching Council of Aotearoa (2020b) to guide its 'Professional Growth Cycle', narrow the perspective of reflection to compliance. The future-focused research produced by the OECD (2018) is often quoted as the research that supports the practical application of these reflective tools; however, these approaches to reflective practice miss the mark. To address this shortfall, this practice-based study is framed by the question:

How do innovative schools create the conditions for effective reflective practice?

This question is significant as reflective practices are especially important to schools seeking to effectively adopt innovative approaches, especially in contexts that involve working in collaborative spaces and co-constructing learning.

The role of the literature review is to allow the reader to see the scope of writing that has been undertaken in reflective practice over time. The literature connects to the practice-based approach of this work by supporting the development of the creative component of the study, including the development of the artefact and related questions.

This review is an investigation of three key aspects, namely, analysing what reflection is (how it relates to pedagogy and the importance of reflective practice having a critical framework); the role trust plays in creating the conditions for effective reflective practice, and how leaders support the development of critical reflection in their kura (school). Finally it will investigate the place of reflective practice in innovative schools.

Reflection

> When someone reflects in action, he [sic] becomes a researcher in the practice context...he does not keep means and ends separate but defines them interactively as he frames a problematic situation. He does not separate thinking from doing…. Because experimenting is a kind of action, implementation is built into… inquiry (Schön, 1987, pp. 68-69)

Reflective practice can be defined as learning from and through personal experiences and gaining an understanding of the impact of self upon others and outcomes. Schön (1987) promoted its importance as part of initial teacher education. Thuynsma (2001) related the significance of reflection in teaching to times when teachers encounter uncertain conditions or critical incidents. There have been many influencers on the tools to support reflection by practitioners. Processes have been influenced by philosophers, Habermans and Jarvis (Atkins & Murphy, 1993), their work alongside Dewey which helped define reflective as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends" (1910, p. 5). Schön (1987) echoed Dewey's definition and proposed a way in which educators could use reflective thinking as a tool to become reflective practitioners.

Schön (1983, 1987) believed that reflection has two aspects that work together, believing that professional knowledge and growth involve rules and artistry alongside reflection in action. Reid, (2004) distinguishes between reflection in action, when doing, and on action, as post review. Schon (1983) states reflection in action occurs when the teacher's self-awareness and knowledge is used to deal with problems or issues as they arise. Schön continues with the idea that reflection on action is similar to the idea of the post-mortem analysis of the event. This should involve some

cognitive loading as it should engage with research. Reflecting while working and responding to the need for shifts is critical and difficult, especially as a beginning teacher. After the fact reflection is as critical as it allows for more cognitive interaction with the facts of what is being reflected upon. Brookfield, (1995) describes critical reflection as challenging as it involves critiquing professional ways of working that may differ to the norm. This portrays a real difference to reflection, which may be limited to considering one's own work. The impact of simple reflection is non-threatening, whereas *critical* reflection brings into question personal competence and one's deeply-held assumptions and beliefs (Smyth, 1993).

For Gibbs (2006), reflective (deliberate) and reflexive (spontaneous) thinking are different, though both involve the need for teacher cognition, and both require a structured approach. Osteman and Kottkamp (1993) believe in the need for greater self-awareness that will lead to growth and development. This range of views needs to be synthesised in order for a deep understanding of the impact, both intended and unintended, that reflection can bring as well as the cognitive loading needed to be a successful reflective practitioner.

In *Teaching smart people how to learn*, Argyris (1991) identified learning as a key to success in organisations, however, he argued, those people at the top of their field are often the least able to learn. They fail to recognise the need to learn and may not even understand its core function; they tend not to reflect inwardly on themselves and are often very narrow in their thinking. This thinking could lead to speculation that in the teaching profession, compliance, not learning, is arguably what is regarded as essential for teaching staff, a situation not helped by role promotion processes within educational environments that often see the best and the brightest move into positions of leadership without disrupting the cycle of compliance. As a result, teachers may fall into roles as the 'sole expert,' unable to see beyond their limits or understanding their impact. Due to the emphasis on compliance through such processes as 'Teaching as Inquiry' (Benade, 2015a) reflection can become just a chore in an educational setting rather than an effective tool to enable growth—the need for staff to see the impact and understand that becoming effective is linked to reflection. Cardno & Piggot-Irvine, (2005) See appraisal as a form in which opportunities for self-evaluation and reflective practice are part of the process and

should be supported. Schön (1987), however, described those who have reached professional artistry as able to use their experience to reflect in action and make changes based on the evidence in front of them. Finlay (2008) describes this as professionals who 'can think on their feet'. The connection Schön and Argyris attain with their thinking is the requirement to take reflective practice through a process and commit thoughts and ideas in a cognitive way to a form of journaling (Bailey, 2012; Benade, 2015b).

Kolb (1984) also acknowledges the importance of drawing conclusions, using analytical tools and the application of educators own findings to shift their practice. Finlay (2008) identified five models of reflective practice, that all have different levels of complexity: structural, hierarchical, iterative, synthetic, and holistic. Each model has similarities in the stages they identify: awareness, analysis, and new perspectives, as a practitioner moves from through the action of reflective practice and the recording of the practice to making it a natural everyday occurrence. The writing process has links to cognitive development (Greenfield, 2019), and as cognitive growth is an important factor in critical reflection, the process of recording thinking is critical. In terms of recording the process of reflective practice, Bailey, suggests writing as the best way to gain a deep sense of honest reflection, but videoing (VLOG) or audio files are also suggested (Benade 2015b). The cognitive link to the impact of writing down thoughts is strong as it brings clarity. Greenfield (2019) refers to the importance of writing as it improves cognitive function, benefiting the brain by working in a logical manner and promoting recall. Videoing or vlogging may be a preferred method for those in innovative spaces as it may fit with the pedagogy. Whichever option is decided upon, recording thinking is important as part of the process.

Benade (2018a), with a focus on innovative education, promotes collaborative, reflective practice and the notion of critical reflection that is collegial instead of congenial. Dweck (2012) describes the notion of collegiality as supporting others in a challenging way to achieve improved outcomes, as opposed to a congenial approach, which is based on kindness, but achieves no professional growth. Collegial support could be considered as warm and demanding. A warm and demanding approach is critical for practitioner development and reflective practice in

innovative spaces where collaboration is crucial (O'Reilly, 2016). The ability to work alongside colleagues allows for reflective conversations that both support and challenge. Farrel (2016) argues that reflective practice is based on the belief that teachers can improve as educators by consciously and systematically reflecting and collecting evidence by different means to inform and improve their performance. The disposition of effective teachers is that of a positive growth mindset (Kolb, 1984). Thus, it can be suggested that this mindset for improvement needs to be developed into the culture of the institution, to help all staff to develop this effective mindset, and see themselves as being effective.

There is agreement within the literature of both Schön's view of linking reflection to practice, and that of Mezirow (1991) and Bailey (2012), about the importance of reflection as a vehicle to improve outcomes. Reflective practice is, however, more than a self-aware process of pausing and thinking. Reflection requires a process that goes beyond thinking about immediate results to the deep thinking needed to reflect critically. Critical reflection is an important aspect of practice as it supports practitioners in becoming more aware of impacts on student learning. If reflective practice can be defined as "learning through and from experience towards gaining new insights of self and practice" (Finlay, 2008 p. 1), then when moving from a focus limited to insights and improvements, onto a deeper level of growth, suggests there should be engagement in critical reflection. Critical reflection is the sustained and intentional process of identifying and checking the accuracy and validity of personal teaching assumptions (Brookfield, 2017). The importance of adding 'criticality' emphasises the role of change and growth as part of the process of reflection. Critical reflection and reflective practice are, however, often used interchangeably (Fook, 2007). Both processes involve inquiring deeply into practice and outcomes. Nonetheless, one cannot reflect without critical thinking, as Edward and Thomas (2010) indicated, who suggest that critical and reflective thinking are not exclusive but part of each other. A further challenge is managing the dynamics between organisational thinking and reflective practice. If the need for critical reflection is considered within innovative environments, then disrupting compliance and the norm of traditional models requires critical thinking and reflective practice.

Trust

A definition of trust is the firm belief in the reliability, truth, or ability of someone or something. Trust also refers to being responsible for another or a thing (*Concise Oxford English Dictionary,* 2008). The three key elements I will discuss in relation to trust are competence, knowledge and vulnerability. These components will be linked to the conditions required to have critical reflection occur effectively within an educational environment. This will then lead to a final statement on trust within innovative spaces and its relationship to collaboration.

In communities where a high trust model is evident, a climate of success within reflective practice is more probable (Tschannen-Moran, 2014). Although novice leaders may struggle to know what to focus on when considering their growth as a leader (Dreyfus & Dreyfus, 1980), trusting relationships should be at the head of the list. Critical to forming trusting relationships is competence. Staff must see those leading, or those who they are working with, as competent. Forsyth and Adams (2014), both connect competence to the role of the leader as a requirement to develop the conditions for critical reflection within organisations. Leithwood et al. (2010) identify that leaders who exhibit role competence, especially around curriculum and learning, will engender trust in their leadership. Benade (2018a) cites Mcleod (2011) as identifying that the skills of colleagues are a crucial factor in developing trust, which is important in the context of building collaborative teams in innovative schools.

Staff also want a leader who is knowledgeable of how critical reflection works. However we could pose that personal knowledge of the reflective process is an important factor (Benade, 2018) as is knowledge of the purpose or practical intentions (Benade, 2018) behind the critical reflective process. Knowledge of this process will include knowledge of theoretical literature (Brookfield, 1995), as well as the possession of skills to participate in critical reflection. Together, this knowledge and skill will enable the leader to participate in the process with confidence demonstrating to staff the leadership required to allow trust to gain momentum.

The development of trust in an organisation can be seen as building a sense of interdependence – that is, the need to rely on someone else. Doing so, demonstrates a sense of vulnerability, which in turn is a feature of a trusting relationship (Baier, 1994). As trust is explicitly linked to vulnerability, it can be most powerful when a leader demonstrates vulnerability to/with their staff (Baier, 1994), and modelling leading with vulnerability to staff can support the development of trust (Tschannen-Moran & Hoy, 1998). Trust is "the willingness to be vulnerable to another party based on the confidence that the other party is benevolent, honest, open, reliable, and competent" (Tschannen-Moran, 2014, p. 154). Conversely, McLeod noted that "a refusal to be vulnerable tends to undermine trust or prevents it from occurring at all" (2011, p. 4). To critically reflect one must deeply critique their own assumptions and beliefs in collaboration with teaching colleagues. This requires high levels of relational trust and a willingness to be vulnerable in sharing successes and failures.

One common feature of innovative schools is collaboration. The challenge with reflective practice in innovative schools, however, often lies in challenging collaborative relationships. Within collaboration, challenges of trust can arise when working in a team and not knowing in advance how each team member will operate, or what they think or believe about learning and teaching. McGeer (2008) identified that going beyond the obvious begins by digging deeply into relationships. The first steps for collegial relationships is for team members to get to know each other, as learners and people, for trust to develop. Good working relationships are seen as the key to team success (Troen & Boles, 2011). Once trust is established, "the confidence one holds in the intentions and capabilities of the other persons to fulfill one's expectations results in feeling a greater sense of ease in the interdependence and a willingness to take risks" (Tschannen-Moran, 2014, p. 153). In connection to the innovative spaces encouraged by the idea of '21st century learning' (Benade, 2018b), staff are required to be disposed towards reflection as they are often in view of other staff in open plan environments. As such the features of competence, knowledge and vulnerability are critical for trust to allow critical reflection to flourish.

Innovative Schools

The historical purpose of schooling, that has changed very little since post WW2, was based on an industrial model (Bolstad et al., 2012). This model was designed to support the economic growth and job opportunities that fell out of the rebuilding of the post war society. Schools were designed to produce workers for either factories or office blocks where rule followers would be necessary and successful. This model continues in many schools today, even though the global economy has changed (Bolstad et al., 2012). Innovative schools are more focused on the complexity of the world students will be heading into and promote learning that supports students to thrive in an unknown future. The nature of these schools requires staff to be cognitively engaged with possibilities and reflect often on what powerful learning might look like.

The nature of reflection needed in innovative school should be considered differently to that of reflection in more traditional single cell classroom schools, specifically due to the nature of teaching teams working in close proximity sharing space and students. This means that reflection on self and impact on others is critical in these schools.

Innovative schools, sometimes referred to as MLE's (Modern Learning Environments) engaging in 21st century learning have commonalities in their approaches that require a different set of dispositions that often more traditional schools require (Benade, 2018b). The view of these environments is that they place the ideas of innovation and change at their centre and challenge their organisation to move away from a more traditional modes. The Ministry of Education (MOE) has demonstrated significant investment in change happening at many levels within the current education model (Bolstad et al., 2012). When rebuilding or remodelling, schools are required to look at flexible/modern spaces, rather than single cells of the past (MOE, 2017). The New Zealand Curriculum (MOE, 2007) encourages changes in thinking, including identifying the goals of the Curriculum having layers of opportunities for learning and teaching to shift, such as localised curriculum and key competencies. Benade (2017) discusses the 21st-century learner and the skills they require as challenging the factory model of traditional learning. These dispositions,

and the notion of life-long learning are just as applicable to staff as they are to students (MOE, 2007).

Collaboration is listed as one of these skills required by students (OECD, 2018), and is thus a crucial part of innovative teaching. It is also a skill the teacher must be able to demonstrate and teach collaboration. Teaching collaboratively, co-teaching or working openly alongside a colleague or colleagues (O'Reilly, 2016) is a critical aspect of innovative schools. This teaching relationship gives the opportunity for supportive critical reflection and conversations.

Schools in New Zealand considered to be cutting edge, such as Stonefields, Hobsonville Point Secondary, Ormiston Middle School, Albany Senior, all have a collaborative approach to learning and teaching. Collaboration is more than just working in a space with colleagues – it is co-teaching (O'Reilly, 2016), using space (Benade, 2017) and understanding how each colleague works (Troen & Boles, 2011). Teacher collaboration occurs in environments where teachers work together in a strategic planned way to achieve common goals. Hargreaves and Fullan suggested a continuum of collaboration: "Scanning and storytelling (exchange of ideas, anecdotes and gossip), to help and assistance, to sharing (of materials and teaching strategies), to joint work where teachers teach, plan or inquire into teaching together" (2012, p. 112). This continuum can be a useful indicator of collaborative practice. This 'joint work' has significant benefit for teachers and students with teaching focussing on work that has the potential to improve student outcomes, well-being and self-regulation. Also important are shared expectations about reflection and its purpose to allow for growth, the conditions for collaboration (Troen & Boles 2011) and identifying how to operate as a colleague and team. Therefore, reflection and the conditions required for robust communication and open to learning conversations (Cardno, 2005, Robinson et al. 2009) is important to allow collaborative teaching teams to succeed. Cardno, (2015) describes this process in terms of teams as needing to have regular review as part of growing capacity to be effective as a group. Building the ability and space/time to communicate about the students and about practice are important aspects of working together. As Benade, (2015) termed it 'collaborative critical teacher reflection', it sums up the notion of team, conversation and critical thinking.

The Nature of Learning (OECD, 2010) is one source that helps to frame an understanding of what an innovative school might be. This research into future-focused schools or innovative schools identifies seven fundamental principles, led by the idea that the student is at the centre of all thinking about schooling. Innovative schools actively have a student-centred approach (Nair, 2011). While many schools could claim to be student-centered, connecting with the other key cornerstones in the OECD work or 21st century skills that lead to an innovative approach are also required. Students' leading learning, learners at the centre (OECD, 2010), learners at the centre (OECD, 2010), is the idea that students are part of the process of learning, rather than learning being done to them. 'Learners at the centre' are agentic, in their relationship with their teachers as they co-construct learning together. In this sense, they are 'co-agentic' with their teachers. This also fits with the principles outlined in the New Zealand Curriculum (MOE, 2007). The Education Review Office (ERO), in its paper, 'Leading Innovative Learning in New Zealand Schools' (2018), references the OECD document, linking its findings to effective leadership. Innovative schools tend to be collaborative, both in learning and space design (Nair, 2011, OECD, 2010, 2018); for this reason, collegial relationships based on trust leading to reflective practice needs to be part of the process of working together. Engaging in more than just reflection into the teaching-learning relationship but into what is important.

Bolstad et al. (2012) also identify emerging principles of what being an educator in the 21st century might be that can be elaborated on to create a sense of practice required for the 21st-century teacher. These themes are listed as:

- Personalising learning. This is moving from the more traditional industrial age modes of learning.
- New views on equity, diversity and inclusivity. This is not limited to equity, but looks for a strength-based approach to meeting needs.
- A curriculum that uses knowledge to develop learning capacity, moving from a sole focus on content to a connected model of content and concept.
- The emergence of student agency means rethinking learners and teachers' roles as teachers work alongside students.

- A culture of continuous learning for teachers and educational leaders is the shift to dispositional modes of practice and weaving these through learning.
- Finally, new kinds of partnerships and relationships, moving from being involved, only, in local thinking to also being involved in global thinking.

The importance of these principles or themes is that they are written to be actioned in a New Zealand context, however these principles are also very relevant for other systems. The critical reflective principle identified by the authors (Bolstad et al. 2012) is a culture of continuous learning for teachers and educational leaders. An essential component of continuous improvement is a culture of critical reflection.

Reflection has been occurring in many innovative schools for a long time. Some reflective practices have come and gone, for example thinking hats, (De Bono, 1992). As such, caution regarding moving into another "fad" has been noted over time. During the 1980s, reflection started to become the norm within schools; the practice associated with it became part of what teachers did, yet little understanding of the purpose or awareness of the impact was evident. Calderhead (1989) recognised at that point that many models had yet to be tested or explored. Moving forward, I do not believe that critical reflection being an integral part of teaching is in dispute; in fact, it is an encouraged part of practice. For example, the Growth Model (Teaching Council of Aotearoa, 2020a) is a current practice. However flaws are evident as it has gaps pertaining to a school's vision, values, principles, and pedagogy and the need to connect critical reflection to that. The way schools operate and their shared, often co-created, ways of working are critical factors involved in attaining levels of innovation, especially when led by the vision of the leadership (Bolstad et al, 2012).

Conclusion

Reflection in its current mode is an iteration of what has gone before, revisiting small adjustments to a similar process with tweaks. A range of sources have driven that development. Unfortunately reflection has not been seen as an essential, but rather as a useful, tool. Schools themselves may have embraced reflection by making it

part of appraisal. It is now a compliance part of the registration process for teachers in a structured form (Teaching Council of Aotearoa, 2020a).

The need for reflective practice cannot be rebutted as it is evidenced that it supports personal growth. There is, however, a growing call for critical reflection (Brookfield, 2017). Innovative schooling lends itself to critical reflection due to the collaborative nature of learning and space design. Teams of staff working together must be part of a critically reflective process to allow the development of trust, the openness to develop competence, and the ability to share openly about practice (Cushman, 1998). Building aspects of cognitive growth through critical reflection into planning and data collection will grow the ability for teams to discuss practice, removed from the personal. While the growth of trust and openness amongst a teaching team is critical, connecting critical reflection to the school's educative purpose, principles, and values is essential. Staff reflecting and then adapting their practice is the goal; however, it must connect to the educative purpose of the school.

Critical reflection, within co-teaching or collaborating in innovative schools should become the norm and move from compliance, appraisal type thinking (Benade, 2018b). This shift to a dispositional approach, by staff and pupils, to learning and collaborating, and seeing every new opportunity faced as a learning and reflecting opportunity is important (Bolstad et al, 2012). School design (Nair, 2011) of collaborative spaces where many adults work with large groups of students requires a change in the role of the teacher. Critical reflection needs to connect and reflect the educative purpose of the facility. To connect the aspects of critical and purpose, reflection is the way forward as this will grow the ability for staff to be more effective as educators.

METHODOLOGY

The driving question for this study is: How do innovative schools create the conditions for effective reflective practice? My goal was to engage with practice and draw on personal and expert experience when creating an artefact to support reflective practice. Thus, this study did not follow a traditional thesis or dissertation

format, but a practice-based approach, and in this chapter, this approach is explained.

Introduction

The aim in this study is to investigate the power of cognitively levelled questions to enable the reflecting practitioner the ability to critically analyse the impact reflection has upon themselves, colleagues, and the students with whom they work. The methodological approach was based on practice-based research with autoethnography as a way to describe and analyse my personal experience, with the aim of extrapolating my understandings to produce a creative artefact. The ontological connection is of my own reality and the challenges to that reality provided by critical friends and literature (epistemology).

As this practice-based research is centred on a story, an autoethnographic journey (Brogden, 2010) unfolds as the importance of reflective practice and its impact on educators and the concluding outcomes becomes obvious through the generation of new knowledge and processes. The goal of this study has been to produce an artefact that allows users the ability to co-create a process that will be relevant and effective in their schools. The research and related practice supports the development of the artefact and the processes that allow schools to utilise the tool as a starting point for their own journey into effective reflective practice.

Newby (2014), states research can be a reason to improve practice, justifying the creation of an artefact as the focus of this study. A cognitive approach needs to be embedded within a framework of critical reflection. Tools need to be designed to allow for critical reflection to be easily accessible for all types and stages of educators to support growth and change. Mutch (2005) too supports the idea of using research to improve practice, referencing "its' purpose - the improvement of teaching and learning systems and practices for the betterment of all concerned and society at large" (p. 18). Mutch (2005) also discusses that research can support change, which is required in this ever changing world of education.

The literature review provided evidence that reflective practice is a critical aspect of teacher practice. While reflection in teacher practice might be evident, it is, however,

also clear that aspects of effective critical reflection are missing. The missing aspect is often the lack of a practical framework that allows for differentiation and personalisation that can be easily aligned to the principles of the educative institution. The justification for critical reflection has come through as a component of the work of Argyris (1985), Bailey (2012), Farrel (2016), and Richards (2012). Most New Zealand schools utilise the Teaching as Inquiry model (Ministry of Education, 2007) for both reflection and appraisal, yet in its current form, it lacks the ability to provide for any form of differentiation. (See Benade's (2015a) critique of the "one size fits all" Teaching as Inquiry process, which does not allow personalisation). Therefore, the resulting challenge is to provide a personalised, critical, connected and purposeful process for schools to engage in critical reflection.

Practice-Based Research

This practice- based research study has brought together the process of research and practice, and I utilised autoethnography as a way of telling a story and producing an outcome, creating new knowledge. Practice-based research is fundamentally different from the traditional practice of research that leads to thesis writing, and therefore requires definition. Sullivan (2009) describes this new territory of practice based research as [involving] "the identification of research questions and problems, but the research methods, contexts and outputs then involve a significant focus on creative practice" (p. 48). Therefore the product of such research should be intended to develop the individual practice and the practice of the field, and to build theory related to the practice, in order to gain new knowledge or insight. In this case the creative artefact is the contribution to knowledge (Candy, 2006).

When considering a practice-based approach related to a practice-based vocation, connections can arise. Practice is at the heart of what education and teaching is about (Sheehan & Higgs, 2013). Research and philosophy play their part; however, practice is the primary function of teaching. Therefore, if change is required, research that is practice-based should be a common aspect of study and practice of educators. While it is commonplace for a practice-based thesis to be the norm in areas such as the creative arts and design (Skains, 2018), it is less well known in education. Practice-based research could be a celebratory approach towards higher

study options. Candy and Edmonds (2018) state that "practitioner research may use artefacts as the object of study or as experimental apparatus and, in many cases, the creation of an artefact may well represent the core of the new knowledge generated by the research" (p. 67). Creating a resource is therefore the goal of practice-based research. In education studies, this could be a popular pathway for teachers that enhances practice and ultimately supports the development of themselves, colleagues and students. Thus, the development of an artefact contributes to new knowledge through assessing investigations and reframing ideas to meet current needs that are seen as requiring development (Candy & Edmonds, 2018). Originality comes in the form of the artefact, its composition, and its influences (Skains, 2018). The exegesis accompanying the artefact is the critique of this knowledge and its creation. In essence, this is an experiment of a creative act, experimentation pushes boundaries to ask questions and grow practice.

In the arts, the artefact results from a creative process, and the resulting work generated is often considered new understanding and seen as new knowledge. Stated succinctly, "practice-based research is an original investigation undertaken in order to gain new knowledge, partly through practice and the outcomes of that practice." (Candy, 2006 p.1). Arguably, a practice-based approach should be as relevant and acceptable within education as it is within the arts. Thus, while the artefact in arts is a process of creation, a related process can have its equivalent in education. In this study, I used a process that encapsulates the aspects required of practice-based research to create an artefact that will enable effective practitioner critical reflection to occur.

Autoethnography

Ellis et al. (2011) describes autoethnography as an approach to research and writing that seeks to describe and systematically analyse (graphy) personal experience (auto) in order to understand cultural experience (ethno). A researcher uses parts of both autobiography and ethnography to compose an autoethnography. As a method, autoethnography is both process and product (Skains, 2018). Autoethnography can play a role in practice-based research in terms of creative practice by extrapolating experiences to support the development of an artefact. The ontological and

epistemological approaches to autoethnography lie within the connection to personal reality and the proof of that reality (Mack, 2010). Hence this supports the thinking that practice-based methods are a process designed to create new knowledge.

I based this study on an autoethnographic approach to describe and systematically analyse my personal experience engaging with critical reflection. (Autoethno)graphy is the literature review part of the writing, connecting research and experience. Auto(ethnography) is my lived experience of 21 year leading innovative schools, developing practice and culture. Auto(ethno)graphy is the connection to the culture that is schools and education as opposed to the cultural connection to the land or people. Bringing autoethnography together to support the development of the practice-based research allows for both process and product (Ellis et al., 2011). The definition Ellis et al. (2011) provide of autoethnography links my lived connection to the personal aspect of working in an innovative school and the critical reflection practices supporting that growth and change within the culture of the school. As stated above, the resulting application of my personal experience and work with critical friends supported my creation of an artefact that is designed to be both creative and a process, bringing together aspects of research and practice to generate a new approach.

As ontology and epistemology are two sides of the same coin (Daniel & Harland, 2017), my views and assumptions hold true for both. When considering ontology, the connection between research and practice sits strongly with me and it closely relates to my personal beliefs, values and views upon reflection and its place in education. The epistemology of this work lies in its close connection to my own journey as well as the critical work of colleagues and links to research. Daniel and Harland (2017) frame epistemology in relation to research as the importance of personal interpretation due to the researcher's connection to their own values. My values-based position is that critical reflection is crucial as a tool for an educators' growth to be successful in a changing landscape. My twenty years of experience in leading innovative schools and developing staff members' capacity to work in these environments has allowed me to personally observe and reflect on the skill sets and capacities that I believe are important to be a successful practitioner. The knowledge

held through my experience has been challenged by the nature of my journey and critical friends.

The epistemological view of critical reflection is, how can knowledge and practice be influenced due to the work that educators engage in when reflecting critically. In an educational setting, my view is that non-reflective societal pressures can influence practice, meaning that outside pressures often dictate the direction of learning, rather than the vision and values of the school. Because of this outside influence, the importance of leadership is again reiterated. Another aspect that resonates with my experience and values is that the position I take as a researcher is not neutral, but focussed on bringing about change (Newby, 2014).

Methodological Approach

The theoretical aspect of my approach was to explore research and research issues; the conceptual aspect was my attempt to understand the artefact; the dialectical was how I connected meaning through and beyond communication; finally, the contextual aspect is the need to bring about social change. The component that connects these four areas together is the theoretical strand. The theoretical strand is the literature review and its connections to the artefact's development. Sullivan (2009) proposed that in practice-based research, the boundaries of these areas are blurred and intertwined. As such the analysis weaves its way through the whole document. The conceptual practice is the process of reflecting on the research and creating the artefact, in this case, a model of critical reflection in the form of a process document that others can utilise. The dialectical approach encompasses the meaning-making process, which includes the lived experience connections and the connections with critical friends. The contextual practices are part of the change resulting from the process both conceptual and contextual, while the theoretical weaves its way through the whole process.

My lived experience of staff reflecting has demonstrated that the most important requirement is for staff to understand the reason for reflecting. In my experience, and what the artefact had to demonstrate is the importance of staff understanding the school's educative purpose and what growth might be needed. Next, the artefact

required a visual framework for reflective practice to be utilised, that allowed for a clear link to the principles that the school holds. Alongside this there needed to be open, honest conditions where trust was established amongst the teams and with leadership. Once all of these factors were designed and in place, a successful critical reflection process could operate. Challenges with reflection, in my experience, mainly occur when the conditions and adequate justifications for reflective practice are not enabling for staff. It is critical that staff do not see this as something that could be held against them, such as a condition of appraisal, but as a way of developing practice.

The ethical challenge in this study was the informal discussions with leaders, the 'critical friends'. These leaders have developed trusting, open relationships with their staff. As these leaders are close colleagues, I trusted their views and utilised these in my synthesis of the research and my lived experience. While no recordings were made, I wrote critical notes on the processes they have undertaken, and these formed part of my reflections on how to develop the artefact's design.

Self-Reflection

Part of the ontology of the study is my personal reflection of the journey into writing this study and ultimately creating the artefact. The reflective journal (Appendix no. 1) is a memoir of the thinking that was taking place during the time of reading and synthesising the conversations as well as critical analysis of the literature related to the practice of critical reflection.

The process of self-reflection included my interaction with critical friends concerning the practice of reflection and the conditions created in their schools. I connected the informal conversations with critical friends and the literature review, and the resulting conclusion supported the ideas behind the development of the artefact.

Draft 1 of the artefact was an idea dump based on initial thinking and a first iteration. This draft, figure 1 (below), was based on my lived experience synthesised with the literature review. It is an outline based on creating a process that would lend itself to
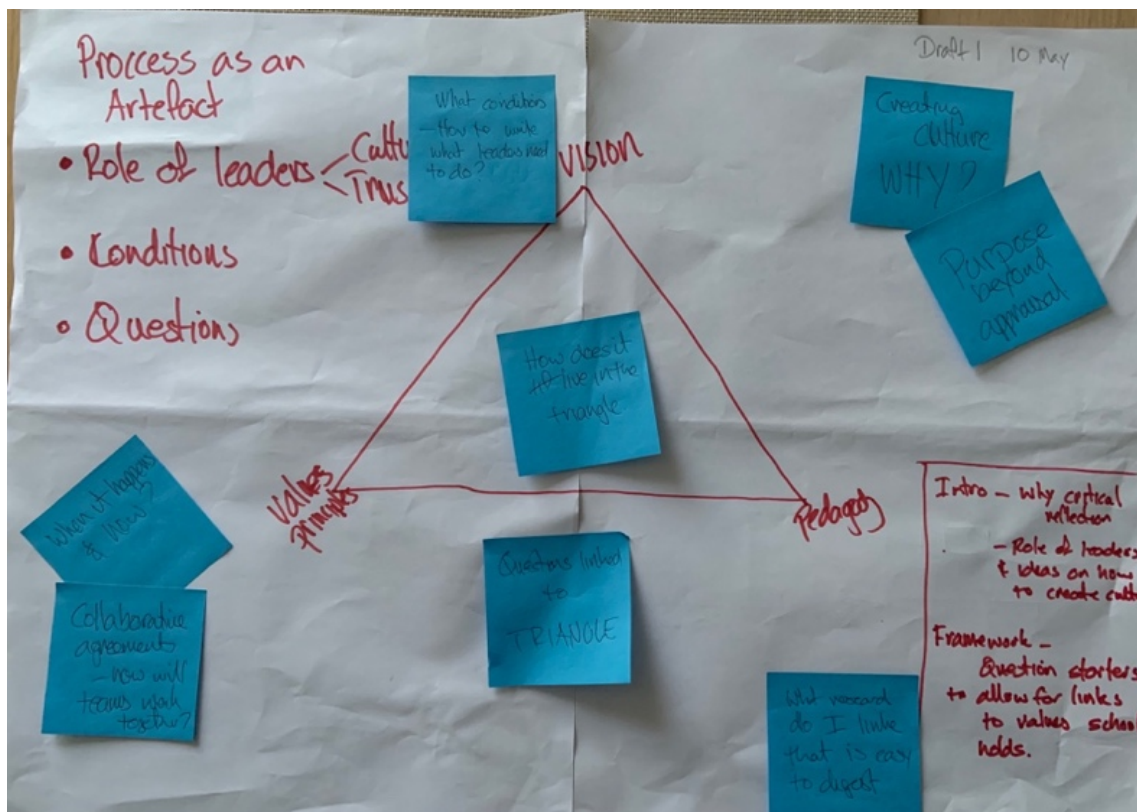
Figure 1: first draft of ideas for artefact

the development of reflective practice for all staff to engage in, but particularly that would enable leaders to understand their role. The influence of critical friends here is substantial. The role they played in challenging my thinking and offering thoughts from their own journey challenged and grew my own understanding. Having practitioners challenge my thoughts and those from the literature I read led to more clarity as my first iteration came together. It is leadership heavy in it's make up. The connection from leadership to action needed to be challenged for the next iteration.

The second iteration (figure 2) took into account the responses from the three critical friends to the first attempt and the questions synthesised my revised thinking and more reading and thinking. After considering the response and challenge from the critical friends, I added the three layers (why? Who? what/how?)

The importance of the culture that is directly related to the actions of the leaders within the educative environment came to the fore after the second iteration. Figure 3 (below) demonstrates that I took aspects of the first iteration, modified some of it, and strengthened other aspects so to support the next steps of development for the artefact.

Have a range of levelled
questions

Practices
What

Open door, where all
can be involved in
the learning

Offer a range of supports
at the beginning

Principles
How

Model leaders
reflections

Staff sharing their
learning

We value the educative
purpose of the school.
Reflection should sit
within that.

We value open honest
conversations

Using experts

Give time and process for
this to happen

Model success with
outcomes

Values and Beliefs
Why

We value and believe in
Critical Relfection
Because it allows us to
consider our impact on self,
others and on the outcomes
we desire for those we are
working with.

We believe in
knowing our learners-
staff or students

We believe in different
starting points based on
personal experience

Utilise team members
and how they work to
allow it to be part of
everyday

Develop critical friends as
an option for conversations
outside the team

We believe in
the importance
of the leader
modelling
vulnerability

Model open
conversations with
Honesty etc

We believe in an
effective framework to
allow for scaffolding.

Journal reflection-
possible online tool?

**Use the artefact when
complete**

Feedback and feed
forward conversations

Lead professional
development
opportunities to engage in
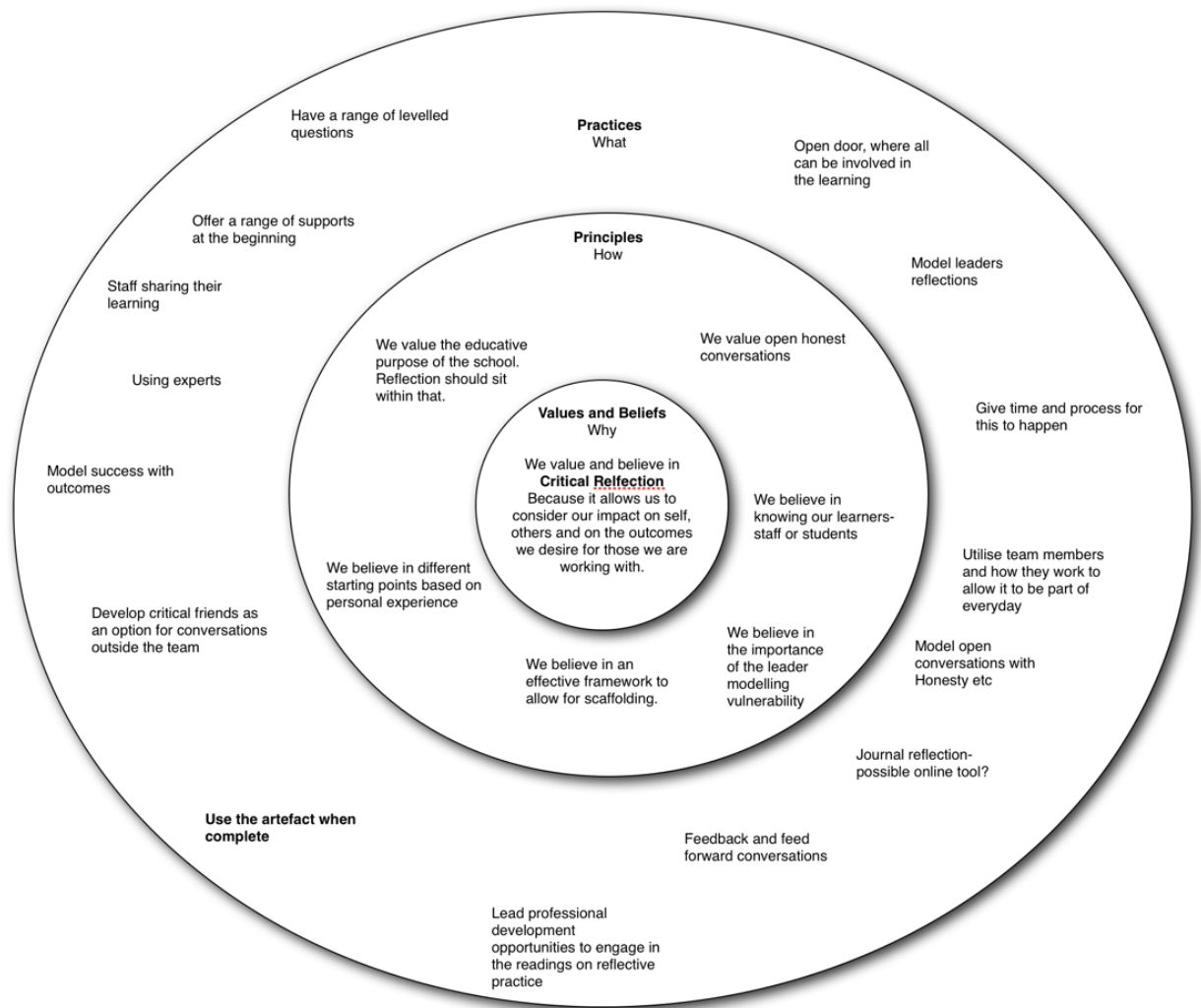the readings on reflective
practice

Figure 3: values and beliefs model of thinking concerning reflective practice

Creating the Artefact

The creation of an artefact is a pivotal part of this practice-based study, and it represents new knowledge. The self-reflection aspect of the previous section connects my experience and the reviewed research to the creation of the artefact. When in the process of combining the journey of working with the literature and with critical friends it was important to consider both the early thinkers such as Argyris, Lyons or Mezirow, as well newer thinkers. Over this time period much of the challenge and possibilities within reflective practice stay the same. The resulting work done in this practice-based study brings together the thinking of credible current practitioners, current research and my lived experience. It was essential to reference the importance of a changing landscape in education. As discussed in the literature review, change can be challenging, however, critical reflection is crucial to

innovate and challenge the status quo. An innovative mindset partnered with an inquiring mind needs to be part of the artefact.

When discussing the development of the artefact with critical friends, I realised that there was a need to make a deliberate and clear connection to leadership. It was deliberate because, in innovative schools, leadership is often set up differently from what may be seen in more traditional settings. The notion that everyone can be a leader is often thought to be a strength of these schools, therefore, all can take aspects of this approach and lead that culture of reflection. Still, the crucial role still lies with the principal and their actions around the critical reflection.

The nature of the literature and conversations I had have also led to the need for the artefact to be flexible and be applied to a range of purposes. One size fits all was not the goal of this artefact, so having levels of entry points and complexity within the artefact is vital. The outcomes of having entry points, as demonstrated in the artefact, show the requirement for leaders to deeply understand their impact and create a well thought out and connected process.

Critical Friends

As previously mentioned, I have involved the challenge and support of three critical friends in this study, but as this study did not involve formal interviews or field work, formal ethics clearance was not required. For 12 years I and the three critical friends have been part of a Professional Learning Group that meets at least once a term. These informal meetings are for us to seek support and challenge each other around effective practice and leadership. This forum was the perfect place to ask for critique and challenge of my thinking. Meetings through the year (some virtual) helped shape thinking and development behind the artefact. The professional dialogues were focused on four key questions that I asked each of them. These educators range from experienced principals to classroom teachers. The four questions were designed to elicit responses that lent themselves to personal reflection of the journey or experiences of these educators.

The questions were asked after I had shared the first iteration (figure 1) that had resulted from just informal conversations with these colleagues.

- What is the role of the leader in creating critical reflective practice in a school?
- Should critical reflection be part of everyday practice?
- The third question inquired into their thinking about a schoolwide framework for reflective practice.
- The final question focussed on how to encourage vulnerability and trust in the process.

The literature review, the informal conversations with the critical friends, and my lived experience resulted in a level of thinking that helped me to finalise the development of the artefact and its function.

MY REFLECTIVE PRACTICE JOURNEY

The findings in the chapter start the journey towards answering the question: how do innovative schools create the conditions for reflective practice? In the following sections, written in the spirit of personal critical reflection, I consider what I have discovered are the conditions for critical reflective practice, and the role of the leader. Then I look at the creation of the artefact and explain its use as a tool to support critically reflective practice.

Conditions

> As teachers teaching, it is a commonplace awareness that we need to 'model good practice', which is visible, experienced and open to scrutiny and judgement. But to lay bare our innermost thoughts and concerns – part of our very self and the construction of our own identity as a teacher is a far more risky business. (Armstrong, 2008, p 45)

Brogden (2010) describes the autoethnographer as someone who 'lays bare' (p. 370) their thinking and feelings and takes a risk by sharing a story. Writing of my own experience that has been a reflective journey of discovery since 2001 involves sharing my journey that others have influenced. Their words and challenge filter through my own lived experience. The lived experiences of fellow educators

therefore have played an integral part in my synthesising of information. Those who engage in their practice and reflect on it often bring clarity and authenticity to their work (Lawrence-Lightfoot & Hoffman Davis, 1997, as cited in Feuerverger, 2011). Analysis of research literature and the challenge of critical friends have supported in generating more clarity in my thinking. Throughout my career I have been a constant reflector. I wanted to analyse the impact on learning of my actions, but I realised this reflection was often conducted in a simplistic way, such as described by Kolb (1984) or further developed by Bailey (2012). I concluded that my reflections did influence the way I have practiced as a teacher, however the process was isolated and personal to myself and until 2001 in a traditional environment. As an emerging teacher, this foray into reflective practice came about due to witnessing non-engagement from students and the need for my own practice to develop responsively. At this early stage of my career, I had no one or little research to support my thinking and a framework to work with.

Thinking back to that time of starting my critical reflection journey, key moments of clarity occurred that supported the significant development of my thinking. One such moment was when I noticed how educational ideas or concepts became a marketing fad. Personally, I mistrust 'packages', and companies that have grown wealthy by pushing their packages through schools. By this I mean, for example, when publishing companies start to promote educational ideas and sell them as 'how to' packages. A recent example is Longworth selling the idea of play in learning (Longworth, 2021). This aspect of education was new to me, as I had spent most of my early years creating ideas for myself, though now having a book or published resource was initially supportive and it gave me the opportunity to see options that I could relate to. These early resources gave me the opportunity to investigate these ideas. I utilised the reflective work of Edward De Bono and his 'Six Thinking Hats' (1992) in 1994 to support my students and myself with a framework for thinking and reflecting. Using a framework positively impacted my ability to generate deep thinking for myself and then from those students I was working with. Following on from De Bono, I started to find more interesting and challenging ways of developing reflection with my students, more so than with my own practice. While in hindsight, I was reflecting on my own practice, I was relating it to growing my students' ability to know themselves as learners. That revelation came a little later. Utilising Bloom's

Taxonomy (Bloom et al. 1956) as a framework of questions allowed me to help students challenge themselves and their thinking beyond a simplistic view of reflection. What I noticed from this was a shift in the way that I approached certain aspects of teaching.

The importance of learning relationships started to develop in my ways of working as I had noticed those who trusted me and related well to my work would reflect more openly. My understanding of a learning relationship was that I knew the learner beyond formal data, such as a test, that is, I understood their background, I knew their hobbies and had a relationship with their families. At this stage of my career, I was working in a low decile environment, where trusting an adult was challenging for some students, whose home lives were not conducive to developing trust or trusting relationships. Utilising clear and workable frameworks such as provided by Bloom or De Bono played an important role as a way of engaging students. My next turning point was when I starting to take on roles of leadership. I began to transfer the reflection I was asking of my students and asking those questions of myself. An early goal was to grow my colleagues as reflective practitioners, so that they too would question themselves.

Growing as a Leader

As I grew into leadership, I started to surround myself with those also wanting to challenge learning as a practice. The goal of surrounding myself with challenging minds was to question how reflective practice, when connected to innovation could become part of everyday practice. These colleagues as mentors and advisors have been a challenging influence on my journey. Much of this influence comes from their probing questions, and I, in turn, asking probing reflective questions of them—trust-based, actual reflective practice.

These critical friends, have been cultivated over the last 20 years of leading innovative schools. As a collective we challenge each other's views on learning and teaching and have a strong professional trust in each other. They have all become principals of numerous schools over this time and left a positive mark on their journey.

- The recent, focused conversations I have undertaken based on reflective practice with these colleagues have all drawn similar conclusions based on the outcomes I see as important. While conversations took place, I focused on some internal statements essential to understanding how to engage in critical reflection. Typical starting points were:
- The importance of the role of the leader in critical reflection
- The frequency of reflective practice to enhance practice and growth
- Questioning how leaders can learn to demonstrate vulnerability and how they can encourage their staff to develop and demonstrate vulnerability

As critical colleagues, while we all have a similar outlook on the importance of innovation in our practice, we all work in different institutions with different visions. While the themes of our conversations are very similar, the resulting synthesis based critical conversations is somewhat different.

As a cohort of innovative educators, we all agree on the importance of the role of the leader. Our collective discussions concerning critical processes of reflection often tend towards leaders modelling the practice of being reflective, asking questions of themselves (Kane & Mallon, 2006; Toole & Seashore Louis, 2002). Modelling resonates with my practice as I open myself up for feedback and demonstrate the learning from that feedback. Teaching others to reflect is an aspect that is essential in developing an educator's ability to effectively reflect. Reflective practice frameworks, such as Finlay (2008) and Kolb (1984) are plentiful. One important aspect of developing positive conditions for reflective practice, is the way that leaders can influence critical reflection, which requires them knowing their staff and individualising the processes to allow each person to grow in a way that works for them. It is critical to personalise the approach to reflective practice, as this demonstrates an understanding that staff work at different paces and levels. Dreyfus and Dreyfus (1980) believed in four stages of cognitive development ranging from novice to expert in relation to both understanding and actioning learning processes. Novices need to have a framework described to them, while experts create their own ways of working based on prior experience. When considering this model, a scaffold is essential for the novice reflective practitioner. My experience working with teachers is that they need to start with generalised conversations about reflection as

a novice, about new practice, before they feel like they can participate and develop a sense of purpose and trust. Once in a place of ease, the development of conversations that are reflective and moving towards being critical can occur more naturally. Leaders play an essential part in the modelling critical reflection, especially to the novice practitioner, demonstrating the expectations of being critical in reflection.

The aspects of critically reflective practice that come to the fore when in dialogue with colleagues are; trust, modelling, developing a risk-taking culture and clear personalised frameworks that have research to support their creation. The critical friendships I have developed over the years, have led me to develop similar conclusions about the frameworks needed for critical reflective practice to occur successfully and its place within innovative schools.

Following on from seventeen years of leading innovative schools and the reflective challenges that come with this experience, such as writing down what critically reflective practice is, I questioned how the process of critical reflection might be represented visually. I became motivated to apply the knowledge I gained about critical reflective practice in this period so that others could see the power of a well-designed and well-supported process of critical reflection. My knowledge has been developed through a trial and error approach. Engaging in a practice-based study has led me to connect practice and research supporting the formulation of a stronger case for a simple structure that allows the user to develop confidence, skill sets, see results, and add layers of complexity when needed. Part of the practice-based approach to this writing has been the development of an artefact that synthesises my work and the work of others into a tool that educators could use to support their journey through reflective practice. The artefact (attached document), represents the practice-based aspect of my personal learning journey. The artefact also reflects the work referenced in my journal that I kept (Appendix no. 1) while working on this study. It evidences critical moments of self-reflection that have either challenged me or reinforced my thinking through readings or work with critical friends as part of the process. It demonstrates the reflective practice that I conducted while both managing the study and working as a principal.

Creating the Artefact

This beginning visual (Figure 1) came about as a result of my review of literature and the process of synthesising the various reflective thinkers, my experiences and the challenges from expert advisors (critical friends).

These advisors, as explained previously, are colleagues who have been involved in innovative education for a number of years. They are recognised by fellow principals as experts as leaders and practitioners. One is the principal of a Christchurch primary school renowned for its reflective practice and vulnerable leadership. One is
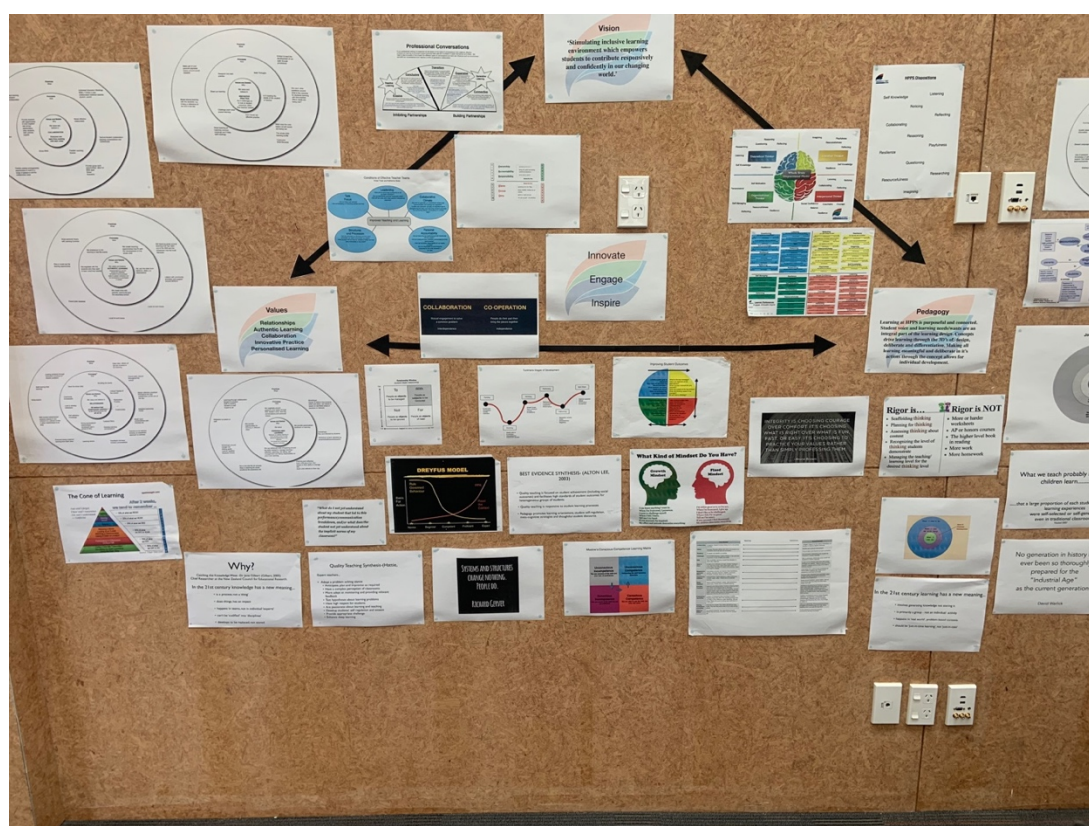
Figure 4: Example of the triangle supporting the educative purpose of the school outlining the vision, learning values and the way learning is approached along with supporting research and thinking to visually represent the educative purpose and function of the school

an Auckland secondary principal approaching learning in an innovative manner based on building staff capacity for change. The third is a principal currently on sabbatical working in an advisory field previously having led a range of schools.

The notion that reflection should be contextualised is an essential factor, in my experience, so that the practice in question is closely linked to the educative purpose

of the school. The points of the triangle (Figure 4) represent the vision, values and pedagogy of the school.

This idea of the triangle arose in discussion with the expert advisors to identify what is important in an educational setting. The envisaged model of reflective practice processes fits within the triangle framework to live out the purpose of the school and fit the thinking behind why learning happens in a particular way within a school. I also started to investigate the function a leader has within the triangle and resulting reflective practice. As stated previously, leaders play an essential part in developing the layers required for the conditions to support the practice of reflecting critically. These practices come with complex layers at each level of novice through expert. The leader must support staff to design an appropriate level of engagement within the framework for the teachers to start the process of reflecting, be it at the beginning, middle or end.

The second iteration (Figure 2), was developed especially because the artefact needed to be developmental in its configuration. The ideas of creating layers so that users can start with simple levels of action and move towards more cognitive loading in their approach is important, aligning to the Dreyfus (1980) 'novice to expert' model. The triangle (Figure 4) is at the heart of the model because it is crucial that the reflection links to the educative purpose of the school. As the model connects to the purpose of the school it supports leaders to articulate and enact the vision of the school as well as highlighting the importance that critical reflection plays in the triangle. In my lived experience and conversations with my colleagues, innovative environments have at their heart, the need for dialogue, to grow and develop new ways of approaching learning. A school with a reflective framework based on its educative purpose has the potential to support capacity for change and growth.

In creating the artefact (see attached document), I was very systematic in creating layers. Layers are important as each develops a level of complexity that is required for effective critical reflection. The layers allow movement from novice to expert as explained earlier, moving between the levels as required. The first set of questions are designed to support the initial stages of critical reflection and be a starting point. The layers get more complex as the questions develop a greater need for cognitive interaction. I was mindful of the need for the artefact to stay within the vision, values,

and pedagogy of the educational facility, so the questions had to be broad enough in their makeup and allow for connection to the current situation of the practitioner, including allowing for depth as staff develop their understanding of the educative purpose of their work place.

Using the Artefact

The leaders within the educational institution need to take lead at when introducing the artefact with a clear process. Engaging in professional learning development (PLD) in relation to working with the artefact, is imperative. PLD that is already embedded in all schools tends to a generalised and traditional one size fits all model; how schools approach PLD in preparation to use the artefact has to be quite different, as its focus is on the journey of reflective self-discovery rather than learning about a curriculum area or new product. The artefact requires a process that uses a distinctly challenging strategy to re-consider how a school approaches its PLD in the case of this process. Leaders should start by engaging in the reflective readings to fully immerse themselves in the nature of critical reflection. Working in Professional Learning Groups (PLG's), staff then dialogue about reflection. Moving forward the leaders in the school need to continue the process by sharing their own critical reflection practice to model it's importance.

Through the readings, leaders should understand the essential role they play in creating the conditions for effective critical reflection. Leaders should spend a considerable amount of time developing those conditions, making sure failure is encouraged, developing a warm and demanding culture and modelling the vulnerability it takes to critically self-reflect. These conditions should be part of the journey when utilising the artefact. As part of the process, leaders again should be constantly modelling so when staff begin their journey, they will have a range of exemplars to work with.

The premise of the artefact is that it can be a tool that is used in innovative schooling, as innovative schooling by its nature and design tends to embrace change. The need for innovative schools to question the outcomes they are achieving beyond the usual focus of literacy and numeracy allows these schools to celebrate diverse outcomes through the use of the artefact and shared reflection.

While the conditions are the key essential aspect that must be focused on first, practice is also required by staff engaging with reflection as practice gives rise to modelling opportunities. Throughout the developing stages of the artefact, practice is critical. Embracing the idea of novice to expert helps with personalising the process towards staff and allowing them to enter at a place that works for them. The leaders should be having reflective conversations and observing staff to personalise the entry point into the artefact. It is essential at this stage that reflection is based on the educative purpose of the school, aligning all reflections with the triangle.

As the artefact is introduced it is important leaders model reflection as part of the journey into implementation. As well as modelling reflection, leaders should use this time to clearly communicate with staff and receive reflective feedback as part of the modelling loop into the next steps. Initially, a one size fits all approach is acceptable when introducing the artefact, but as the process develops, a responsive approach by the leader is required as staff will develop at different rates, therefore the process will need to be personalised.

The questions in the artefact have three distinct levels, based upon the varying levels of novice to expert. As with all learning, when beginning a process, participants are starting to develop an understanding of the idea they are at a novice stage. The novice questions are fundamental in their approach and a starting point to allow for the other complex layers to be developed simultaneously. The questions are a basic outline that function as a starting point. Once staff are demonstrating deep cognitive reflection, the questions will then need to be tailored to the schools' educative purpose. As the novice layer becomes an active part of practice, the second level could be introduced.

The second layer brings an extra level of complexity as it starts asking staff to go beyond their own thinking and add a layer of evidence. The added question to this layer, seeks to provide staff with the ability to research ways in which to change or justify their actions when reflecting on their practice. This layer requires staff to delve into thinking beyond their own ways of working and into new possibilities as a way of developing the outcomes for themselves and their students. It also requires them to break out from their own thinking and learning space and seek advice and challenges from other staff, thus helping to build a culture of inquiry in a more

natural, purposeful way. Once mastery is developed with this layer and staff are in a place of comfort with challenging themselves and adding evidence to their thinking, the third level can start to be part of the reflective practice.

The key to this third level is requiring staff to add some communication to their reflection that can be shared. Once they have reflected on their work, challenged themselves on the way they are approaching learning, developed new methods based on sound research, they can now share. This aspect of communication allows for school wide development as staff would need to be open to sharing their journey based on sound practices, for colleagues to learn from. This could be done as critical friends, in PLG's, in staff meetings, and most importantly, informally as critical reflection becomes part of the culture. Schools can start the process where best fits the needs of each staff member, their processes and reflective development.

As the questions develop in complexity, the need for written documentation and follow up conversation grows. Conversations help staff unpack their thinking and allow others to critique and challenge so that reflection is not done in isolation. The collaborative nature of innovative schools does allow for this to happen naturally, as the space design of innovative schools lends itself to collaborative practice and conversations between staff become a critical aspect of co-teaching (O'Reilly, 2016). At this point, the addition of a critical friend (Cushman, 1998) may be prudent. There are huge benefits to working in collaborative teams and the conversations generated, however it is also beneficial for a colleague/critical friend who is removed from the intimacy of the team to be involved to bring different dimensions into the work of teams. The final layer of questions challenges educators to be far more vulnerable in their approach as it requires the input of others to support the development of each individual.

Schools are required, when introducing the artefact, to make many strategic and critical decisions regarding the journey. One critical decision involves the recording of the reflection undertaken. Writing is an aspect of reflection that improves the clarity of thought, so, how, where and when this happens should be considered. Staff should also be compliant with the criteria within the Professional Growth Cycle, written reflection is an aspect of that, so connects to the artefact and written reflections.

The process outlined in the artefact allows compliance to be met, personalisation to be achieved and provides growth for staff as the ultimate outcome. The ability for schools to approach critical reflection using the artefact in a way that works for them allows leaders to develop frameworks, within the artefact's use, to work with their schools' educative purpose to create positive, effective and sustainable change.

DISCUSSION

The focussing question of this study is: 'how do innovative schools establish conditions for effective reflective practice?' The intention of this practice-based study was to create an artefact that can effectively support the development of critical reflection in schools. The importance of the research question lies within the need for critical reflection to be part of everyday practice in schools, especially in innovative schools where collaborative teams of teachers are the norm. To truly challenge the traditional industrial model, teaching staff need to be aware of the impact of their work on self, colleagues and student outcomes as they practice in new ways. This chapter rounds off the study and answers the question in six different parts. The first part is the connection of the artefact and question to the New Zealand context. Following the context in New Zealand is a reflection or judgement of the artefact. The short piece following that identifies the need for a connection to the educative purpose of the school and to innovation. Finally prior to the conclusion is a section on what this study may mean for research moving forward.

The Current New Zealand Context

The current model for reflective practice in New Zealand for teachers is the Growth Cycle (Teaching Council of Aotearoa, 2020a). This is a relatively new process by which teachers demonstrate they are reflective and constantly developing through an approach that involves goal setting. A requirement as a teacher is to demonstrate this reflection, based on the Growth Cycle Framework, as part of the requirements to be registered to teach. It has been developed as a part of the ongoing process to review how well teachers are developing in their practice as the old model of appraisal is removed. The growth cycle model is based on setting goals and reflecting on the goals, engaging in conversations with colleagues, re-evaluating the

goals/setting new goals; it is, however, a somewhat simplistic cycle that allows for feedback, observations and self-reflection. There are subtle links to the educative purpose of the school as the goals are negotiated with leaders, though, as previously stated, the link to the school's vision and values should be at the heart of the process.

The difference between the Professional Growth Cycle and Teaching as Inquiry (Ministry of Education, 2007) is minimal. Both involve a cyclic approach, and both involve goal setting. The inquiry model could be interpreted as very personal to each educator, whereas the Growth Cycle is promoted as being very collegial. However, both have limitations. Neither considers the teacher's experience of teaching experience or reflective practice. My belief, based on my experience, is that both processes encourage a one size fits all approach, which is the likely outcome for most schools. In their current form, these processes also do not consider or understand the nature of the learning environments educators may be working in. In this study, I have argued that a reflective approach be aligned to the educative purpose of the school, and that a culture of reflection is being developed or is in place.

In contrast to the two models above, the artefact designed for this study deliberately moves away from a compliance model to a growth model that all can benefit from. Aspects of the function of the Teaching Council's growth model is evident in the proposed outcomes of reflection and improved practice. The artefact designed for this study does comply with the current Teaching Council thinking on teacher development, but focusses more on developing individual teachers in their current learning environment, so they can understand their impact on self and others at a level of complexity that is appropriate to the personal journey the staff member is on within the vision, values and pedagogy of the workplace. It connects to the study question in relation to the innovative environments and the collegial/collaborative nature in which these spaces operate. The conditions allow for a school to personalise the artefact towards their purpose, vision and values and then connect the work to the shared understanding of the school.

Judging the artefact

The resulting artefact, which contributes to answering the question, is judged here. This judgement forms part of the critique of the study and the creative function of the practice-based approach of this study. The literature review, ranging from Dewey in 1910 through to current times, shows that reflective practice is not a new idea. Over time, it has changed and developed in complexity, and so has the application of reflective practice, however, with change comes challenges around implementation. I have utilised the work of theorists who write about reflection, (eg Gibbs, 1988; Kolb, 1984; Leithwood et al., 2010; Schön, 1987), my own thinking and experience, and that of critical friends, and existing models to develop an artefact that allows for personalisation aligned with the educative purpose of the school.

Reflective practice is embedded in many aspects of particular vocations. Research into effective critical reflection is apparent for nurses (Davey et al., 2021) and initial teacher education students (Kilgour et al., 2015) where they are encouraged and supported to develop reflection as part of their everyday work. Brookfield (1995), Gibbs (1988), Kolb (1984), and Schön (1987) all promoted reflective practice as a way of developing self through a model. While each new developing model grew, one omission was becoming apparent. This omission was the ability to see reflective practice from the perspective of the educative purpose of the school in which the teacher is working. Critical reflection in innovative environments requires personalisation (Benade, 2018a), and requires looking at reflective practice from different perspectives such as through collaborative practice, collegial relationships, and the school's purpose. Teams of teachers working together is a key function of innovative schools that requires a strong model to allow staff to be open to reflecting.

Three main components of critical reflection are lacking in many models from my lived experience. I have addressed these aspects that I see as missing when developing the artefact. The three aspects are personalisation, leadership and culture/purpose. Each of these critical parts are outlined below as to the purpose of their role within critical reflection.

Personalisation is a critical aspect of reflective practice as it is a personal function. Individual practitioners need to understand the purpose of reflective practice and how it impacts on self.

1. Personalisation: what I developed into my model was the ability to personalise it to the developmental needs of the educator. The complexity of its questions grows as the ability to practice reflection grows. The questions start at a basic level and grow in complexity as the practitioner becomes more comfortable with the process of reflecting. The cognitive load of the questions also develops.

The role leaders play in the development of reflective practice in organisations is well documented (Tschannen-Moran, 2014). The need for leaders to truly understand their place in enabling effective reflective practice cannot be underestimated. Baier (1994) as well as Tschannen-Moran and Hoy (1998) discuss the significance of trust, which has to be modelled by the leadership of the school. Forsyth and Adams (2014) and Leithwood et al. (2010) identify the leader's role as crucial in the way staff operate, and emphasise the need for leaders to demonstrate levels of competence and openness.

2. Leadership: Leadership plays a key function in the development of critical reflection in a school. The artefact explains the role leaders should play to allow for success.

The final aspect that I draw on, namely the need to connect to the educative purpose of the school, is not well referenced in the reflective practice literature reviewed for this study. I have termed this aspect, 'culture and purpose'. Although schools may use the same curriculum, their approaches vary, both in philosophy and implementation. The diverse nature of approaches adds to the requirement that a model can be personalised to the nature of the schools' educative purpose.

3. Culture and Purpose: The triangle (Figure 4) is the key to developing an understanding of the connection of the purpose of the school to the reflective practice.

The purpose of the artefact is to address what I see as missing from current reflective practice and combine them into the artefact to allow for it to support all schools in developing a critical practice and have success in engaging staff to feel that they are participating in something worthwhile, personalised and helping them develop as practitioners. Connecting the educative purpose of a school with the leadership driving forward the culture and purpose alongside a personalised approach brings this artefact to the fore in terms of new ideas.

Designing the connections

The practice-based and autoethnographic approach enabled me to engage in reflective practice myself, reflect with innovative colleagues and converse with critical friends about the key aspects that should inform an artefact. Candy and Edmonds (2018) reflect on the need for practice-based research to produce something that is new and will engage others. What has resulted from the work undertaken in this study is an artefact that combines 'the new' with 'the researched'. The connection, between research and new ideas, to innovative schools is critical as in these institutions, the need for the work to be collaborative and relational in its approach is a core component. This approach relates to the establishment of the processes for utilising the artefact. The practice of being vulnerable in leadership to develop the conditions within an innovative environment is the new aspect that resonates with the experience that I bring to the research. Connecting the educative purpose to personal development adds necessary layers of complexity. Research into something that is ever-evolving is challenging. Thinking about reflection and reading about reflection is one thing; engaging in critical reflective practice is different to the act of just research, it combines practice and research.

What does this mean for research?

The connection to my experience, as outlined in the previous chapter, is an important part of this study. I have been practicing versions of critical reflection as a teacher, senior leader and as a principal, experience which supports this practice based study. While investigating practice-based research, it has become apparent

that most work in this area does not include education. Candy (2006) and Skains (2018) indicate how practice-based research can occur easily in the creative arts, showing that it is possible to connect performance or the creation of pieces to the demonstration of new knowledge. Scrivener (2002) also argues for the arts as an outlet for practice-based research and new knowledge coming in the form of creative pieces. Teaching is a practice-based profession (Hargreaves, 1996). The Teaching Council Standards (Education Council, 2017) are practice-based, reinforcing the practice-based dimension of teaching.

To encourage greater based practice evidence in the profession, practice-based research for educators as a pathway should be encouraged. A practice-based approach for educators who want to study allows them to contribute both to a research base and resources in the form of artefacts that would hopefully support the development and growth of others. The artefact that has been developed as part of this work is an example as it connects research to effective practice in the form of critical reflection linked to the Professional Growth Cycle.

A Masters approach that is designed for teacher practitioners to advance their learning through working on practice has merit. The connection to practice would be easy for teachers to see as an opportunity to continue as learners focusing on a creative outlet rather than only research. The connections are far easier to see than a research thesis in the traditional sense. Whereas researchers often cannot connect the thinking to action, a practice-based approach allows for both to occur. Educators are required to back their thinking with research, and this gives an excellent opportunity for educators to follow this path.

The limitations in this study have been balancing my role as a full time principal and giving the time needed for this study to be a success. Some work in this area by the university is to be encouraged as to allow a full time practitioner the ability to do further study. A paper leading towards this outcome would be a good option as there are challenges to this process. The paper could sit alongside the research 30 point options.

The limitations and possibilities of a practice-based option to study for current educational practitioners go hand in hand. While I see the possibilities for educators to follow a more practice-based approach to their further study, it does come with challenges. I reflect that several aspects could be considered challenging to the average teacher. Especially those who may not have been involved in study for some time.

The first challenge is writing. Academic writing is critical in a thesis, however, the papers leading up to the thesis are just as important. The design of the course needs to lead towards the challenge of writing in a way that is both personal (own experiences/autoethnography) and academic, as the two often challenge each other. The second challenge stems from one's practice knowledge. Experienced educators have knowledge based on lived experience, but may have no concept of the research that can help make sense of practice. The requirement to read deeply is a big challenge, but interesting. Even understanding use of the library and how to find appropriate readings is a challenging part of the process.

What works well I have referenced above. Connecting this to actual practice is the most exciting aspect of a practice-based approach. Practitioners often believe their own rhetoric, so challenging it by researching is a positive approach. This also involves reflective practice, which has its benefits no matter the focus.

The final aspect I would like to celebrate is the creation of an artefact. It is easy to see why this approach is often used in the arts. Educators are constantly developing processes, visuals and resources that will possibly support the learning of their students or colleagues. The chance to develop something that involves personal experience, research and creativity to support and challenge the learning and development of others does not often happen at a high level. I reflect that this aspect is the most engaging part of the process.

Conclusion

The literature review provides evidence that when critical reflection is engaged in at a cognitively challenging level (Flower & Hayes, 1984) results are that growth of

practitioners occurs (Osteman & Kottkamp, 1993). Providing a model that schools can utilise to begin or challenge their own critical reflection process is a supportive way of allowing schools to challenge the limited scope of the Professional Growth Cycle (Teaching Council of Aotearoa, 2020b).

While individual parts of the process may not be new knowledge, the whole process is, in its design. The resulting artefact pulls together crucial aspects that allow for critical reflection to occur and provides support for the conditions as well as support for innovative schools. It challenges leaders to adapt their practice and have staff develop trust in the process. It challenges teachers to develop their reflective skills and move though levels of complexity. It challenges schools to personalise reflection to their educative purpose, rather than just reflect.

The presumption that innovative schools will engage with this process or use it to modify their current processes is based on conversations and the notion that innovative schools are always looking to learn and re-learn as part of their journey. While written and researched with innovative schools in mind, the resulting document and process would be suitable for any school context as long as the steps are followed.

Ultimately the goal of this study was to bring teacher critical reflection to the fore in a positive action-based way, a process with which practitioners could engage in at a level that suits them. Critical examination of practice is required if the needs of learners are to be met as they move into a world of complexity and challenge (OECD, 2018) acknowledging that an inquiring mind should be encouraged and developed. To answer the research question is not simplistic as it has complex components. The desire to see reflective practice as part of the school culture needs to be central, and this is the responsibility of the leaders within the school. The conditions they create around trust, sustainability, personalisation and effective outcomes will result in the success of the process. The artefact is the outcome that most answers the question as it brings together the critical aspects into a package that can be used by schools, innovative and traditional. It would be a useful outcome for someone to take this artefact and use it as part of another layer of research into

critical reflection to gauge its success against the question and in outcomes for staff and students.

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APPENDICES

Appendix 1- Reflective Journal, record of thinking and processing throughout the journey

Thinking	So what/what next
28/01/2021 Start of the year leadership meeting- new team of 5, 2 new AP's (not new to the school but new to the role) Wondering about their ability to reflect since they don't know what they don't know! While Agrys might argue those at the top of their field might struggle to reflect, I worry about the challenge that may bring to those at the top, but those that don't know. I am also interested to see how they create separation from their teaching peers whom they have strong relationships with.	Set up reflection opportunities with coaching
Week 2 7th-9th Feb 2021 Following on from the leadership meeting, have set up a coaching time with each of the new leaders. Will be utilising Kolb (1984) to start with as it's simple and easy for them to grasp.	Wonder if the simplicity is just helping me think I am supporting rather than challenging the complex situation.
22/02/2021 Lock down!!- big reflective opportunity! Ran a staff meeting on return around practice and the flexibility of planning. Posed some reflective questions: Smyth, (1993) 4 sequential questions. (a) describing (What do I do?), (b) informing (What does this mean?), (c) confronting (How did I come to be like this?), and (d) reconstructing (How might I do things differently?) I reframed these to be related to the transition back into school.	Smyth further developed Kolb's thinking. Again I noticed relationally those who felt a working trust with me were able to engage more- what is the role of the leader in this case?
24/02/2021 The structure of school has changed as we have employed 12 new staff for the start of the year- so teams of three that were quite	Where does something like HBDI fit, not as the tool as such but as a type of tool to build an understanding of self.

settled have now all been disrupted. Have done HBDI profiles on them all and done a team profile as well. This has allowed for them to reflect on their preferences and aspects of practice they may omit when designing learning. Have developed a team agreement (Boles and Troen, 2011) to help them think about how they may operate and how they may reflect or think about their work. The agreement allows for me to have conversations with them based on the piece of paper to take away the personal while I develop relationships with the staff (especially the new ones)	I do notice that because I have knowledge of their thinking preferences I can tailor my questions to either support or challenge them
Week 6 12/03/2021 Finished first round of coaching with new leaders. Was interesting to see how they reflected. They have a long standing relationship with me, so I was able to challenge them to go beyond just what they thought I wanted them to hear. Had to adapt on the fly the questions I was using. One of the new team members is newer to the school, am noticing in reflection time that she is flexing her muscles a bit to get noticed. Will follow up with "why" next time we meet. Online catch up with critical friends, conversation around reflective practice.	I followed up on the noticing of the newest member and the flexing of the muscles. It is her coping mechanism, I have helped her see this, she is reflecting on it- but "so what " We need to co-construct a scaffold for her to notice and change- WHAT IS THE ACTION THAT FALLS OUT OF REFLECTION? WHO SUPPORTS WITH DEVELOPING THAT?
23/03/2021 Warm and demanding- Ran part of a staff meeting on this explaining the concept. We have used this phrase as part of our work with growth mindsets. Staff need to be aware that for us all there will be times when we reflect on the successes and how they may have occurred, how we replicate them and improve on them. As well as challenging conversation to shift traditional thinking or poorly thought out practice.	Was interesting observing the staff while I discussed this and watching those who I believe I will have to support more in their ability to be honest. How will I frame questions to support them
Interesting to see those who actively worked on the reflective questions- A week later from posing them, some teams are flying ahead with their thinking and systems to support the transition, while those who dismissed or skimmed over the questions are struggling- have set a meeting with those 5 teams.	
07/04/2021	I wonder for those teams, all of

Meeting with 5 teams. We went through each question together and discussed- While I know the act of writing plays an important part, I had one person scribe while we had a collaborative conversation. The impact was greater than when they didn't do it as they have all participated and seen some possibilities.	which are new and have staff who are formative in their relationship with me and their understanding of the school, if this again shows the need for trust and culture understanding/development?
03/05/2021 Start of my sabbatical, I am sitting at home reflecting that for the first time in 9 years I have space for myself and all I want to do is go into work to see how it is going. Is this a leadership thing? Is this just my need for control? I fully trust the acting principal and know she will do a great job.	Maybe I need to structure my break time more.
08/05/2021 After a couple of days of down time and catching up with some friends I have set myself the task of structuring my days to have a range of activities happen. I will spend my mornings everyday working on readings and writing. At 11am I will work on any MOE tasks, then I will engage in some sort of physical activity. My self reflection is that if I don't structure my days I will end up doing very little. Shared my first iteration with my critical friends- sought feedback, developed a set of questions for them to help shape the next try.	
31/06/2021 3 weeks in and I am on a role now. I do have to keep referring to my notes and how I write. My ability to write in an academic way is a struggle. I could easily stand up and share this in a presentation, however the act of writing is a problematic one. Feedback from my supervisor reflects this. I need to be better at structuring my words and thoughts. Shared the second iteration based on the questions and further reading. One critical fiend led us all through a framing process of values and beliefs to create a circle of thinking.	
Conference in Queenstown	

Week 2 term 3 After a term of sabbatical, coming back to school and beginning "one on ones" (a process by which I meet each staff member for a 10 minute time frame each couple of weeks- we term it warm and demanding) I have noticed that my questioning around their own thinking/emerging reflecting has enabled me to dig deeper.	Perhaps the simplicity of Brookfield (1995) has challenged me to conceptualise the questions I pose differently
06/08/2021 Have noticed that being away for a term has challenged my relationships with new staff. My first round of one on ones has been effective, but not as effective as I would have hoped.	Will make more time for the new staff, but also make sure I reconnect with experienced staff too.
24/08/2021 Lockdown, reflection for teams and their impact on the students is huge. I have asked Middle Leaders to take teams through a series of questions as part of their reflection after 1 week of learning at home. The questions were the novice questions from the artefact.	The noticings were that most staff could answer the basic questions, however, the depth came from the levels of trust that staff had for their middle leads. One team has a slightly strained relationship with their lead and their answers to the reflective questions lacked and critical openness.
27/08/2021 Have run an online workshop for a team on reflecting with their students. We workshopped the novice questions to meet the needs of their aged students so that they might have an impact on their personal learning journey. We wrote a lesson plan that will start with all students having some basic questions to answer about their learning.	Overall goal here is to reflect personally then to reflect on others work in a critical and constructive way.