Including creativity in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership

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Abstract

In 2007 a revised *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c) was introduced by the Labour government. This curriculum document included all subject areas and key competencies. Cross-curricular integration was advocated, and its values and vision promoted the holistic development of confident, creative, and enterprising life-long learners. Schools were also encouraged to formulate teaching and learning programmes contextually appropriate to their own unique students, school community, and situation. Three years later, in 2010 under a National led government, the Ministry of Education implemented *National Standards* in reading, writing, and mathematics (New Zealand Ministry of Education, 2010a). Unlike the *New Zealand Curriculum*, the *National Standards* focussed narrowly on these core subjects. Teachers also became accountable for judging and reporting annually, to parents and the Ministry of Education, on students' performance against the rigidly prescribed chronological achievement benchmarks of *National Standards*.

This complex and contradictory educational landscape was the setting for this research study which investigated teachers' practices of 'creativity' in education and the leadership that enables these practices. Nine participants from three schools were involved – three senior leaders (two principals, one deputy principal), three middle leaders, and three Scale A teachers without formal leadership responsibilities. A qualitative methodology was adopted and semi-structured interviews were employed to explore participants' personal experiences and their perceptions of developing students' 'creativity' in today's schools.

The literature review highlighted key factors that have an impact upon the development of student creativity – *definitions*, *barriers*, *benefits*, *and development*. The major findings for the study were therefore derived from the focussed exploration of the following factors – participants' definitions of creativity, their perceptions of the benefits of creativity, and the ways in which teachers facilitate creativity development through their pedagogical practices. Data was also gathered concerning the positive influence of school leaders upon teachers' development of their students' creativity. The data were analysed qualitatively to identify important themes.

A key theme emerging from the data findings was that all participants emphatically viewed creativity development as of great benefit for students – a belief that fully aligns with the creativity literature. The benefits described by participants were also revealed to be motivational and guiding factors for teachers' pedagogical practice and a driving force for school leadership behaviour. However, despite participants' genuine commitment to creativity recognition and development, several challenges were highlighted that could potentially hinder students' creativity. These themes were also present in the literature; for example creativity was not clearly defined, it entailed an element of risk, and participants had received little or no creativity training and professional development. Furthermore, it was evident that not only were participants juggling the development of students' creativity with the performative pressures of standardised assessments in literacy and mathematics, they also lacked confidence in utilising or developing students' creativity within these core subjects.

The findings and key themes led to recommendations at a policy, school, and individual level in terms of ensuring that:

- The *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c), including its principles, vision, values and key competencies, which set the direction for students' holistic and cross curricular learning, is fully utilised by teachers and leaders as the guiding document for their pedagogical practice;

- Teachers' effective pedagogy for creativity development is enhanced by professional learning to ensure that all aspects of students creativity are enhanced through the explicit teaching of creativity and through the inclusion of creativity development within all areas of the curriculum; and

- Leaders inquire into their leadership practice, and teachers inquire into the impact of their teaching on their students' creativity development and also on their curricular learning and achievement through "Teaching as inquiry" (New Zealand Ministry of Education, 2007c, p. 35).

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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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Chapter 1. Introduction

Background

The role of 'creativity' within primary school education has long been the subject of research, debate, and comment. In 1931, in a report commissioned by the United Kingdom Board of Education, Hadow (1931) stated that the "soul of education" (p. xiv) was to encourage innovation amongst staff and students and to nurture in both a creative spirit that eschews the tried and tested and bravely breaks new ground. Guilford (1950) in his address as president of the American Psychological Society (1950), endorsed this view. He explicitly pronounced that creativity and education should be closely linked and asked two key questions "How can we discover creative promise in our children and our youth… and … how can we promote the development of creative personalities?" (p.445). Plowden (1967) and the Central Advisory Council for Education in England, echoed Hadow's inquiry and recommended a curriculum and pedagogy that was empathetic, adaptable and fostered students' creativity, inquisitiveness and personal motivations. Plowden (1967) also stated that, as the benefits of creativity outweigh the risks and uncertainties, teachers must allow their students to follow their individual passions to explore diverse pathways of discovery. The important place for creativity within education was reiterated yet again by the National Advisory Committee on Creative and Cultural Education in *All our Futures: Creativity, Culture and Education* (1999). They posited that a nationwide strategy for creative and cultural education was essential for students to mature holistically, to discover and develop their individual abilities in order to enhance their self-belief and their potential to comprehend and thrive in an increasingly complex world now and in the future. As Maslow (1987) states "creative education can prepare people for the unknown" (p. 255). Moreover, in the words of Paul and Kaufman (2014):

> There is little that shapes the human experience as profoundly and pervasively as creativity. Creativity drives progress in every human endeavor, from the arts to the sciences, business, and technology… Creativity is the vehicle of self-expression and part of what makes us who we are. (p. 3)

It would seem self-evident, therefore, that a key role of primary school education is to develop the creativity of our young learners, so that they can explore, enjoy and benefit fully from their school experiences, mature into well-rounded individuals, and develop the potential for success across a range of disciplines. However, history shows that in an education system only punctuated sporadically by calls for creativity there are more creative troughs than peaks. Despite the advice of Guilford (1950) and the recommendations of government-commissioned research bodies, such as that of Hadow (1931), Plowden (1967) and the National Advisory Committee on Creative and Cultural Education (1999), the development of students' creativity is rarely mentioned explicitly in education policy documents and inconsistently encouraged in the curriculum.

This erratic 'on-again-off-again' interest in developing students' creativity has been echoed throughout education in much of the English speaking western world, including New Zealand. At the present time, it is proclaimed by many that creativity is now off the agenda and we are at a creative nadir in education (e.g., Burnard & White, 2008; Craft, 2001, 2003; Ings, 2017; Robinson, 2006; Robinson & Aronica, 2015). This current lack of creativity in education, these authors assert, is of particular concern and also rather ironic. Our world is changing economically, technologically, socially, culturally, and environmentally at a faster rate than ever before. As a result, key aspects of creativity such as adaptability, imagination, initiative, and the ability to flexibly apply knowledge and skills in new and diverse ways are needed now more than ever before. In fact, in the light of these increasingly complex and unpredictable twenty first century demands, even politicians, economists, and businessmen are echoing the educationalists call for creativity (e.g., Fallon, 2016; Obama, 2011; Vincent-Lancrin, 2015; Yusuf, 2007). However, despite this apparent consensus, many writers maintain that, paradoxically, due to consecutive educational reforms which focus narrowly on student achievement in literacy and mathematics, there is a gap between what is needed from education and what education is able to deliver. As a consequence, today's students are not being enabled to meet the complex challenges they face, now and in the future (Burnard & White, 2008; Craft, 2001, 2003; Ings, 2017; Robinson, 2006; Robinson & Aronica, 2015).

In seeking to enhance our knowledge of creativity in education within New Zealand, it is important to recognise that much of the literature and research concerning creativity emanates from the United Kingdom, from America and, to a lesser extent, from Australia. Furthermore, it is essential to place New Zealand's education system within a geographical and historical context. Like that of America and Australia, our current education system was born out of a social transformation that took place hundreds of years ago in a country thousands of miles away.

It was in the United Kingdom, that the Industrial Revolution (1760 to 1840) eventually resulted in free compulsory schooling for all children. Prior to this, citizens in rural communities had, for many centuries, remained largely illiterate and geographically immobile, needing only to learn the traditional crafts and trades first-hand from their elders. The technological advances of the industrial age created a wide range of new goods and materials and totally transformed production methods. Suddenly, an army of manual labourers was needed and mass migration from the countryside to the cities took place. This in itself did not require the education of young 'working class' people, as their jobs remained largely basic and menial. Eventually, however, the campaigns of the National Education League resulted in the *United Kingdom Education Act* (United Kingdom Parliament, 1870) which ensured that free education became a reality for all children. New Zealand, Australia and America soon followed suit; the 1877 *Education Act* (New Zealand Parliamentary Council Office, 1877) established New Zealand's first secular, compulsory and free national system of primary education. New Zealand's education system therefore has its roots in a nineteenth century conventional model of education (Maslow, 1987) which was specifically suited to the needs of industrial society at that time.

With reference to the history of New Zealand's education system from its inception in the late 19th century, Tearney (2016) states, "put simply, education is about life and life is about education" (p.3). The evolution of our curriculum over the last 140 years is reflective of New Zealand society's changing beliefs about what education should achieve at a national level and what children need to learn. It also illustrates educationalists' efforts to achieve an effective balance between the diverse needs of students, their individual fulfilment, and the needs of their communities (Tearney, 2016). With these goals in mind, Tearney (2016) maintains that curricular changes

over the past three decades have offered students a greater diversity of achievement possibilities and this situation is further enhanced by the *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c) which allows schools to adapt their teaching according to their own unique social and geographical contexts. However, Tearney (2016) also acknowledges that despite this flexibility, today's curriculum is still "more heavily targeted towards academic progression" (p.3). Robinson and Aronica (2009) have a similar but less positive view. Whilst they acknowledge that considerable educational evolution has inevitably taken place over the last 150 years, they see the plurality of achievement possibilities for students as being negated by a world-wide educational emphasis on academic achievement. Consequently they believe that, in the most important respects, education today still anachronistically resembles that which was appropriate in the eighteen hundreds. Many decades later, these two authors re-iterate Plowden's (1967) disparaging statement "the past is still with us " (p. 210).

There are several grounds for this belief. In the first instance, Ings (2017) argues that the New Zealand education system still exhibits the tiered accountability of eighteenth and nineteenth century institutions, whereby an upper echelon are in control and those beneath them must adhere to policy directives implemented without genuine consultation. Secondly, the current marginalisation of creativity is redolent of education in the past. For example, in the nineteenth century, a narrow curriculum devoid of creativity was designed purely to equip students for their future jobs with the basic skills they needed in reading, writing, and mathematics. In addition, the overall structure of education was like a "pyramid" (Robinson and Aronica, 2015, p. 34) with Intelligence Quotient (IQ) tests such as the Stanford-Binet Intelligence Test (1916), enabling a select few to progress upwardly through the levels towards the apex of academic success. Robinson (2006) argues that globally we are currently experiencing a case of 'déjà vu', as reading, writing, and mathematics once more sit in prime position at the top of a narrow hierarchical curriculum. Students' success is dependent on achievement in these three subjects, and creativity in education is similarly lacking. Reinforcing this lack of creativity are numerous government initiatives which omit creativity from educational policy; for example, the compulsory statutory assessment tests (SATs) in the United Kingdom (United Kingdom Department

of Education, 2017), America's *No Child Left Behind* Act in (United States Department of Education, 2001) , Australia's *National Assessment Program for Literacy and Numeracy* (NAPLAN) (Australian Curriculum Assessment and Reporting Authority, 2008), and New Zealand's *National Standards* (New Zealand Ministry of Education, 2010a). Consequently, although not all agree with Robinson's dire assertion that schools may be killing creativity (Robinson, 2006) as Burnard and White (2008) and Cremin (2015) claim, the evidence of creativity development in education today is disturbingly lacking.

If students' achievement in the core subjects were improving, it could be asserted that the call for increased creativity would have little substance. However, evidence shows that this reductivist approach, as described by Brundrett (2004), is not beneficial. In countries with standards-based assessments, despite this narrowed focus, achievement levels in core subjects are consistently declining, as shown by the *Programme for International Student Assessment* (PISA) (Organization for Economic Cooperation and Development (OECD), 2013). Furthermore, disturbingly wide attainment differentials still exist between high and low achievers. It is asserted by educationalists such as Elley (Collins, 2017) and Robinson (2001) that we are not offering a learning experience that is motivating, engaging or enabling our students to achieve and develop their unique potential. To enhance learning outcomes for all, as described by Maslow (1987), it appears that a different more humanistic and transpersonal approach is required – one that accepts students' individuality, empowers them, motivates them and develops their creativity.

Rationale

This thesis seeks to explore further the issues concerning creativity in education as investigated by such researchers as Baer (2016), Burnard and White (2008), (Craft, 2001, 2003, 2010, 2012), Kaufman and Sternberg (2010) and Trotman (2005). The rationale for this research is that creativity, although emphasised as important in the literature, is not currently included in the majority of primary school teaching and learning programmes (Robinson, 2006). The beneficial influence of creativity on the learning, achievement, and psychological well-being of students was identified in the last century by Hadow (1931), Guilford (1950), Plowden (1967) and the National

Advisory Committee on Creative and Cultural Education (1999). More recently, in today's rapidly changing world, scholars have re-emphasised the link between a 'creative mind-set' and the potential for success (e.g., Beghetto, 2008, 2010; Burnard & White, 2008; Craft, 2001, 2003; Jeffrey, 2006; Kaufman & Sternberg, 2010; Plucker, Beghetto, & Dow, 2004; Robinson, 2001, 2006; Stoll & Temperley, 2009; Trotman, 2005). In addition, political and commercial imperatives in the English speaking western world have prompted a revival of interest by governments in developing students' creativity (Burnard & White, 2008; New Zealand Ministry of Education, 2007c; Plucker, 1998; Smith & Smith, 2010). However, not only is creativity extremely hard to define (Lubart, 2010; Plucker et al., 2004), it is also challenging to teach (Beghetto, 2008, 2010; Lubart, 2010; National Advisory Committee on Creative and Cultural Education, 1999; Plucker et al., 2004; Smith & Smith, 2010; Stoll & Temperley, 2009). Moreover, standards-based government education reforms – most notably in England, America, New Zealand, and Australia – have created a performative climate that is not conducive to creativity (Ball, 2003; Beghetto, 2008, 2010; Burnard & White, 2008; Peters, 2003; Robinson, 2006; Smith & Smith, 2010; Trotman, 2005). There is therefore a paradox in education between the 'pro-creativity' rhetoric and the 'anti-creativity' reality (Beghetto, 2010; Craft, 2003; Robinson & Aronica, 2015; Smith & Smith, 2010). Due to these tensions over the last fifty years there has been a considerable amount of research into creativity in education. However as this research involves educational institutions, spanning early childhood to tertiary, only a portion of it seeks to gain the valuable personal perspectives of primary school practitioners. Furthermore, I have been able to locate very little creativity research that has taken place in a New Zealand context.

Research aims and questions

My research, which took place in primary schools, investigated teachers' practices of creativity in education and the leadership that enables these practices. Three key questions were explored:

1. How do teachers and school leaders define creativity in relation to their students and their teaching and learning programmes?

2. What pedagogical practices do teachers use to include creativity in their teaching and learning programmes in order to develop the creativity of their students?
3. What school leadership practices influence classroom teachers' implementation of creativity focussed pedagogical practices in their teaching and learning programmes?

Recognising that creativity can mean different things to different people depending on their culture, gender, beliefs, background, and experience, I investigated primary school practitioners' personal experiences of creativity in education. The intention was to see creativity from their perspectives, to hear their human stories and to investigate their thoughts, actions, and the influences upon them. By engaging directly with participants it was possible to explore their definitions of student creativity, the way they planned learning programmes for creativity development and the influence of school leaders in this process. Participants' individual accounts of their experiences were interpreted through a qualitative lens, because the data collected was not numerical but verbal. The words of the participants in individual semi-structured interviews were recorded, transcribed verbatim, and then analysed in detail through coding – a recognised system for such research analysis. As the aim was to build productive relationships with interviewees and also to engage in meaningful and honest discussions, this was a small case study with nine participants. However, to aid triangulation and transferability, three schools were involved, and from each school, teachers with differing amounts of experience and leadership responsibility took part.

Thesis organisation

Chapter 1 is an introduction which includes a detailed explanation of the research study and provides a contextual and historical background to creativity in education. This chapter also outlines the rationale for conducting the research, the research aims and questions, and the thesis organisation.

Chapter 2, a literature review, identifies four key themes highlighted by authors and researchers whose work about creativity was critiqued in the course of this research. These themes are: *definitions*, *barriers*, *benefits*, and *development* of creativity. This chapter also outlines where and how opinions align and differ, what is clear and well

understood, what requires further research, and what the implications are for leadership practice.

Chapter 3 explores the methodology for investigating the concept of creativity in primary school education, and explains the epistemological and ontological research positioning. Through exploring relevant methodological considerations, this chapter provides justification for the choice of an interpretive research paradigm, a qualitative investigative approach, and the use of semi-structured interviews to gather data. With reference to credibility, triangulation, and transferability, the reasons for engaging in a multiple case study, with a small sample-size, are also explained. This chapter also details the precise method of data collection, and explains the rigorous approaches to data analysis through coding that were employed. It also explores the important ethical considerations at the heart of this research namely: informed consent, minimising harm, honouring privacy and confidentiality, and being truthful and avoiding deceit. It also details how these core ethical values are framed by a need to exhibit sensitivity through an awareness of world diversity, to foster rapport and beneficial relationships, to eschew intrusive and inappropriate behaviour, and to benefit communities through collaboration and the generation of trustworthy knowledge. In this chapter, the possible limitations of this research project are also highlighted.

Chapter 4 details the research findings, and includes tables to show the frequency and overall totals of participants' responses.

Chapter 5 identifies and discusses the important themes, arising through the rigorous process of data coding and analysis. Through analysis, it also relates these themes to the literature reviewed in Chapter 2.

Chapter 6 provides an overview of the research and the conclusions arising from this research study. This chapter also re-visits the limitations of this research study, makes recommendations for future practice, and includes suggestions for further research.

Chapter 2. Literature review

Introduction

As noted in the previous chapter, creativity is widely believed to be of benefit to individuals, societies, cultures, countries, and the wider world. Education and creativity should therefore be well matched partners, "almost obvious in their 'degree of 'fit'" (Smith & Smith, 2010, p. 251). However, history shows that this potentially favourable relationship has unfortunately been intermittent and problematic (Beghetto & Kaufman, 2014; Plucker et al., 2004; Smith & Smith, 2010). Within the wealth of literature and research relating to creativity and education, five key themes are apparent: *definitions*, *barriers*, *benefits*, *development*, and *assessment*. The extensive discourse around assessment merits a detailed exploration in its own right; therefore, due to practical constraints, this critical analysis will explore creativity in education as related to the first four themes, within which the role of school leadership will also be addressed. Furthermore, as my experience is within the primary school sector, this paper will focus on children aged five to thirteen years. The majority of texts available for review originate primarily from the United Kingdom, with an additional small percentage from the English-speaking western world.

Identification of topic

In today's rapidly changing environments, unprecedented globalisation, intensified competition, and technological advances constantly bring forward new challenges. Consequently, key aspects of creativity such as imagination, initiative, flexibility, and the adaptable application of skills and knowledge in original and diverse ways, are acknowledged as being of crucial importance now and in the future (Beghetto & Kaufman, 2010; Craft, 2010; Robinson & Aronica, 2015). Accordingly, the partnership between creativity and education is currently being closely examined around the world (Burnard & White, 2008; Craft, 2003, 2012).

In considering the four major themes presented in this chapter, it is important to recap on the historical foundations underpinning the present situation. In response to what many describe as an outmoded utilitarian education system more suited to a previous industrial age, (Ings, 2017; Plowden, 1967; Robinson & Aronica, 2015), there were

intermittent pleas throughout the 20th century for educators to encourage and develop the creativity of students (Guilford, 1950; Hadow, 1931; National Advisory Committee on Creative and Cultural Education, 1999; Plowden, 1967). However, it could be said that each subsequent report, re-iterating the need for creativity in education, is evidence of the lack of success achieved in promoting creativity by the previous research recommendations. Now in the 21st century, as Craft (2010) argues, creativity is a priority for governments once again, with its educational value driven upwards by perceived economic, social and technological benefits. The theoretical upward trajectory of creativity, however, is hindered by the education system's increasing focus on "ever-higher achievement on narrower measures" (Craft, 2010, p. 20). Standardised benchmarks for achievement in the core curricular areas of reading writing and mathematics have become performative challenges to creativity in many countries (Ball, 2003; Burnard & White, 2008; Craft, 2010). Thus, although Craft (2010) still sees creativity as "a priority despite the performative backdrop" (p. 21), she also concedes that creativity and performativity are rather mismatched. Moreover, it is postulated by many that performativity is definitely the dominant partner (Ball, 2003; Blackmore, 2002; Sachs, 2005). Evidence shows too that, ironically, this dominance not only fails to raise achievement levels in the core subjects, as shown by the *Programme for International Student Assessment* (PISA) (Organization for Economic Cooperation and Development (OECD), 2015). Moreover, as Stoll and Temperley (2009) explain, it also diminishes the creativity on which such improved learning ultimately depends. Hence, it is asserted by educationalists such as Robinson (2001), Ings (2017), Burnard and White (2008) and Sternberg (2010) that, despite the current widespread pro-creativity rhetoric, 21st century educational reforms are driving creativity from education at a time when governments, economists, industrialists and educationalists agree that it is most necessary.

In addition to the creativity-diminishing agenda of accountability and competition emphasised in education today across much of the developed world, there are several other factors contributing to a lack of creativity in education. In the first instance, it is clear across all four themes – definitions, barriers, benefits, and development – that governments and educationalists have differing ontological beliefs about creativity. Secondly, it is apparent that there is also a lack of agreement amongst educationalists,

authors, and researchers as to how the term creativity should be defined. Thirdly, although there is general agreement about the damage inflicted on creativity by education reforms, the identification of the other barriers to creativity varies across the literature reviewed. Fourthly, a united belief in the benefits of creativity is also marred by differing opinions about which benefits should take priority, causing a lack of consensus and clarity over the most effective pedagogical practices to develop students' creativity. Finally, although there are sources that can assist teachers to enhance creativity, there appears to be little constructive guidance for educational leaders endeavouring to develop creativity within their schools' curricula and pedagogical practices. Craft (2001) commented on this deficit in her exemplary analytical overview of literature and research into creativity in education; today sixteen years later, aside from the writings of Beghetto (2016), Stoll and Temperley (2009) and Brundrett (2004), this situation appears not to have improved.

This chapter will explore the four themes that emerge from the literature reviewed: defining creativity, barriers, benefits, and development of creativity. In so doing, it will explain where and how authors' opinions align and differ. Topics that are well researched will be mined for the depth of information they can offer, and areas benefitting from further investigation will be identified. Throughout this literature review, the implications for leadership practice across all the themes will be considered.

Defining creativity

Since the time of the ancient Greeks, the concept of creativity has prompted great debate, and is still "notoriously difficult to define" (Runco, 2004, p. 21). Nevertheless, the need for clarity is keenly stressed by authors such as Smith and Smith (2010) and Plucker et al. (2004), who believe a lack of precision and consensus over a definition impedes the progress and legitimacy of the research and development of creativity in education. Plucker et al. (2004) describe the confusion caused by different definitions as "comparing apples, oranges, onions, and asparagus and calling them all fruit" (p.89). Skiba, Tan, Sternberg, and Grigorenko (2010) are of like mind describing the anxiety and uncertainty felt by educationalists when defining creativity. Plucker et al. (2004) discovered the extent of this problem through their quantitative analysis of peer-

reviewed articles on creativity which revealed that "most authors did not explicitly define creativity and those that did provided a wide range of definitions" (p. 88). This thesis chapter mirrors these findings – a third of the authors reviewed did not attempt a definition, while the majority presented a balance of explicit and implicit definitions which varied according to their different ontological perspectives. These viewpoints, range from creativity as an individualised phenomenon to creativity as a collective endeavour. There is also the dichotomy apparent between creativity as domain-free or domain-specific, a debate acknowledged by authors in this review (Burnard & White, 2008; Craft, 2003; Plucker et al., 2004). The domain-specific definition is endorsed by Baer (2016), who states emphatically that creativity needs the scaffolding of curricular areas and "doesn't develop in a vacuum" (p. 9), a view also favoured by Beghetto (2016), Smith and Smith (2010), and Stoll and Temperley (2009). Others such as Trotman (2005) implicitly favour a domain-free definition, while Burnard and White (2008), Mullet, Willerson, Lamb, and Kettler (2016) and Plucker et al (2004) just acknowledge the debate.

There are, however, many other aspects of creativity. First, as outlined by Robinson and Aronica (2015), is the major epistemological division between the truth and objectivity of creativity in the sciences, versus the emotional subjectivity of creativity in the arts. For example, the National Advisory Committee on Creative and Cultural Education (NACCCE) (1999) and The Office for Standards in Education (2003) take an objective positivist stance, seeing creativity as discretely quantifiable. Due to their economic imperative, they define creativity as "Imaginative activity fashioned so as to produce outcomes that are both original and of value" (National Advisory Committee on Creative and Cultural Education, 1999, p. 29). Conversely, Trotman (2005) deplores this definition and states that it reduces imagination and the subjective empathy of experience to crudely measurable commodities.

There are also the concepts of *Big C*: Exceptional, heroic creativity, and *little c*: Regular everyday creativity as described by Beghetto and Kaufman (2010), Plucker et al. (2004) and Sharp (2004). These concepts are expanded further by Kaufman and Beghetto (2009) in their *Four c model of creativity* which includes two further types of creativity, *Pro-c* and *mini-c*. In their opinion, *Pro-C* is not as exceptional or elitist as *Big-C* as it represents an accomplished, but more achievable, level of expertise, mastery, and skill,

while *mini-c* describes creativity that is within the reach of children. In essence four different types of creativity are proposed by Kaufman and Beghetto (2009), but they do not envisage a natural step-by-step progression for everyone from childlike *mini-c* to the expertise of *Big-C*. They assert that moving from *mini-c* to *little-c* is possible for nearly everyone with practice; advancing to *Pro-C* is only achievable for those who exhibit sustained passion and commitment; and attaining *Big-C* status is beyond everyone other than an elite exceptional minority. Across the literature, there is consensus that the elite exceptionality of *Big - C* is of little relevance to education, whereas *mini-c* and *little-c* are particularly valuable, as they make it possible for teachers to recognise and encourage children's creativity, in an educational setting (National Advisory Committee on Creative and Cultural Education, 1999). The concept of *mini-c* reflects Craft's (2012) notion of possibility thinking in young people and, as Sharp (2004) asserts, this is of particular relevance to younger students.

The benefits of creativity

Burnard and White (2008) contend, in their detailed analysis of creativity and performativity, that political and commercial imperatives have prompted the unprecedented revival of interest across the globe in the creativity of young people. This view is echoed in the literature, which posits that governments and business leaders regard creativity in education as the keystone for economic growth and the cure for a range of social and political problems (e.g., Burnard & White, 2008; Craft, 2003; Hartley, 2006; Robinson, 2001; Robinson & Aronica, 2015; Zhao, 2009). There is also agreement amongst these researchers that creative children have greater potential to become creative adults who are better equipped to meet 21st century challenges. However, although they all recognise the importance of a healthy economy, none see economic growth as the key objective or benefit of creativity in education – a view also echoed by many others (e.g., Beghetto, 2008, 2010; Craft, 2001; Cremin, 2015; Esquivel, 1995; Plucker et al., 2004; Stoll & Temperley, 2009; Trotman, 2005).

The benefits noted above are identified across the literature. Cremin (2015), for example, explicitly challenges the dominant neo-liberal logic of creativity for economic gain, stating that the priority for children should be creativity for self-knowledge,

holistic development, and well-being, as these are central to individual growth. This view is echoed by Esquivel (1995), who favours a humanistic approach to creativity, and Beghetto (2008) who describes imaginative processes as fundamental to being human and paramount for our cultural development through "possibility thinking" leading to "personal transformation" (p. 134). Craft (2001), also highlights researchers' broader claims that cross-curricular creativity can enable students to successfully navigate through a range of challenging situations and environments in their lives. The relationship between creativity and enhanced resourcefulness and resilience is echoed by OFSTED (2010). They report that students who achieve success in creative ventures show greater confidence and perseverance when faced with problems or challenges. In addition, Trotman (2005) illustrates the benefits of affective imagination for the growth of well-balanced empathetic individuals. Plucker et al. (2004) fully endorse this view, maintaining that creativity offers individuals many potential gains including emotional maturity, violent behaviour reduction, conflict resolution, the maintenance of affectionate relationships, enhanced positivity, and mental well-being. As Le Guin (1975) proclaims – eminent scientists state, and all children are aware, that it is through our imagination, above all else, that we attain insight, understanding, empathy and optimism.

Dumont, Istance, and Benavides (2010) link positive emotions with enhanced learning while the research of Conner, DeYoung, and Silvia (2016) discovered the crucial input of creativity into this beneficial mix. Through experience sampling and diary studies, they discovered that the daily engagement in creative activities directly enhanced research participants' overall well-being, feeling, and functioning. Despite being a study of university students, the findings can be generalised to a primary school context as similar results were found by Jeffrey (2006) and the Creative Learning and Student Perspectives (CLASP) research project. This extensive investigation, involving primary aged pupils in nine European countries over a 22-month period, discovered a cause-effect relationship between creativity, and the enjoyment, motivation, achievement, and personal agency of students; a relationship also noted by Craft (2001). Echoing this viewpoint, Beghetto (2008), Lucas (2001), Robinson (2001), Stoll and Temperley (2009), and Craft, Cremin, Burnard, and Chappell (2007) assert that creative imagination supports cognition, because as Lucas (2001) explains, new

learning requires "a state of mind in which all of our intelligences are working together. It involves seeing, thinking and innovating" (p. 38). Throughout the literature, the wide ranging benefits of creativity for students now and in the future, are clearly emphasised.

The barriers to creativity

Guilford (1950) not only endorsed the benefits of creativity but also expressed serious concerns that education systems could damage children's innate creativity, an issue echoed across the literature with several barriers being identified (e.g., Cropley, 2001; Ings, 2017; Kampylis & Berki, 2014; Kaufman & Sternberg, 2010; Robinson, 2006; Sharp, 2004). Most notable is the authors' united belief that an ethical educational objective of nurturing knowledgeable, free thinking citizens has been replaced by "learning to earn" (Bush, Bell, & Middlewood, 2010, p. 33) and a government-led agenda of performativity and competition centred around a cost-benefit analysis of education. This situation is deplored by Codd (2005) and Fitzgerald, Youngs, and Grootenboer (2003). It is also disparagingly described by Ball (2003) as a financially-led regulatory environment that systemically judges, compares and discriminates, by praising and punishing, in order to dominate, and constrain in explicit and implicit ways. Thus, as noted by Ball (2003), Craft (2003), Burnard and White (2008), Robinson (2001), and Cremin (2015), the pro-creativity "espoused theory-of-action" (Argyris & Schön, 1974, pp. 6-7) propounded by various governments across the globe including New Zealand, is countered by their constricting "theory-in-use" (Argyris & Schön, 1974, p. 7). As a consequence, there is a disturbing paradox between policy and practice.

The development of students' innovation, inquiry, and curiosity, was advocated by Pestalozzi in the late 18th century (Chambliss, 2013), championed by Rhodes (1961) and is endorsed by many current educationalists (e.g., Bodrova and Leong, 2005; Winter, 2008; New Zealand Ministry of Education, 2007c). However the literature suggests that this creativity enhancing pedagogical approach is diminished by the compulsory measurement of students' academic achievement in three core subjects against the standardised benchmarks of *National Standards* (New Zealand Ministry of Education, 2010a). The research of the Office for Standards in Education (2010) indicates that teachers perceive that creativity development within the core subjects

is more pedagogically challenging. Furthermore, as Craft (2003) and Cremin (2015) explain, such rigid accountability within a narrow curriculum leads to teachers replacing artistry with technicality and a reduction in their pedagogy for creativity.

A government-dominated stratified system has the potential to cause another related barrier. Craft (2003) identifies this as hierarchical deference, whereby teachers lack critical self-reflection and do not critique their own performance because the creativity rhetoric from above has become a reassuring substitute for creativity itself. In a similar vein, Lubart's (2010) cross cultural analysis, draws on the theories of Hofstede (2001) and highlights how an increase in the disparity between the power brokers and those who are subservient to them leads to a decrease in the originality, innovation, imagination, and creativity of the disenfranchised. The literature reveals that these two cultural phenomena can also be generalised to educational contexts, as explained below.

This unequal distribution of power in combination with pejorative stereotypes of creative people is doubly damaging, as Smith and Smith (2010), Beghetto (2008, 2010), Ings (2017), Robinson (2001) and Plucker et al. (2004) describe. They posit that this harmful pairing can lead to teachers regarding creativity as a potentially disruptive unknown quantity – chaotic and risky, and hence very likely to de-rail a carefully planned class programme and waste precious learning time. Milne (2008) states that creativity demands risk-taking. However, as Beghetto (2010), Cremin (2015), Cropley (2001) Makel (2009) and Smith and Smith (2010) contend, although teachers claim to favour creativity, when faced with the daunting and risky prospect of managing diverse learners en-masse, their professional practice for creativity development is negatively affected by the performative stress of meeting achievement targets (Ball, 2003; Burnard & White, 2008; Codd, 2005; Cremin, 2015; Olivant, 2015). Consequently, instead of overtly modelling and encouraging creativity through their behaviour and pedagogical practice, as described by Cropley and Urban (2001), they may actually avoid it. This inconsistency exemplifies the difference between the theories that people espouse and the theories that drive their actions, as identified by Argyris and Schön (1974) and Argyris (1977). Furthermore, as Maslow's (1987) research shows, although creativity is a common attribute and an essential part of being human, its healthy development is usually contingent upon security and a lack of

fearfulness (Maslow, 1987). It seems fair to deduce, therefore, that a threatening combination of accountability, performativity, and competition to 'make the grade' is likely to make leaders and teachers more anxious, possibly even afraid, and therefore less creative and less able to develop the creativity of their students. As Beghetto (2010) empathetically posits, the heavy burden of achieving standards makes it understandable that teachers revert to a comfortable default position, adopting a convergent rather than divergent approach that shuns creativity for the safety of "conformity and compliance" (Beghetto, 2010, p. 454).

Beghetto's (2008) mixed methods research also revealed that 68.5% of prospective teachers did not appreciate how imagination and memory work in unison for purposeful and lasting learning; for that reason they valued the memorisation of facts over imaginative thinking. Despite Beghetto's research sample being undertaken in America and heavily weighted with an 83% white female bias, his investigation has generalisability as it is representative of many teaching cohorts in the western world including those in New Zealand. Further barriers are explained by Trotman (2005) and Beghetto (2010) who discovered that all too often, creativity, instead of being a foundation for learning, becomes an isolated add-on to the curriculum, restricted to the arts, regarded as an enjoyable but frivolous diversion or squeezed out entirely. As Smith and Smith (2010) explain, in some respects "education is a zero sum game" (p. 262) with finite limits on a teacher's time, energy and focus. Adapting the popular rocks and sand in the jar analogy, it seems logical that if the large rocks of creativity are placed in the educational jar first, space could remain for everything else: the sand. However, if the sand of structure, standards, and convergent teaching is poured initially, no room is left for creativity at all.

Leadership for creativity

Effective educational leaders inspire, motivate, affirm, challenge, and influence the practice and pedagogy of teachers to ensure best possible outcomes for all ākonga now and in the future (Cardno, 2012; Duignan, 2012; Robinson & Timperley, 2007; Yukl, 2012; Timperley, Kaser, & Halbert, 2014). They achieve this by modelling the behaviours they wish to foster in their staff (Cardno, 2012; Bush, 2011; Gunter & Ribbins, 2003; Louis, Leithwood, Wahlstrom, & Anderson, 2010). They must also be

instructional leaders who enhance teachers' professional capacity through their promotion of scholarship for pedagogical improvement, as described by Leithwood, Jantzi, and Steinbach (1999), Jackson and Temperley (2007), and (Cardno, 2012).

With enhanced student outcomes in mind, and reflecting on Weber's (1987) description of school leaders as conductors who skilfully co-ordinate a multifaceted orchestra of staff and students, it seems evident that a complementary and sustainable partnership between creativity and education is crucial. However, as previously noted, there is little literature, aside from Stoll and Temperley (2009) Brundrett (2004) and Beghetto (2016), that explicitly addresses leadership for creativity. What is available for school principals is a wealth of global leadership literature together with valuable examples specific to the leadership of New Zealand schools (e.g., Cardno, 2010; Cardno & Youngs, 2013; New Zealand Ministry of Education, 2008, 2010b, 2012; Stoll & Temperley, 2009; Youngs, 2014). Therefore, in order to devise appropriate patterns of leadership practice that will foster creativity in their own schools, educational leaders must adopt a demanding multi-pronged approach. Their challenging task is to decide on an appropriate course of leadership action by critiquing the literature on creativity in education, consulting appropriate educational leadership literature, and exploring the limited amount of literature specifically about leadership for creativity.

Cardno (2012), Tamati (2011), Raelin (2016) state that effective leaders establish positive relationships with all stakeholders, foster horizontal trust, exhibit and engender professional respect, and promote collaboration leading to positive change. Conducive to this collaborative approach, are distributed forms of leadership which are seen by many writers as positively influencing teaching and learning (e.g., Hargreaves & Fink, 2012; Harris, 2003, 2004; Harris, 2008, 2013; Harris & Gronn, 2008; Louis et al., 2010; Spillane, 2005; Youngs, 2013;). The Education Review Office (2016) also describes effective educational leadership as unrelated to hierarchical rank or status, and The Education Council of Aotearoa New Zealand (2015, 2018), and Davis (2013) assert that beneficial professional collegiality amongst all staff, whatever their experience or status, is increased by an absence of suspicion and doubt. More importantly though for creativity development, Burnard & White (2008) and Perkins (1999) explain how a trusting collegial environment allows teachers to experiment and

construct their own contextually appropriate approaches to creativity development. In such a creativity conducive climate, a willingness to embrace and learn from mistakes is also fostered, as recommended by many writers (e.g., DeBono, 1970; Dweck, 2006: Bryk, Gomez, Grunow, & LeMahieu, 2015). Thus, it can be inferred that school leaders can nurture creativity in teachers and students by showing that they value it through their adoption of a distributive leadership approach which is non-performative, non-judgemental, collaborative, supportive of diversity, and encouraging of risk-taking in all ākonga (learners). This approach is also conducive to teaching excellence as described by Bishop, Berryman, Cavanagh, and Teddy (2007).

In addition, Burnard and White (2008) cite the research by Jeffrey and Woods (2003), into pedagogical strategies which enhance creativity, and concur that this supportive environment must also embrace the four key elements of creativity "ownership, relevance, innovation and control" (p. 676). Flowerday and Schraw (2000) also emphasise the beneficial relationship between creativity and student choice, and the positive links between learner agency, collaboration with peers, and enhanced students' empathy and cognitive ability is endorsed by OECD (2012).

Beghetto (2016), and Stoll and Temperley (2009) add a further ingredient to an educational leader's tool-kit for enhanced creativity and see creative leadership as crucial to creative teaching. As Stoll and Temperley (2009) propound, "to lead a creative school, you need creative leadership" (p. 66). Cardno (2012) describes the influence of leaders on student achievement indirectly through their teachers while Leithwood, Harris, and Hopkins (2008) Timperley, Wilson, Barrar, and Fung (2007), and Robinson (2017) believe leadership influence is crucial to student progress. However, Stoll and Temperley (2009) also concede that evaluating the precise influence of a creative leader on a creative school is complex and problematical. Moreover, many authors refute this direct cause-effect relationship and also specifically question the link between creative educationalists and creative students (e.g., Beghetto, 2008; Craft, 2003; Smith & Smith, 2010). For this reason, it appears that the issue of teaching and leadership for creativity development merits further investigation.

Even with all the above noted factors conducive to creativity being in place, school leaders must then decide how best to develop creativity across and through the

curriculum. Torrance (1972) states that there are numerous ways to enhance student creativity, and Isaksen (1988) maintains that the most common approach is to integrate creativity into existing curricular areas. Echoing this notion, the majority of literature suggests that domain-specific creativity taught through problem solving skills is easiest to understand and implement, not only for students (Baer, 2016; Smith & Smith, 2010) but for leaders too (Beghetto, 2016; Stoll & Temperley, 2009). Despite this though, Baer (2016) and Beghetto, Kaufman, and Baer (2014) express their concern over what they perceive as teachers' lack of understanding about developing cognitive creativity (Gorny, 2007) and the resulting inadequacy of creativity teaching within the core subjects of literacy and mathematics.

Meanwhile, researchers such as Trotman (2005) regard domain-specific creativity development and an emphasis on problem solving in particular, as a reductionist approach. Craft (2001) also sounds a note of caution, referring to empirical studies that show a narrow focus on problem solving may lead to diminished overall creativity. Bearing this in mind, leaders who wish to adopt a domain-free perspective towards developing creativity could follow the Reggio Emilia philosophy (Foundazioni Reggio Children Centro Loris Malaguzzi, 1980) as described by Craft (2001). This pedagogical approach offers children daily opportunities to explore diverse materials, experience expressive languages, consider different viewpoints, engage their feelings and imaginations, and undertake practical 'hands-on' activities in environments that celebrate individual expression and creativity (Foundazioni Reggio Children Centro Loris Malaguzzi, 1980). It also provides teachers and students with "time … space … rich resource materials…an encouraging climate" (Craft, 2001, pp. 20,21). The notion of giving time however conflicts with Stoll and Temperley's (2009) call for urgency and is an important reminder that when enabling and encouraging creativity, no one leadership style suits all. Skilled artistry is required as are a range of contextually appropriate pedagogical tools (Craft, 2001).

To encourage and enable creativity it is evident therefore that, as well as being pedagogical artists, leaders must also be skilled knowledgeable role-models (Sternberg, 1996), and thus credible mentors and "learning leaders" (DuFour & Marzano, 2009, p. 63). In addition, Waters, Marzano, and McNulty (2004) suggest that leaders need bravery, resilience, and resolve. Furthermore, in *Kiwi Leadership for*

Principals (New Zealand Ministry of Education, 2008), it is emphasised that principals also need "pono (self-belief)" (p. 22). Moreover, as Bush (2011) asserts, they should not accept powerless "bastard leadership" (Wright, 2001) or be "timid leaders" (Burnard & White, 2008, p. 673) who toe the line, coercing teachers to comply and "play it safe" (p. 673). As Waters et al. (2004) state, educational leaders must be ethical agents for change, actively challenging the status quo, and also inspirational optimizers who overcome barriers to creativity in order to generate and capitalise on opportunities to innovate and enhance learning outcomes.

Critiquing connections, themes and gaps

The literature reinforces the pivotally important relationship between creativity and education. It also highlights that the immense potential for creativity in education is matched by prodigious barriers. The four key themes identified are fundamentally interrelated, and although within these themes authors may hold differing opinions, the diversity of beliefs provides wide ranging information and insights. However, two aspects would benefit from a greater consensus and they are defining and developing creativity, as agreement on these aspects may engender a more powerful and positive unity of purpose amongst educationalists and governments.

The need to understand, encourage, and foster creativity is explicitly affirmed by all authors, but it is less clear how this can be achieved. A united belief in the damage done to creativity by educational reform has been highlighted, and Duignan (2003) and Ball (2003) contend that the enjoyment and rewards of teaching crucial to teacher fulfilment and enhanced student achievement, as described by Banerjee, Stearns, Moller, and Mickelson (2017), have been usurped by the "terrors of performativity" (Ball, 2003). There is also an agreed consensus that leaders are essential to a school's success, as endorsed for example by *Kiwi Leadership for Principals* (New Zealand Ministry of Education, 2008), Stoll and Temperley (2009), Cardno (2012) and Gurr and Drysdale (2013). However, the literature explicitly suggests that it is teachers who must be held responsible for developing creativity. How they can achieve this mammoth goal with minimal power or agency is not explained. Without brave and supportive leadership in favour of creativity, they are somewhat impotent, merely tinkering at the edges and risking reprimands from principals, Boards of Trustees, and

parents if they are bold enough to take risks and go against the grain. Furthermore, as Beghetto (2008) and Stoll and Temperley (2009) identify, teachers may not realistically be knowledgeable or motivated enough to break down the barriers to creativity, a belief also expressed by the National Advisory Committee on Creative and Cultural Education (1999) who raised concerns over potentially inadequate teacher preparation for creative and cultural educational development. Teachers could be missing valuable learning opportunities to include and develop creativity if they are unfamiliar for example with educational theory, research, and best practice, as advocated by Jackson & Temperley (2007).

The beneficial effects of creativity development for Māori and Pasifika students, especially those who are achieving below standard – identified as priority learners by (Education Review Office, 2017) is described in the New Zealand literature. Furthermore, culturally responsive teaching has been consistently recommended in New Zealand for many years in the following documents *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c), *Our Code Our Standards* (New Zealand Education Council, 2017), and *Tataiako* (New Zealand Ministry of Education, 2011), *Ka hikitia* (New Zealand Ministry of Education, 2007a). However the recent research findings of ERO (Education Review Office, 2017) identify a lack of explicit strategies within New Zealand schools to responsively meet students' diverse cultural and creative needs. Beghetto (2008) raises another problem and proposes that teacher training must address the formative educational experiences of trainee teachers, as these may also inhibit creativity. As Branson (2007), Larrivee (2000), Krishnamurti (2000), and Hofstede (2001) describe, the subjective viewpoints of individuals are unavoidably determined by the conditioning and values-programming that took place in their past. With this in mind, Beghetto (2008) acknowledges a gap in his mixed methods research, as, although he discovered prospective teachers' personal opinions, he did not investigate the source of these opinions or how they had developed over time. The research of Lee and Seo (2006) touched on these questions. Somewhat surprisingly perhaps, their findings indicated that *more* experienced teachers held less open minded and fairly judged views of creativity than *less* experienced teachers. Although Lee and Seo's (2006) study was carried out in Korea, it is a viewpoint worthy of consideration in a New Zealand context. Exploring this dimension and extending

Beghetto's (2008) research beyond trainee teachers, to engage with a range of newly qualified and experienced teachers, could provide valuable insights into teachers' unconscious beliefs, biases and behaviours (Branson, 2007) concerning creativity in education.

Of note, however, the influence of teacher education was not considered by other researchers. Considering this omission, it is interesting to consider that in Finland, where student achievement levels are high and educationalists have successfully resisted performativity and standardisation, a Master's degree is compulsory to become a teacher and "preparing teachers for a research-based profession has been the central idea of teacher education developments" (Sahlberg, 2007, p. 153). With this in mind, research suggests that continued scholarship, "organisational learning" (Cardno, 2012, p. xi) and "professional learning communities (PLCs)" (Stoll & Temperley, 2009, p. 1) can build the capacity for positive change. It seems evident that creativity could thrive in such a collaborative, knowledgeable, and transformational environment. Furthermore, a distributed leadership structure is identified by researchers as the ideal approach to capitalise on the combined abilities of a team and thus enhance learning outcomes (e.g., Gronn, 2000, 2002a, 2002b, 2003, 2009; Harris, 2003, 2004, 2008, 2013; Harris & Gronn, 2008; Youngs, 2013, 2014). In holistic professional learning communities, such as these, teachers could become leaders and "innovation champions" (Lubart, 2010, p. 273) with the ability and autonomy to confidently and knowledgeably challenge the status quo and push for positive pedagogical change. However, as today's hierarchical education systems inhibit such spontaneous and innovative leadership, it may be challenging for leaders to empower teachers and jointly lead the nurturing of creativity in education.

Summary

This review has critiqued a small fraction of the available literature on creativity in education. Five key themes were identified and four have been focussed on – definitions, barriers, benefits and the development of creativity. In addition the importance and complexity of effective leadership for creativity has been discussed. Skiba et al. (2010) assert that in an educational climate which is hostile to creativity, due to its narrow focus on accountability and measurable standards in three core

subjects, it is essential to comprehend teachers' conceptions of creativity first before trying to develop creativity in teaching and learning programmes. Mullet et al. (2016) concur and recommend further research, stating "There is a need to investigate perceptions of creativity held by teachers to better understand how to actualize classroom environments rich in creative thinking and practice" (Mullet et al., 2016, p. 9). This recommendation typifies the beliefs highlighted in this literature review and suggests that if creativity and education are to be positively united, carefully designed qualitative research must be undertaken directly with teachers. The literature review consequently prompted the focus of my research and confirmed the selection of my research questions below:

1. How do teachers and school leaders define creativity in relation to their students and their teaching and learning programmes?
2. What pedagogical practices do teachers use to include creativity in their teaching and learning programmes in order to develop the creativity of their students?
3. What school leadership practices influence classroom teachers' implementation of creativity focussed pedagogical practices in their teaching and learning programmes?

Chapter 3. Methodology

Introduction

This chapter describes the epistemological and ontological positions underpinning the research paradigm for this investigation, the methodological considerations, and the rationale for the chosen research approach. Also explained and justified, with reference to dependability, triangulation and transferability, are sample-size and composition, the method of data collection, and the rigorous approaches to data analysis that were employed. Finally, important ethical considerations are outlined as are the limitations of this research project.

Positioning

Research is succinctly defined by Creswell (2012) as a three stage process for gathering and examining information in order to enhance knowledge and comprehension. However, these three stages look very different depending on the significant lenses through which the research process is viewed, lenses which are coloured by researchers' ontological and epistemological positions (Cohen et al., 2000). Ontology can be described as our self-concept (Briggs, Coleman, & Morrison, 2012) which is derived through our perceptions about the nature of reality (Cohen et al., 2000; Davies & Hughes, 2014). Reality can be viewed in two ways – either objectively, as externally fixed, factual and singular – or subjectively, as multiple, transient and dependent on human nature and individuals' experiences. Epistemology concerns the relationship between these opposing assumptions of reality and the development of knowledge (Cohen et al., 2000; Davies & Hughes, 2014). Accordingly, as Briggs et al. (2012) assert, epistemology is "central to research endeavour" (p. 13).

As this research study sought to understand creativity in education as it is experienced subjectively by teachers, it adopted ontological and epistemological positions that are open to diverse and empathetic ways of knowing. In this way the study embraced what Cohen et al. (2000) describe as nominalism as opposed to realism. This anti-positivist research paradigm was appropriate for many reasons – not only does every school vary in terms of its social and cultural context and composition, every class is different and, most importantly, every child is unique. Furthermore, teachers are

distinctive individuals interacting with, and being influenced by, teams of similarly diverse people. Consequently, as the nature of teachers' realities may vary widely, their experiences, perceptions, and beliefs cannot be controlled, examined, measured, or analysed quantitatively. Moreover, the goal of this research was not to uncover 'hard facts' in order to test and prove positivist 'truths' about creativity. The purpose was to acknowledge that teachers have an important human story to tell (Bogdan & Biklen, 2007) to gain an in-depth understanding of *how* and *why* they think and act, and what influences are upon them.

Therefore most appropriate for this exploration of creativity, was an interpretive research paradigm and a qualitative investigative approach which embraced elements of four complementary world views: *naturalist* (Bogdan & Biklen, 2007; Lichtman, 2010), *phenomenologist* (Bogdan & Biklen, 2007; Boydell & Blantern, 2007; Briggs et al., 2012; Lichtman, 2010), *relational* (Bogdan & Biklen, 2007) and *constructivist* (Boydell & Blantern, 2007; Briggs et al., 2012; Creswell, 2012; Guba & Lincoln, 1994; Lichtman, 2010). Naturalism was involved, because the phenomena of creativity was studied as it exists in the teachers' natural worlds (Lichtman, 2010) and explored without conscious interference or distortion (Briggs et al., 2012). A phenomenologist world view was present, because the research sought to understand the phenomenon of creativity through teachers' lived experiences (Lichtman, 2010). Constructional and relational elements were also apparent; in the first instance, teachers' subjective heuristic constructions of meaning concerning creativity are influenced by their individual life-worlds (Berg, Lune, & Lune, 2004) and second, my efforts at neutrality were countered by my own conditioning (Collister, 2010) and inner values and beliefs which I unavoidably brought to the research. Thus, as explained by Boydell and Blantern (2007), and Guba and Lincoln (1994), the relationship and reciprocal interactions between researcher and subject influenced the 'selves' of both parties and stimulated the reconstruction or construction (Guba & Lincoln, 1994, p. 115) of our individual understandings of the research topic.

My research study explored three key questions:

1. How do teachers and school leaders define creativity in relation to their students and their teaching and learning programmes?

2. What pedagogical practices do teachers use to include creativity in their teaching and learning programmes in order to develop the creativity of their students?
3. What school leadership practices influence classroom teachers' implementation of creativity focussed pedagogical practices in their teaching and learning programmes?

Methodology and sampling

Data sources

As stated by Berg et al. (2004), qualitative procedures enable researchers to examine the unquantifiable and to increase their comprehension of the diverse ways in which others interpret and make sense of the situations they are in. It was therefore appropriate and beneficial to gather data directly from primary sources (McMillan, 2004). Such sources can be documents and written records (Briggs et al., 2012; McMillan, 2004), or actual participants who have a substantial first-hand relationship with the research phenomenon under investigation (Cohen et al., 2000). For this research, it was most appropriate to engage directly with participants, namely primary school teachers and leaders, who have personal experience of developing their students' creativity through their purposeful pedagogical practice.

Research methods

Within qualitative research, two methods are most frequently used to engage with research subjects for direct data collection – interviews and participant observations (McMillan, 2004). Bell (2010) states that observations enable researchers to empathise with and comprehend more fully the contextualised behaviour of participants. However, she also acknowledges that the considerable time required to engage in this one-to-one surveillance is often beyond that which is feasible for a Master's research project. Consequently due to time limitations, the most appropriate data gathering tools for this interpretive research study were interviews. Interviews were also suitable because I concur with Boydell and Blantern (2007), and Lichtman (2010), who note that individuals have their own valuable perspectives. I also sought to understand participants' thinking processes (McMillan, 2004) that have led to their definition and inclusion of creativity in their teaching. The interviews undertaken for

this study were carried out individually for the following reasons. Firstly, I was conscious that diverse personalities, experience, expertise, and power structures within schools, can create an unequal distribution of control, confidence, and individual agency (Boydell & Blantern, 2007). Secondly, my research involved potentially sensitive discussions about teachers' professional practice and their honest reflections on leadership. Finally, and most importantly, I wished to facilitate the honest, risk-free sharing of opinions by all participants, especially the reticent and least powerful – that being so, individual rather than group interviews were evidently more suitable. It was also appropriate to conduct the interviews at the participants' schools, unless preferred otherwise by them, as these were familiar, non-threatening settings for interviewees, and it was hoped that this would enable respondents to describe and show examples of creativity, in context, should they so wish.

Berg et al. (2004) suggest that an interview "may be defined simply as a conversation with a purpose" (p. 101) and the purpose is information gathering. However, they also posit that there is something very odd about conversations based around pre-scripted questions in the possession of only one person (Berg et al., 2004). Therefore, to temper this unnatural situation and avoid the structural rigidity of a face-to-face questionnaire (Wellington, 2000), the research tools used in this instance were, semi-structured interviews (Wellington, 2015). Seven open questions were asked. These were derived from the three research questions which were prompted by the key themes in the literature, as shown in Figure 3-1. This style of interviewing avoids closed questions, favouring probing inquiries and open exploration (See Appendix A). By adopting this approach, interviewees are also encouraged to speak from their personal perspectives (Bogdan & Biklen, 2007; Davies & Hughes, 2014; Wellington, 2000) and, through expansion or digression, to give their accounts in-depth, in their own way and in their own words (Lichtman, 2010). This informal interview structure is also more conducive to conversational rapport and an honest exchange of information by both parties (Berg et al., 2004; Wellington, 2000). Furthermore, although this research study does not utilise a kaupapa Māori approach, and is different in many significant respects, there is a similarity of principle worth noting. Because I am a teacher engaging with other teachers, objectivity, distance, detachment, and separation are counter-intuitive and inappropriate (Bishop, 2008). For this reason, I

was also cognisant throughout of the unavoidable influence of the interviewer on the interviewee (Wellington, 2015). However, by integrating thinking and behaving – by simultaneously conversing and reflecting on the conversation (Argyris & Schön, 1974) – I endeavoured to avoid inappropriate counter transference of my personal beliefs about creativity onto participants as suggested by Cohen, Manion, and Morrison (2000). I was also wary of inadvertently guiding or pushing participants, and interviewees were allowed to exercise sufficient agency, so that I did not dictate the direction of our exchange (Wellington, 2000, p. 79).

Sample size and composition

Anderson and Arsenault (1998) state that "there are no rules for sample size in qualitative inquiry" (p.123). However, Briggs et al. (2012), Yin (2009) and Miles, Huberman, and Saldaña (2014) posit that qualitative research is rich, deep and holistic; thus, a small sample size is most appropriate as it enables the deeper exploration of issues with participants at length and in detail (Lichtman, 2010). A lesser number of participants is also suitable for interpretive research embracing elements of relationism, phenomenology, naturalism, and constructivism – such as this investigation – because the rapport between researcher and participants is key to the success of the project (Berg et al., 2004). With a large sample, such genuine relationships would not have been possible. To engage directly and meaningfully with primary school practitioners, I therefore undertook a small scale qualitative explanatory case study which investigated teachers' practices of creativity in education and the leadership that enables these practices. I chose a case study approach because, as expounded by many writers (e.g., Anderson & Arsenault, 1998; Gough & Scott, 2000; Quinn Patton, 2015; Yin, 2009), this type of empirical investigation probes and analyses the real-life experience of participants and is particularly appropriate for the in depth investigation of a phenomenon – complex or simple – that is contextually embedded. The case study was explanatory (Yin, 1984, 2009), as it sought to explain the phenomenon of creativity in primary school education, how teachers define creativity, what practices they use to develop it, and how leaders influence them in this endeavour. Moreover, in undertaking this research, I had no control over the phenomenon explored.

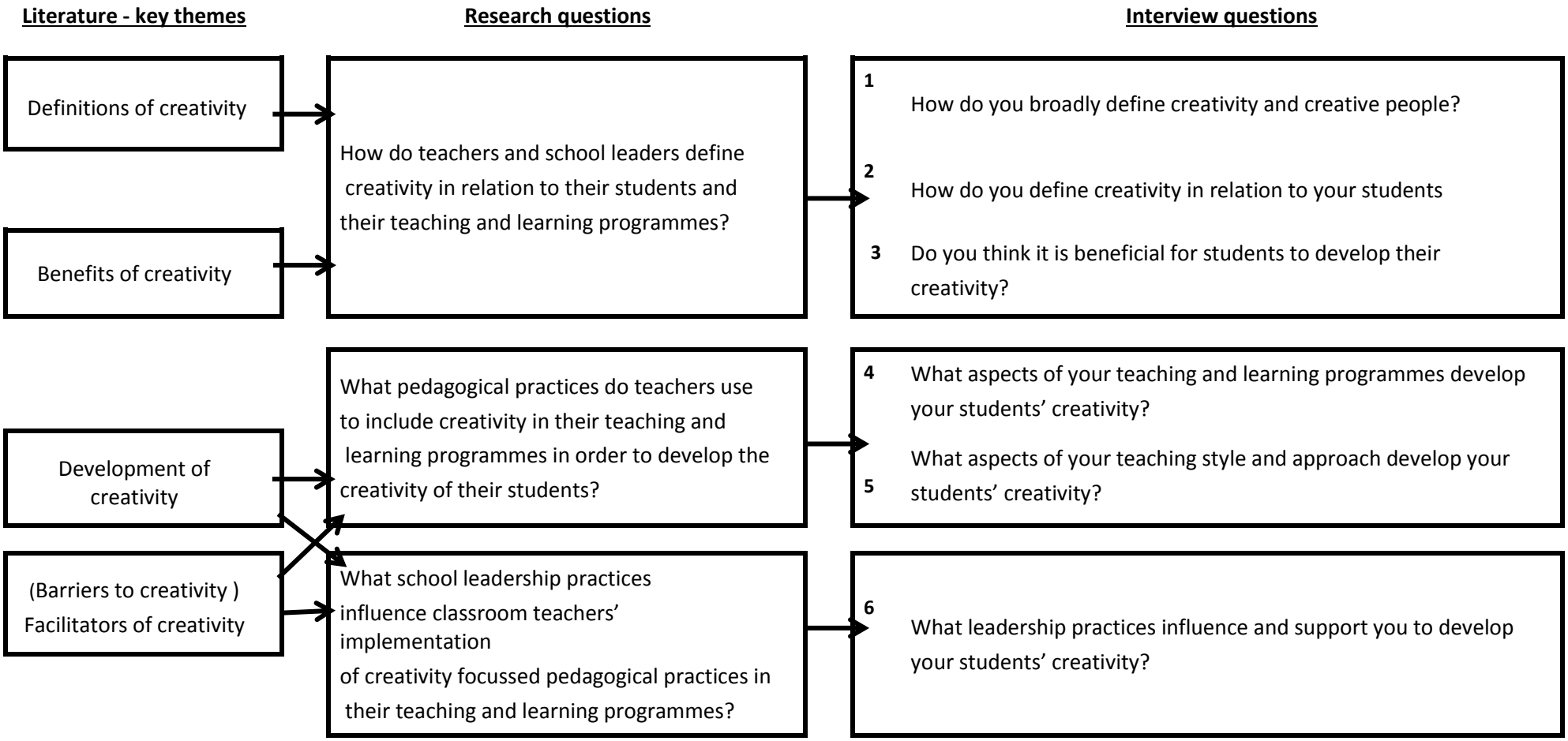

Figure 3-1: **The relationship between the key themes in the literature, the research questions, and the interview questions**

In order to aid "within-method triangulation" (Wellington, 2000, p. 24) and provide greater transferability (Lichtman, 2010), translatability, and comparability (McMillan, 2004) this was a multiple case study in which data were gathered from nine participants – a combination of teachers and leaders employed in three different schools. To provide further triangulation (Wellington, 2000), the participants collectively had differing amounts of New Zealand teaching experience. The method and sample size were both determined following discussions with my supervisor and recommendations from a senior lecturer at Auckland University of Technology. This sample size and composition were therefore selected in order to generate sufficient data from a variety of sources to satisfy my thesis requirements and to align with unavoidable time and budget limitations.

My sample choice of teachers as described above was thus purposive (Briggs et al., 2012; Cohen et al., 2000; Davies & Hughes, 2014; Wellington, 2015). My selection of schools was similarly purposeful (Bogdan & Biklen, 2007; Creswell, 2012; McMillan, 2004) and judgemental (McMillan, 2004) as I selected three primary schools that my professional contacts informed me were exhibiting effective practice concerning creativity. I began the research process by meeting with the principal of each school to discuss the purpose of my research, and to seek their consent to carry out research in their school (See Appendix B). I also welcomed the principals' input concerning my proposed investigative approach, the research sample size and composition, and the feasibility of my investigation. Teacher participation was voluntary and well informed. All parties heard an explanation of the research from myself at a staff meeting and also received detailed written information about the entire research process (See Appendix C). Prior to the interviews I confirmed with interviewees that they understood the interview process and also informed them of the questions and topics we would be exploring (See Appendix D). If they chose to take part, participants subsequently provided their signed consent (See Appendix E). It was also made clear that everyone taking part had the right to withdraw at any point or exclude or amend their data after their interview had taken place should they so wish.

Newby (2010) describes research as a "messy business" (p.5) – an arbitrary, complex and unusual puzzle that can be solved in diverse and innumerable ways. My choice of schools was therefore flexible in regard to school size and decile. I recognised that

finding appropriate participants within three 'creative' schools of identical size and decile would be unlikely[1]. Hence, I selected three schools that were broadly alike with decile ratings of 4, 6, and 7, and pupil numbers ranging from approximately 140 to 280. The schools were also similar in that they are all located in the same educational region and are situated in sub-urban or semi-rural satellite townships served by a much larger town. This geographical context, which reflects my own New Zealand teaching career, afforded me greater familiarity and insight into participants' educational experiences. As Newby (2010) states is necessary, I also made compromises concerning the participants in my group of nine. A researcher cannot dictate who volunteers, hence my neatly planned trio – a principal and two teachers with differing experience from each school – did not eventuate and my participant group consisted of the following:

- School 1 – Two participants: An experienced deputy principal and a Scale A teacher with seven years' experience, without formal leadership responsibilities;
- School 2 – Three participants: An experienced principal and two experienced teachers with formal leadership responsibilities; and
- School 3 – Four participants: An experienced principal, one experienced teacher with leadership responsibilities, and two Scale A teachers without formal leadership responsibilities (one an experienced teacher and one with six years' experience).

Wellington (2000) states that a research sample is usually a fraction which represents a whole. However, with small case studies used for interpretive qualitative research, he also declares that the similarity between the part and the whole is open to opinion. Therefore, this research study did not seek to gather evidential proof about creativity or to provide consistent replication and reliability of results that can be generalized (Wellington, 2000) to a larger group. However, my research design demonstrated due regard for both credibility and transferability, because the appropriate tools for investigating and interpreting the phenomena of creativity in education were employed. Moreover, I followed "a rigorous methodological path" (Yin, 2009, p. 3) and was reflective (Wellington, 2000) by consistently critiquing the research process to

[1]A school's decile indicates the socio-economic status of the school community (New Zealand Ministry of Education, 2016)

ensure that valid credible insights and information about creativity in primary education were discovered. The intention is that the conclusions of this research study form a compelling report (Yin, 2009) that will resonate with readers, "invite them to draw inferences" (Briggs et al., 2012, p. 202) and to judge subjectively the relevance or transferability of the findings to their own situations (Berg et al. 2004). As McMillan (2004) points out, the translatability of research findings and recommendations is dependent on "how well the data, categories, analyses, and patterns are described" (p. 280) and these aspects will be explored in the next section.

Data collection and analysis

Bogdan and Biklen (2007) describe the research label 'qualitative' as an umbrella term covering a range of research approaches in which the type of data gathered is abundant in the contextual descriptions of personal experiences provided by individuals. They also postulate that this complex verbal data is not suitable for collection or analysis using the statistical procedures of quantitative research. This qualitative research study on creativity sits comfortably under that umbrella, as the data for analysis are the word-for-word transcriptions of the recorded dialogues that took place in the nine semi-structured interviews. In addition, to ensure important aspects were not lost or overlooked, the time, date, and location of all data was systematically recorded, all files were backed-up, the amount of data collected was limited to manageable amounts, and formal analysis commenced at the earliest possible opportunity as recommended by Briggs et al. (2012). In fact, the first opportunity for data analysis presented itself the minute the interviews began, as I processed and reflected upon the discourse and started to form my impressions of the data provided by each participant. To support subsequent recall of these potentially important details, Briggs et al. (2012) also advise that, where possible, brief notes should be taken by the researcher during the interview process. I piloted this method with a trusted colleague prior to the research interviews, but found note taking to be potentially intrusive and unsettling for participants as it inhibited eye contact and was suggestive of a teacher judgementally 'marking' their comments. However, notes were taken immediately after each interview because I recognised that the qualitative researcher who seeks "understanding rather than facts" (Briggs et al., 2012, p. 386) must be aware of "thoughts, feelings, expressions and opinions" (p. 386) and be

attentive to every element of the interview (Davies & Hughes, 2014). This in-depth formative analysis (Briggs et al., 2012) required me to judge, in relation to my research questions, not only what was important or irrelevant in the transcripts, but also to consider how these words were said and whether to omit or include such aspects as interviewees' body language and tone of voice.

Qualitative analysis

To provide a systematic structure for the potentially amorphous process of interpretive qualitative data analysis, I adopted the rigorous method of coding as recommended by many writers (e.g., Bogdan & Biklen, 2007; Briggs et al., 2012; Creswell, 2012; Lichtman, 2010; Miles et al., 2014; Wellington, 2015). Explained simply, coding entails the accurate labelling of multiple pieces of data to aid sorting and categorisation, so that important information, faithful to the intent of the interviewee, can be extracted and contextual meaning can be made about the topic of interest (Cohen et al., 2000). As Briggs et al. (2012), Lichtman (2010) and Wellington (2015) describe, although very iterative and methodical, this process, was definitely not mechanical, as it involved meticulous analysis and critical and perceptive thought, combined with painstaking care and precision.

The coding process can be carried out in three different ways. The first process is the 'traditional' way with handwritten notes, highlighter pens, and/or post-it notes. The second process employs a word processing program, such as Word and, thirdly, a custom-made coding software package such as NVivo can be used. Finally, any or all of these three methods can be combined. For personal efficacy and accuracy I combined what I perceived to be the most advantageous aspects of all three methods. First, the nine interview recordings were typed out verbatim by transcribers who had signed confidentiality agreements (See Appendix F), with participant pseudonyms used in all cases. These type-written interview transcripts were subsequently formatted on the page using Microsoft Word. To aid visual clarity, I enlarged the font of the interview questions and changed them to blue-bold, I demarcated individual speakers in black-bold and formatted the page layout to allow sufficient margin space, left and right, for hand-written notes and annotations on the printed hard-copies. During this process, I listened carefully to the recorded interviews, made corrections to any transcribing

errors, and added appropriate punctuation. To ensure confidentiality, I also deleted any names of people or places mentioned by participants. Next, I copied and pasted these formatted documents into NVivo for coding. It was essential for this research study that the codes clearly demarcated individual speakers and schools, so that when analysing key pieces of data the precise source of the information was clear. This identification enables data source triangulation (Miles et al., 2014) which contributes to the confirmability of research (Briggs et al., 2012). To enable codes to be easily differentiated on the computer screen or typed page, (Cohen et al., 2000), Miles et al. (2014), and Bogdan and Biklen (2007) advocate using different abbreviations, symbols, or colours. However this was not necessary in NVivo, as this programme automatically attaches the name of the speaker to each piece of coded text.

The stages of coding

The important incremental stages of coding undertaken for this research were as follows.

- *Stage one*, I re-read each transcript in conjunction with its corresponding tape, as advised by Creswell (2012), to get an overall impression and to begin comprehending not just *what* was said but *how* it was said. At this point, as advised by Davies and Hughes (2014), I also recorded my impressions thoughts, queries, and speculations, annotating the hard copies and expanding my 'first impression' notes made immediately after each interview;
- *Stage two,* I created four deductive parent codes in NVivo reflective of the four themes present in the literature – creativity definitions, barriers, benefits, and development. Although participants were not asked specifically about barriers I felt it important to create this node initially to reflect a key theme in the literature;
- *Stage three*, taking each transcript in turn, I categorised the content into topical domains (Cohen et al., 2000) or segments (Creswell, 2012,) which were sorted in NVivo through the creation of new nodes. These segments, as Davies and Hughes (2014) advise, were in the first instance participants' responses to the seven questions asked in the semi-structured interviews. However, it was beneficial at this point to also examine the more spontaneous discourse of the interview, identify key pieces of information therein and allocate further

descriptive codes for these pieces of data (Davies & Hughes, 2014). Davies and Hughes (2014) maintain that this process requires increasing analytical vigilance and perception; my experience reflected this as it necessitated close scrutiny of the transcripts and much focussed re-reading. I had planned to only create inductive child nodes – sub categories related to each existing deductively created parent node. However I soon discovered the need for additional grandchild nodes – sub categories related to each child node. Segments of text were then allocated to these grandchild nodes. For example, the sub categories of the parent node 'Definitions of creativity' were the three child nodes 'Broader definitions', 'Definitions of creative people' and 'Student-related definitions'. Two of the many grandchild nodes related to 'Student-related definitions' were 'Exists in diverse forms' and 'Differs with age'. It was possible, given my knowledge of the topic and interview questions, that I could have also decided these related child and grandchild nodes a priori; but, as Lichtman (2010) and Miles et al. (2014) explain, for the majority of research, it is more empirically sound for most of the codes to emerge inductively, a posteriori, as the researcher reads and processes the data. That was the approach I adopted and, in that way, although the interview transcripts had codes in common, I was still open to the creation of many new codes depending on what was said in each interview. Creswell (2012) suggests that for manageability, the number of codes should be kept to maximum of 40, but in practice it is likely that they may exceed this number. My experience bears out this statement with over a hundred inductive nodes created in the analysis of my research data;

- *Stage four*, I appraised and analysed these hundred-plus nodes to calculate the number of responses per node, and to identify overlaps, repeats, synonyms, or outliers. The second task was to combine, re-group, and rename nodes as appropriate in the light of this information. This careful process facilitated the identification of key themes (Creswell, 2012) and significant pattern codes (Miles et al., 2014). As Creswell (2012) describes, through this procedure the minutiae of detailed sub-codes can be reduced into a more manageable number of overarching codes that have within them related sub-categories. At this point too, anomalies, contradictions within interviews, and missing

participants for each code were identified. Transcripts were re-checked to guard against inadvertent errors, and every effort was made to ensure the coding accurately represented the content of the interview data. This process of investigating patterns within the data in order to facilitate "selection and condensation" (Miles et al., 2014, p. 116) was greatly aided by the use of tables and figures that clearly displayed the research findings, as advised by Miles et al. (2014) and Creswell (2012) (see Appendix G). The tables in Chapter 4 were also a crucial part of this process. Also advocating this procedure are Cohen et al. (2000) who propose that as part of a carefully documented system of "discourse analysis" (p. 299), these visual aids and their narratives can enable the researcher to represent and report their findings in a way that enhances reader understanding, validates accuracy, and strengthens research credibility. As Newby (2010) states "real world research is not necessarily clear cut and well structured" (p.6) and this coding journey involved many blind-alleys, U-turns, and difficult decisions about which thematic direction to take;

- *Stage five,* by interpreting and interrelating these key themes as advocated by (Creswell, 2012), I drew further meaningful connections between them and gleaned a broad perspective from the minutiae of detail. This process also provided additional "rigour and insight" (Creswell, 2012) for my qualitative research; and
- Finally, as Creswell (2012) recommends, having been immersed in the pool of data, I then adopted a different vantage point from where I could more clearly view the bigger picture in order to understand the messages and implications of the data findings. This complex process involved comparing and contrasting the findings in the light of previous literature and research studies, and finally distilling all the information to formulate appropriate conclusions, theories and recommendations about the research topic based on the empirical evidence gathered.

Ethical considerations and possible limitations

Cohen et al. (2000) maintain that ethical researchers, who seek greater knowledge and understanding, must acknowledge and accept the moral responsibility they have to

their co-researchers and their research participants. Hence, it is essential that, throughout the research process, researchers exhibit probity (Briggs et al., 2012; Davies & Hughes, 2014). As Wellington (2000) states, "codes of conduct" (p. 56) are therefore essential for ethical research; however, as Bogdan and Biklen (2007) claim, conduct is more important than the codes and in reality ethical research is dependent upon the morality and value judgements of the researcher. With this in mind, I exhibited diligence and integrity and ensured that throughout every stage of this research, my thoughts and actions were guided by ethical considerations as detailed below.

The four principles of ethical research, most commonly identified are:

- Gaining informed consent (Bogdan & Biklen, 2007; Cohen et al., 2000; Creswell, 2012; Davies & Hughes, 2014; Lichtman, 2010; Wellington, 2000);
- Avoiding harm (Lichtman, 2010) or minimising harm (Miles et al., 2014);
- Being truthful and avoiding deceit (Bogdan & Biklen, 2007; Miles et al., 2014; Wellington, 2000); and
- Honouring privacy, confidentiality, and anonymity (Bogdan & Biklen, 2007; Creswell, 2012; Miles et al., 2014).

This list however can be expanded to include four further important considerations:

- Exhibiting care and sensitivity through an awareness of "diversity in our world" (Davies & Hughes, 2014, p. 45);
- Fostering "rapport and friendship" (Lichtman, 2010, p. 57)
- Eschewing "intrusiveness, (and) inappropriate behaviour" (Lichtman, 2010, p. 57); and
- Enhancing a culture of collaboration by providing "trustworthy knowledge to benefit a range of communities" (Briggs et al., p. 90).

These additional considerations can be viewed as framing the four key principles, which are interrelated and have ethical research at their core.

Informed consent

To achieve genuinely informed consent, as Bogdan and Biklen (2007) state, research should be avoided where there is the potential for coercion; furthermore, as Lichtman

(2010) advises, participants must fully understand what they are agreeing to be a part of. As I sought the authentic co-operation of teachers, I did not involve friends, colleagues or anyone who may have felt obligated to take part; it was also made explicit in all documentation and discussions that participation was voluntary. Having received the written consent of each principal and having entrusted them with the responsibility of seeking the approval of their Board of Trustees (BOT), I met the staff at introductory whole school meetings – one meeting in each school. In these meetings I explained the research process, outlined the selection criteria, and sought the voluntary participation of staff members. At this point, I answered teachers' immediate questions and also distributed to all staff members, further written information about the research that was sufficient for them to make informed decisions over their voluntary participation. My detailed description of the research process, given in hard copy to all potential participants (see Appendix C) honestly conveyed the qualitative, interpretive nature of the research, its precise methods and purposes, and the potential pros and cons of participation. The criteria for selection were also clearly explained and potential participants were invited to contact me by email within a week for clarification of any queries they may have and to express their interest in taking part. In order for the three selection criteria to be applied, volunteers were asked to provide details concerning their teaching experience and leadership roles. In addition, as advised by Berg et al. (2004), Briggs et al. (2012) and Guba and Lincoln (1994), the consent process was not one sided or researcher dominated. Before giving their written consent, potential participants were invited to discuss the research process further, to seek clarification or negotiate amendments if they so wished. To further ensure their welfare and allay any concerns, they were also informed that they could contact me at any point in the research process. This was crucial, as Lichtman (2010) posits, because interpretive qualitative research can spontaneously evolve and move in unanticipated directions not consented to by participants. Hence, consent given in advance may not be as informed as genuinely intended, and subjects may inadvertently be put in harm's way. I acknowledge that semi-structured interviews, in particular, can carry this risk. For these reasons, I ensured that informed consent was on-going by checking in with participants during the interviews, and also by allowing them to read and negotiate the content of their interview transcripts. Participants were also informed that they could withdraw or

exclude their data at any time, should they so wish, up until the point of thesis publication.

At the end of this process, nine participants volunteered and were informed of their selection by email. Mutually convenient interview times were arranged and written consent was given by each participant prior to each interview.

Avoiding harm

Davies and Hughes (2014) declare that research participants should never be exploited, hurt, or disadvantaged as a means to an end. With this in mind, I endeavoured to minimise the intrusion and inconvenience caused to participants and their schools. Furthermore, before staff meetings and interviews in order to be sensitive to diversity, I checked and subsequently adhered to staff members' cultural protocols, customs, and preferences. It was also the intention for each interview to be an interesting, honest, and mutually beneficial professional conversation, not an unpleasant or intrusive interrogation. To achieve this, as Berg et al. (2004) advise, the interviews incorporated elements of "the symbolic interactionist paradigm" and also "dramaturgy" (p. 102). In this way, carefully crafted questions and probes directed toward the purpose of the investigation encouraged the interviewees to relate to the researcher, to enjoy the process, and to respond willingly and informatively (Berg et al., 2004). However, and most importantly, I recognised that speaking honestly may potentially involve a degree of risk to participants' welfare, status, and career. Therefore, I did everything within my power to protect the mana (dignity and self-respect) of interviewees and also the identities of those involved. My approach was empathetic, respectful, and non-judgemental; furthermore, confidentiality was paramount.

Honouring privacy, confidentiality, and anonymity

Experts in the field agree that research participants have the right to expect that their privacy, confidentiality, and anonymity will be diligently maintained, at every stage of the research process (Bogdan & Biklen, 2007; Cohen et al., 2000; Davies & Hughes, 2014; Lichtman, 2010; Miles et al., 2014; Wellington, 2000). However, anonymity is only possible when nobody, researcher included, knows the participants' names. Thus, I focussed on maintaining confidentiality. To achieve this goal, within each transcript I

used carefully chosen generic school descriptors, replaced all names with pseudonyms, and omitted any information that allowed for the recognition of locations or participants. I also did not request or record extraneous information that was irrelevant to my research. Of paramount concern during and after the completion of the research project was the rigorous protection and safe storage of all data. However, I am aware that my concerted efforts, may not prove to be entirely successful because, as Miles et al. (2014) posit, achieving privacy and confidentiality to the satisfaction of all participants is unlikely. For example, despite the use of pseudonyms, the reported data may still allow for the recognition of participants by those who know or work with them (Miles et al., 2014). Therefore, as advised by Creswell (2012) and Davies and Hughes (2014), in the interests of informed consent, minimising harm, and avoiding deceit, the potential risks to participants' privacy and confidentiality were clearly explained from the start.

Being truthful and avoiding deceit

Interpretive qualitative research which is carried out through semi-structured interviews requires reciprocal honesty and trust between both parties. To establish an ethical foundation for this beneficial relationship, not only did I provide detailed factual information about the research process, and alert subjects to the possible risks, I also honestly expressed my own ontological and epistemological positions. Furthermore, during the interviews, to enhance accuracy and avoid misunderstanding or misinterpretation, I was aware of the risks of inferring rather than inquiring (Argyris, 1990; Cardno, 2012; Robinson & Lai, 2006). Hence I demonstrated respectful advocacy that encouraged bilateral sharing of information, and promoted honest collaborative inquiry. Furthermore, I followed the advice of Lichtman (2010) who maintains that when interpreting and reporting the data, although an objective research stance is not possible, meticulous analysis must be used to ensure there is a truthful representation of the data gathered, so that the conclusions drawn are authentically supported by the content of the interviews and conversations. This concluding stage of the research process, as Wellington (2000) argues, is ethically the most important, when "justice needs to be done, and to be seen to be done"(p. 139).

Limitations of the study

Wellington (2015) posits that the value of research cannot be judged without an awareness of its limitations. Creswell (2012) states why these limitations should be openly acknowledged – to be transparent and honest, to support the comprehension and transferability of findings and conclusions, to enable researchers to repeat similar studies, and to indicate areas for potential future research. Potential weaknesses for this investigation are as follows. Firstly, it is acknowledged that the data gathered from this small scale qualitative study may not represent the opinions and experiences of all teachers concerning creativity. Fortunately however, despite size limitations, the findings can be translatable if they resonate with readers, own experiences. Secondly, there were the limitations of time. For interpretive research, involving verstehen - an empathic understanding of human behaviour (Briggs et al., 2012) – it is beneficial to spend extended periods interacting with research participants (Miles et al., 2014), observing when possible and checking data by re-interviewing key informants (Wellington, 2000). Unfortunately, the timeline of this study did not permit such sustained engagement. Thirdly, qualitative interpretive research may be more influenced by the expertise and personal bias of the researcher than quantitative surveys. For a novice researcher, such as myself, rigour is viewed as sometimes more difficult to maintain, assess, and demonstrate. Finally, although this investigation was prompted by antecedent research and literature about creativity (Beghetto, 2008, 2010; Burnard & White, 2008; Craft, 2001, 2003; Jeffrey, 2006; Kaufman & Sternberg, 2010; Plucker et al., 2004; Robinson, 2001, 2006; Stoll & Temperley, 2009; Trotman, 2005), there appears to be a lack of research specifically into creativity development within primary schools or educational leadership for creativity. Therefore, this research is not “cumulative” (Wellington, 2000, p. 29), and its findings cannot be compared or sounded out against the theories and hypotheses distilled from similar research carried out by experts in the field.

Conclusion

This chapter has explained the area of study and justified its contemporary relevance. The research problem and questions have been outlined and the rationale behind them summarised. The epistemological and ontological positionings underpinning the chosen interpretive research paradigm have also been acknowledged. In addition, as

advised by Brown, Carducci, and Kuby (2014) the research questions have guided the exploration of research methodology and the subsequent choice of method. The adoption of a qualitative approach employing small-scale multiple case-studies has thus been justified as valid and appropriate for investigating the topic of interest and also as being conducive to transferability (Lichtman, 2010, p. 228). Furthermore, the method of data collection and choice of sample size and composition has been elucidated and shown to support triangulation. Additionally, the rigorous step by step procedure employed for data analysis, through coding, has been explained, and revealed to be a credible way of authentically interpreting the data. Finally, the interconnected ethical considerations for research have been explored and the potential limitations of this research study duly acknowledged.

Chapter 4. Findings and data analysis

Introduction

The research participants

Chapter 4 presents a summary of the findings from the semi-structured interviews conducted with nine participants from three New Zealand primary schools. The interviews investigated participants' definitions of creativity, their pedagogical approaches, their teaching and learning programmes, and the influence of school leadership on teachers' development of their students' creativity as perceived by participants. This chapter begins with an overview of the nine interview participants followed by an outline of the format utilised in the summary tables which display the data. The sub-headings for this chapter are the seven interview questions. The data are presented in tables according to the categories emerging from participants' responses to these questions. The findings are outlined in relation to the data shown in each table.

***Table 4-1*: Descriptive overview of the research participants**

Pseudonym	School	Position	Identifier	Years of teaching experience
Suzy	1	Deputy principal	DP	27
Ann	1	Scale A teacher	Tchr	7
Frank	2	Principal	Prcp	34
Barb	2	Member of leadership team	Ldr	27
Clare	2	Member of leadership team	Ldr	17
Eric	3	Principal	Prcp	23
Tess	3	Member of leadership team	Ldr	26
Harry	3	Scale A teacher	Tchr	23
Kate	3	Scale A teacher	Tchr	6

As shown in Table 4-1, the research group of nine participants had a range of teaching experience from six to 34 years, and included two principals, one deputy principal (DP), three middle leaders, and three Scale A teachers (teachers without formal leadership responsibilities). In discussing the data findings the label *teacher* or *teachers* is ascribed to all nine participants, as the middle leaders have their own classes, Suzy is a

teaching (DP), and the two principals also take classes at various times. However if required, for clarity of data analysis, the responses of the Scale A teachers are differentiated from those of the middle leaders (with formal syndicate leadership responsibilities) and the senior leaders (the DP and/or two principals). This was particularly the case with reference to question six, which explored the influence of leaders on teachers' pedagogical practice for creativity development.

Summary tables

Summary tables have been utilised to display the data findings. Column one lists the concepts identified by participants in relation to each interview question, and in the column beneath each name is the number of times that participant referred to each concept. Having initially answered each question, concepts were frequently revisited by the participants throughout the interviews as the discussions unfolded, increasing the number of relevant responses ascribed to each interviewee. The overall sum of the participants' responses is shown in the 'Total' column, and the concepts are listed in descending order according to the total number of responses. The rationale for showing the frequency of individual responses together with the overall totals is to identify clearly which concepts were discussed most often and by whom. Minority categories only mentioned briefly by individual participants have not been included in the tables.

The research findings

Question 1: How would you broadly define creativity?

This introductory question invited participants to think broadly about creativity prior to honing in on creativity in an educational context. To probe more deeply into teachers' definitions of creativity, a supplementary question was also asked: How would you define creative people? Participants' responses to these questions are shown in Table 4-2.

Table 4-2: **Participants' broad definitions of creativity**

Broad definitions of creativity	Number of responses per participant									Total
	School 1			School 2			School 3			
	DP	Tchr	Prcp	Ldr	Ldr	Prcp	Ldr	Tchr	Tchr	
	Suzy	Ann	Frank	Barb	Clare	Eric	Tess	Kate	Harry	
Is original or different	1		1	1	1	1	1		2	8
Involves risk	3		3							6
Promotes fulfilment and mental well-being	5	1								6
Is inherent in all	4					2				6
Requires perseverance to see ideas to completion		1		1	1	1			1	5
Is hard to define	1		1					2	1	5
Can be unexceptional – everyday creativity	1	3			1		0			5
Is driven by personal passion		1		1			1	1		4
Is purposeful and adds value			1		1	1	1			4
Can be exceptional – God given to a few	2	2								4

The findings reveal that although only four people perceived creativity as 'hard to define', there was a diversity of responses. No single definition was commonly identified by the whole group and most definitions only garnered responses from five participants or less. However, a majority of seven people did posit that creativity is 'original or different', and closely related to this notion was the belief, as highlighted by two participants, that creativity 'involves risk'. Frank and Suzy felt that creative people, in deviating from the norm, opened themselves up to criticism, intolerance, or ridicule from others. The need for creative people to have bravery and confidence was also highlighted in their definitions, as shown below:

> *(Frank) Part of creativity is you take a risk… you open yourself up to critique from your peers and everybody else.*

> *(Suzy) To be brave enough not to fit into the norm in society is... is sometimes what creativity's about.*

Conversely however, creativity was also described by four teachers as 'unexceptional and everyday'. Ann, for example, eschewed all notions of originality and difference stating that creativity is merely the *'making of anything'* (Ann). However, even in this limited form, and despite her belief that creativity *'drives into the soul of a person'*, Ann did not feel that everyone possessed the passion, perseverance or capability to be creative. The notion of choosing to pursue your creativity (Barb), or being powerless to resist your inner creativity (Ann) was also mentioned in this context. Only Eric and Suzy declared that creativity was inherent in *all* people, with Suzy believing that, due to *'a fundamental misunderstanding of what being creative is',* the creativity potential of some people can remain unrecognised and unrealised by them. As Suzy passionately stated, creativity is *'the quintessential being of everybody… the soul food of who that person is as a person',* yet as she ruefully commented:

> *(Suzy) You often get people saying, 'Oh, I'm not creative. I'm not. I can't. No, I can't.' 'I can't do that.' And, and you know, that's a real sadness, isn't it? 'Cause like… you are. Everybody is. Everybody's got the ability to be.*

Continuing this train of thought Suzy described creative expression as essential for personal fulfilment and mental well-being – a view echoed by Ann. Yet they both

defined ‘exceptional’ creativity as ‘God given to a few’, with Suzy citing Mozart as an example of such divine creativity.

A further definition, only briefly mentioned by Frank, was ‘entrepreneurial creativity’ leading to individual wealth. However none of the participants were of like-mind, nor did they relate creativity to a wider financial benefit for society. This is noteworthy as, in recent years, the links between creativity and a robust thriving economy have been identified and emphasised by politicians and industrialists.

Question 2: How would you define creativity in relation to your students?

This question, with its focus on creativity as displayed by students, served to narrow teachers’ definitions. This data set, shown in Table 4-3, reveals participants’ wide ranging definitions of students’ creativity. This information also highlights the relationship between these definitions and teachers pedagogical practice for creativity development in their students.

All teachers defined that creativity can take many diverse forms – for example: thinking and acting differently than other people, performing in plays, using digital technology for the presentation of writing, or inventively combining different construction materials. However, the definition amassing most responses by far from all participants was that student creativity ‘requires agency, opportunity, and support’. All participants emphasised the importance of teachers encouraging and empowering students to express and develop their personal creativity, and for reserved or reticent students in particular this was seen as crucial. As in Question 1, creativity was also defined as having an element of risk. However, in relation to students, the links between creativity and risk were emphasised in more detail with 16 responses. Student creativity was therefore interpreted by everyone as being contingent upon a supportive encouraging environment in which students felt ‘safe to take risks’. The following comments are typical of participants’ definitions:

> *(Frank) Number one; children having the ability or the freedom to take risks.*
>
> *(Barb) Choice, absolutely choice! Not being hemmed in… creating an environment where it is OK to take risks and be creative, and not be pushed down.*

***Table 4-2*: Teachers' student related definitions of creativity**

Student related definitions of creativity	Number of responses per participant									Total
	School 1		School 2			School 3				
	Ldr	Tchr	Prcp	Ldr	Ldr	Prcp	Ldr	Tchr	Tchr	
	Suzy	Ann	Frank	Barb	Clare	Eric	Tess	Kate	Harry	
Requires agency, opportunity and support	7	3	5	5	3	6	3	4	4	40
Exists in diverse forms	1	2	3	1	4	1	3	3	5	23
Reveals originality of thought and action		2		5	4	4	4		3	22
Needs confidence and a growth mind-set	3		3	1	6	4	1	1	2	21
Differs with age	1	3	3	2	3	1	3	2	2	20
Is most easily expressed in the Arts	3	3	1	3	1	2	1	2	1	17
Involves risk	4		3	4		3			2	16
Involves Problem solving				3	2	3	5	1	2	16
Is not linked to academic ability		1	2	6	2	1	1	1	1	15
All students have it	1		1	1	1	1	1	1	1	8
Exists in differing amounts		1	2					1	3	7
Involves imagination	1	1		1			1		1	5

With creativity acknowledged as risky, it was no surprise that eight out of nine teachers also defined self-confidence and a growth mind-set as essential requirements for students to express and develop their personal creativity. These personal attributes were also closely interwoven with student agency – students knowing themselves as learners, exhibiting self-management, and having the competence, self-

belief, and encouragement of teachers to direct their learning through informed choice. Due to these beliefs, although eight participants defined creativity as present in all children, four teachers felt that, due to students' varying levels of self-esteem and self-efficacy some were more creative than others. Clare's statement highlights this viewpoint:

> *(Clare) I think mind-set is a thing that can affect creativity depending on whether you're sort of open-minded, or more fixed or closed-minded about the way you approach a task. I think self-confidence probably connects with that idea of creativity too. If you're more confident in yourself, and in your thoughts and ideas, you're probably more inclined to apply something new or something different.*

When asked if creativity was age related, the teachers' views were very similar. They described how children's creativity evolves and develops over time due to the impact of many influential factors, both positive and negative – as shown in the following responses:

> *(Barb) I think they start off with a lot… a little bit free and they'll draw and they'll write and they'll play in the sand pit and they'll create and they'll go places in their heads and they'll create these environments… and then they have different people's constraints put on them. .*

> *(Ann) I just think that as they get older they get more tools to be creative with.*

There also was a further similarity of beliefs concerning creativity and the arts. Everyone stated emphatically that although creativity was synonymous with the arts, it was not confined to the arts. Participants believed creativity could exist in many 'diverse forms' if students were given the freedom, encouragement and opportunity for personal exploration and self-expression across the curriculum. This belief is reflected in the response by Tess below:

> *(Tess) It depends what the task is… I think there's always an element that creativity can arise if the task is open-ended.*

In a similar vein, although eight participants identified some *domain-specific,* forms of creativity such as problem solving in maths, <u>all</u> respondents placed greater emphasis

on *domain-free* creativity and the capacity of creative students to inquire and apply their original thoughts, ideas, and problem solving skills *'across the board'* (Ann).

The relationship between creativity and academic ability was also explored with eight of the nine interviewees ultimately deciding that academic prowess was not an indicator of enhanced creativity. Barb for example described high-achieving 'academic' students who were too inhibited and scared to take creative risks for fear of making mistakes and less able students who would creatively 'give anything a go'. As she explained:

> *(Barb) It's almost like if they are really perceived as being really bright in that area they are boxed in further… often your low kids… they've always had to think a little bit differently to everyone else to, to make progress.*

Question 3: Do you think it's beneficial for students to develop their creativity?

Research indicates that there are many benefits of creativity in education and three key aspects were explored with participants – the current and future benefits of creativity for students, and also the wider benefits for others within and beyond the classroom. These data, shown in Table 4-4, give an insight into *why* and *how* teachers would adopt pedagogical approaches and employ teaching and learning programmes conducive to creativity development. This table has eight categories, the three most common of which were affirmed by all nine participants with 74 responses in total. It is evident therefore that creativity development was viewed by participants as of great benefit to students.

***Table 4-3*: The benefits of creativity development**

Benefits of creativity development (aspects that are enhanced)	Number of responses per participant									Total
	School 1		School 2			School 3				
	DP Suzy	Tchr Ann	Prcp Frank	Ldr Barb	Ldr Clare	Prcp Eric	Ldr Tess	Tchr Kate	Tchr Harry	
Learning and achievement	5	3	2	5	1	9	2	2	2	31
Self-confidence and mental well-being	7	1	1	2	1	3	5	3	1	24
Enjoyment, motivation engagement	1	4	4	3	1	2	2	1	1	19
Self-realisation and fulfilment	8	4			1			1	1	15
Citizenship, contribution to society	1	1	2	3	2	1	1	1	1	13
Preparation for 21st century life	1			2	1	1	3	3		11
Social and behavioural skills	1	1	1	1	1	3			1	9
Teacher enjoyment satisfaction	1		2	1		1	1	1	1	8

The first major finding emerging from this data set is that all the participants believe creativity enhances students' learning and achievement. Two teachers, Ann and Frank, gave examples of the specific curricular benefits that occurred during creative play-based learning – a child's scientific discovery of floating and sinking, and students' improved counting and oral language skills. However, over and above any discrete curricular achievements, all the interviewees placed far greater emphasis on the way in which creativity enhanced students as unique and self-aware individuals. These benefits, although personal, were perceived by respondents as more wide reaching because students' gains in self-confidence, engagement, and motivation, enhanced their capability to learn and achieve across *all* curricular areas. The two principals

specifically noted that for those five and six year olds who were not developmentally ready for formal learning, most commonly boys, there was an immense difference between the formative success experienced though play-based learning and the damaging demoralisation of being identified as underachieving in relation to *National Standards* (New Zealand Ministry of Education, 2010a) or in need of Reading Recovery (National Reading Recovery, 1983) at such an early age. As Frank states:

> *(Frank) Okay, you're behind… you know, you've only been at school a year, and you'd better go on reading recovery too. You need to recover already after one year at school!!*

There was also a notable commonality of belief amongst participants that students' positive feelings of self-worth were closely linked to the key aspects of personal creativity previously defined – freedom, opportunity, independence, self-expression, self-worth, and agency, through empowerment, permission, and trust. Barb gave an example of this:

> *(Barb) There's a group of boys collaboratively writing at the moment… and they're away and they're off and that's what they choose to do in their free time. And in maths, the boys have created their own game… and it's like "yeah I trust you to go with that".*

Also linked to enhanced self-esteem, through creative expression, were self-realisation, personal fulfilment, and mental health. These interrelated aspects were identified by four participants, and emphasised particularly strongly by Tess and Suzy:

> *(Tess) I think that mental health well-being element is so important… when you have the chance and opportunity to be creative it slows everything down and perhaps there's quite a nice self-nurturing thing.*

> *(Suzy) I think that if we don't allow creativity to come out, then we do become repressed… you've gotta recognise what your creativity is, but if it's not allowed to come out and you can't express it, I think that you know, mental health issues come from that, and they're big.*

Aligning with the notion of creativity fostering personal growth and well-being, eight teachers stated that creativity development *within* school was also valuable for students *beyond* school because it increased their employability and prepared them for an uncertain future in a dynamic and rapidly evolving world. Key aspects of this

future preparation were fostering students' flexibility and openness to new ideas, enhancing their creative problem solving, and building in them the resilient self-confidence to express themselves. Tess's comment highlights this:

> *(Tess) It also links up to lots of other skills that benefit you later in life, you know, all the problem solving, innovative skills that you need for 21st century learning… the confidence to be able to put those thoughts and ideas out there… that's going to mean good things for them…for life.*

In addition, participants identified that creativity was beneficial, not only for students themselves, but also for those around them. Seven teachers described how creativity development, and the increased trust and autonomy afforded to students by teachers, had increased learners' motivation, enhanced their self-management and social skills, and decreased conflict and misbehaviour. Clare and Frank took this a step further contending that creativity development could lead students to become more responsible citizens in the future. As Clare explained:

> *(Clare) I believe that it's not just about work and about jobs, it's about creating citizens and people who can contribute in good ways to our society, and if creativity helps them to be those good citizens that we need, then I'm all for that.*

However, once again, despite government and industrial rhetoric linking student creativity with future economic benefits for society, none of the participants made this connection. The perceived benefits to society of student creativity, as described by teachers, were more practical than financial. A key aspect of this was the ability of creative people to view things from unusual perspectives and as a consequence to solve problems in the wider world, as summed up by Harry and Tess:

> *(Harry) Well, I think creativity is where innovation comes from, where new ideas come from… it's the solution to problems in the world…..you know….*

> *(Tess) Creativity encourages original thought and that's what we're going to need to solve problems, you know, environmental, political, religious… you need to have people that have original thought and different approaches to solving things.*

Finally, of relevance to participants and their colleagues were the positive links between creativity in the classroom and teachers' job satisfaction. Seven participants

noted that developing students' creativity meant reduced stress for teachers, greater rewards, and a renewed passion for the job. These benefits accrued because conflict between students decreased, engagement in learning increased, and teachers relished the collaborative and creative journey into the unknown with students who were exploring their passions. The principals, Eric and Frank, were most keenly aware of this:

> *(Frank) It's just so easy to observe how happy they are… within four weeks of starting, how more relaxed the teachers were – a huge change in teachers.*
>
> *(Eric) You know, if the kids come up with something they come up with something. So, jump on, enjoy the ride!*

Question 4: What particular aspects of your teaching and learning programmes, do you feel encourage your students to develop their creativity?

All participants stated emphatically that the role of education is not to fill young heads with information, but to inspire students to be creative and curious about the world they live in. Table 4-5 shows the key ways that participants fostered students' creativity through their pedagogical practices in relation to their teaching and learning programmes. These data reveal that although creativity within the core subjects of literacy and numeracy was seen as desirable, it was also identified as more challenging to facilitate. Conversely however, teachers talked confidently about encouraging students' personal creativity through their cross-curricular inquiries. An identified sub-set of this inquiry approach was play-based learning which was present in the junior syndicates of all three participating schools and viewed as the essential foundation for future student-led inquiries. Eight respondents extolled the creative, emotional, social, and behavioural benefits of learning through creative play, and participants keenly stressed the importance of allowing older students to creatively pursue their personal passions, through self-directed investigations. The personal and professional risks for teachers of this student-led approach were also identified, most notably the relinquishing or sharing of control with the students. Nevertheless, the importance of letting students lead their learning in the directions they choose and that reflect their personal passions was fully endorsed with fifty positive responses, an example of which is below:

(Kate) Inquiry, definitely – like individualised projects and inquiry and all of that… whatever we're doing, it's always based on the idea that students are creating something that <u>they</u> love.

***Table 4-4*: Pedagogical practices – participants' teaching and learning programmes for creativity development**

Pedagogical practices - teaching and learning programmes	Number of responses per participant									Total
	School 1		School 2			School 3				
	DP Suzy	Tchr Ann	Prcp Frank	Ldr Barb	Ldr Clare	Prcp Eric	Ldr Tess	Tchr Kate	Tchr Harry	
Cross-curricular inquiry approach	11	1	12	2	3	7	5	4	5	50
Providing knowledge tools and skills	5	5	2	1	3	3	4	6	3	32
Scaffolding for independence	3	2	4	4	1	2	4	1	2	23
Flexible planning	2		2	9		2	2	1	5	23
A broad range of experiences	2		5	1	2	4	5	2	1	22
Creativity in core subjects	3	3		4	2		1	4	2	19
Giving time	4		3	2	1	2	1			13
Authentic cross curricular learning	1		1	1	2	3		2	1	11

Seven of the nine teachers also recognised that, for effective creative inquiry encompassing all or any areas of the curriculum, flexible planning combined with adaptable and responsive teaching and learning programmes were essential. Harry's response reflects these teachers' views:

(Harry) You know, it's about being open minded and… having a zest for, for learning and, um, also, you know, creating an environment where kids are free to explore things and to ask questions…to allow time in the programme where they can investigate things on their own.

An additional issue, recognised by six respondents as necessary for creativity development, was giving students sufficient time and room to be creative, as Suzy's animated response below highlights:

> *(Suzy) We must give kids time. We're so rush, rush, rush, rush, rush. 'Come on, [clicks fingers] let's go onto the next thing, and now it's time for… now we're going to do...' You give them that space and that time to explore. And if they go off a tangent, great, you know.*

The complex relationship between students' tools, skills and knowledge and their personal creativity prompted over thirty responses from participants. Everyone stated that an appropriate combination of specific skills and subject knowledge was a necessary foundation for creativity development. Barb described a *'tool-box of knowledge and understanding'* that provided *'a better base to pull out that creativity',* and Ann was of like mind venturing that:

> *(Ann) It's our job as a teacher to hand them the tools… to give them the skills that will become tools in the tool box that they can then reach into and use creatively … you can't be successfully creative, I don't think, without having a solid knowledge base…*

The importance of also providing opportunities for students to utilise their skills and knowledge through creative exploration was also identified, as was the need for careful and appropriate scaffolding to facilitate increasingly independent learning. However, finding the correct balance of these factors was seen as challenging by six participants and Kate's response echoes their comments:

> *(Kate) Yeah, there's an absolute balance, eh. It's, it's a real little marriage between those three… the skills, the knowledge and the ideas…What fosters their creativity? It's gotta be a real balance between letting them go and do it, whatever they're wanting to do and having an adult or someone experienced on the side-line coaxing them in the right path.*

Eight participants also stated that students needed a wealth of diverse cross curricular learning opportunities in order to find and develop their individual creativity. For example, principal Eric described a boy whose creativity and motivation to learn had been very limited until he engaged in food technology. With this child in mind, Eric summed up the need to cater widely for students' diverse creativity:

> *(Eric) A broad and rich curriculum, is absolutely paramount to identifying where creativity is, an opportunity for kids to be in and work within a creative environment which allows for creative ideas, new ideas, the ones that the kids bring in or the teachers bring in, because we're trying to, you know, give them an opportunity to, experience something new, and expose them to a new idea.*

In addition, four teachers (Suzy, Kate, Tess, and Eric), felt that excess of screen time, digital technology and virtual reality in the home environment made it essential for today's teachers to provide a wealth of *real-life* experiences for students to learn from and draw upon in the future. Kate's comment below typifies the views of these four participants:

> *(Kate) The way our society is going in terms of technology and being removed from so, so many real life experiences that you… used to have a decade ago… children need as many experiences as possible.*

Question 5: In terms of your teaching style or your approach, how do you develop your students' creativity?

Participants' responses to this question provided further insights into the pedagogical practices employed by teachers to develop students' creativity. As shown in Table 4-6, the main findings to emerge were 'reacting positively to students' creativity, 'knowing and responding to students', and 'collaborating with students'. All participants believed that they were role-models whose personal responses to students' creativity were exemplars for their class to emulate. Therefore, to encourage pupils to respond positively to the creativity of their peers and to create a safe, supportive environment conducive to students' self-expression and creative risk-taking, teachers stated that they consistently celebrated difference and explicitly modelled enthusiasm and respect for originality. The following responses are examples of this mind-set:

> *(Suzy) I think my attitude is crucial… being positive, being encouraging, celebrating, having fun. You know, the way that I am in the classroom is crucial.*

> *(Harry) You have to model it yourself, in terms of how you interact with the students, you know. Being interested in them, valuing what they say, being open to them… creating an environment where students still feel safe to blurt that stuff out, and working really hard on getting students to value each other's opinions… That's a big part. So, the tone in the classroom, that the teacher's trying to create, I think that's important… to creativity.*

Furthermore, all participants affirmed that for students' individual creativity to flourish, the affirming reactions of teachers must be complemented by authentic relationship building and responsive personalised teaching derived from an empathetic

and holistic knowledge of the young people in their care. Harry and Suzy describe this pedagogical approach:

> *(Harry) It starts, starts before school, you know, just having conversations with them, talking with them about what's going on in their lives and what's interesting. And then they feel open to talk to you.*
>
> *(Suzy) It comes from that want, and that need to, do what's right for the children… the children at the heart of the matter, like ERO (Education Review Office) says.*

Once again reflecting the crucial links, as perceived by participants between students' self-worth, self-efficacy, and their creativity, eight teachers re-iterated the importance of giving young people a voice and encouraging their personal agency. Collaboration, negotiated choice, and the co-construction of learning tasks with students were seen as crucial for creativity development. With this pedagogical approach in mind, the necessity for teachers to relinquish full control, whatever the risks, was highlighted once again by seven participants and expressed most emphatically by Frank. He asserted that teachers must resist being *'micro-managing control freaks'* (Frank) and '*allow students to have a greater control of the pathway which they want to go.'*

***Table 4-5*: Pedagogical practices - participants' teaching styles and approaches for creativity development**

Pedagogical practices - teaching style and approach	Number of responses per participant									Total
	School 1		School 2			School 3				
	DP Suzy	Tchr Ann	Prcp Frank	Ldr Barb	Ldr Clare	Prcp Eric	Ldr Tess	Tchr Kate	Tchr Harry	
Reacting positively	5	1	1	4	3	5	2	3	7	31
Relationships and responsive teaching	4	2	2	4	3	3	6	2	3	29
Collaborating with students	4	1	3	2	1	3	4	3	4	25
Inquiring reflecting and up-skilling	2		2	5	4		5	1	4	23
Collaborating with colleagues		2	4	3	1	2	3	3	4	22
Facilitating student-led learning	4		2	3	2	1	2	3	2	19
Taking pedagogical risks	1		3	2	2	2	1	1	2	14
Encouraging risk-taking in students	4		2	1		3			1	11

Echoing this mind-set, Harry affirmed that he strived to work 'beside the students more than ahead of them' and Barb colourfully described the challenges of letting go of the reins:

> *(Barb) You've got to be prepared to go down those rabbit holes… And not put obstacles in their way, road blocks. But that's a hard thing to do, when you have been the person in charge… and it is a power position. To suddenly step back, and close your mouth, and tie your hands behind your back, and let them go.*

In combination with this responsive pedagogical approach, the importance of embracing ako (reciprocal learning) – being humble and receptive enough to learn *with* and *from* students, whanau, colleagues and community was also identified by Suzy,

Harry, and Barb. As Barb stated *'It's not about my ego, it's actually about how can I help these kids'* – a view reinforced by Suzy:

> *(Suzy) I am creative and I am a learner too. It's important for me to demonstrate ako so that, so that … students, teachers, leaders, and the community together can contribute to the collective knowledge base of the school.*

In response to the question "Do you think you need to be creative to develop students' creativity?" Ann was undecided, Frank felt it was most likely true, and Suzy answered emphatically *'Yes – creative teachers encourage creative students. Totally!'* However Barb and Tess expressed other views explaining that it was precisely because they didn't view themselves as creative people that they sought to promote the creativity of their students, through thinking and inquiring honestly into their practice. Seven of the nine participants similarly identified that developing students' creativity in the ways noted in Table 4-6 required teachers' self-reflection, on-going inquiry, and a desire to keep on learning. The following responses from Tess and Suzy typically reflect these beliefs:

> *(Tess) I feel like there's lots more to learn. You know… you kind of go away and do a little thinking and reading… the more I'm finding out the more I want to know and the more it's challenging many things. [Laugh]*

> *(Suzy) Yeah. To discover and to inquire, because as a teacher… I'm a learner too… and to keep vibrant and fresh, and not get stale, we've got to keep learning, we've got to keep asking the questions, we've got to keep experimenting with the material that we've got.*

Despite the challenges and uncertainties, all participants spoke fervently about the enjoyment and rewards that they and their students had gained from developing creativity through the approaches noted above. As Tess stated, *'The more I find out, the more passionate I get about it'.*

Question 6: What leadership practices influence and support you to include creativity in your classroom programmes and to develop the creativity of your students?

Participants were keen to discuss positive leadership influence and the views of teachers, middle leaders, and senior leaders (principals and DP) were largely in alignment. All respondents stated that for leaders to effectively influence and support

teachers to develop the creativity of students, it was essential for them to 'champion' creativity by being creativity role-models. The two principals Frank and Eric expressed this viewpoint in most detail, closely followed by Suzy who, as deputy principal, is the driving leadership force for creativity in her school. Participants described how their principals consistently show that they value creativity, are committed to building a school-wide environment conducive to creativity, and are focussed on promoting pedagogical practices that develop creativity in students. Table 4-7 shows the different leadership practices identified by participants as positively influencing teachers' development of students' creativity.

The notion that creativity involves risk-taking was expressed once again by eight people. Because of this connection, a major finding was that principals' affirmation, encouragement, and trust were influential in affording teachers the personal agency and confidence to develop students' creativity through new and different pedagogical approaches. The responses below are typical of teachers' appreciation of their principals' empowering leadership practice:

> *(Clare) Oh, you're really very supported… and I feel, yeah, trusted as a professional that I can make decisions about, yeah, where I need to go or what I need to be working on with kids… to make a difference for their learning.*

> *(Kate) Ah, definitely empowered. And really sure in the sense that, take a risk and see how it goes. He's really, really big on risk-taking and just knowing that – yeah, give, give that programme a go. Give that concept a go. Give that question a go. Give that idea a go, you know.*

In addition, the importance of principals fostering a school-wide creative ethos was identified by eight participants with Eric, in particular, emphasising the difference between the rhetoric and the reality:

> *(Eric) So many schools say "We are a creative school. We foster creativity". So, my question would be, okay, so, at what level in terms of let's say at an administration level or at a school… a school-wide level or a BOT level, you should be able to show me what would that look like… and can you give me a good example? And half the time they probably can't.*

Also highlighted by seven people was the positive influence on student creativity of leaders who eschewed a top-down approach in favour of a more distributive form of

leadership which fostered collaborative communities of learning. The responses below illustrate this:

> *(Clare) I mean, no hierarchy, yeah. And… we all feel like… we're in it together and, um, whatever we can do to sort of support each other or bounce ideas off each other… having a go at things and seeing if it works.*

> *(Frank) So… yep… it's not a top-down school where you're all doing what I want you to do, it's far more collaborative… The sharing of it… some of our teachers are quite creative and will pilot a lot of programmes for us.*

***Table 4-6*: Leadership practices that influence teachers' development of students' creativity**

Leadership practices influential in developing students' creativity	**Number of responses per participant**									**Total**
	School 1		School 2			School 3				
	DP Suzy	Tchr Ann	Prcp Frank	Ldr Barb	Ldr Clare	Prcp Eric	Ldr Tess	Tchr Kate	Tchr Harry	
Affirms and supports	4	1	3	2	3	3	2	2	3	23
Collaborates with teachers			6	2	3	6	2	2	2	23
Allows responsive planning & assessment			3	5	2	7	2	2	2	23
Trusts and permits	2	1	3	4	2	2	1	1	2	18
Fosters school-wide creative ethos	2		3	2	2	3	2	1	2	17
Challenges status-quo			5		2	5				12
Builds a creative environment			2	2	1		3	2	1	11
Has vision and self-belief	3	1	2	2		3				11
Takes creative risks	2		2			4		1		9
Encourages risk-taking			2	1	1	1	1	1	2	9

Seven participants described the positive influence on creativity development of retrospective planning and assessment that more accurately reflected the teaching and learning that had occurred. Having permission, from principals, to complete after-the-event record keeping was seen as essential by teachers, because creative journeys in the classroom often went in unanticipated directions. Moreover, sustaining and enhancing students' engagement and motivation required teachers to responsively go where their students led them. This point is best illustrated by Barb who stated humorously:

> *(Barb) No it's usually not planned... My planning's basically rubbish. [Laugh]… I just make notes in my planning now of the path we've taken, because that's what they are passionate about what they're interested in and they're engaged in that, whereas if I pull them back and we try and go the way I wanted them to go at the time I'll lose them.*

Other definitions encompassed the ideas that influential leaders who champion creativity have the vision, self-belief, and courage to take creative risks and challenge the status-quo. In Schools 2 and 3 for example, due to the creative vision of the principals, the senior students' technology programmes that had previously been out-sourced at the local high school were now being taught in-house. In addition, four participants (Eric, Frank, Kate, Harry, and Barb) described how their school buildings, classrooms, and furniture had been radically changed to foster students' creativity. Frank, for example, was equipping shipping containers for use as technology workshops, and he had created open-plan modern learning environments by employing a local builder to knock down walls between classrooms – all without Ministry of Education support.

Question 7: Is there anything else that helps you, or could help you, to include creativity in your classroom programmes and to develop the creativity of your students?

This concluding question gave respondents the opportunity to reflect on additional factors influencing creativity development. The answers to this question are shown in Table 4-7.

A key finding that emerged from the data was the need for the Ministry of Education, society at large, and students' whanau to reject traditional pedagogical approaches

narrowly focussed on academic achievement in the core subjects, in favour of more holistic approaches relevant to the 21st century that would value, nurture, and develop students' diverse creative abilities across the whole curriculum. In this respect, National Standards came under fire, and the performative pressures placed on students, teachers, and leaders by the data collection, compliance, and accountability for narrowly defined academic achievement in the core subjects were of great concern. The following responses reflect the sentiment of eight participants:

> *(Suzy) Get rid of National Standards – totally! You know, the worst thing about any learning environment is if you're under pressure, and what are the reasons for that? Because the teachers are under pressure, the children therefore are under pressure. The principal's under pressure to achieve this, that and the other results… Because it's a government statistic, that's all. That's all. You know, it doesn't benefit the children at all.*
>
> *(Frank) Yeah. National Standards is one big... one big problem. I mean, there is more to learning that just reading, writing, and maths.*

***Table 4-7*: Additional factors that could facilitate students' creativity development**

Additional factors that could facilitate students' creativity	Number of responses per participant									Total
	School 1			School 2			School 3			
	DP Suzy	Tchr Ann	Prcp Frank	Ldr Barb	Ldr Clare	Prcp Eric	Ldr Tess	Tchr Kate	Tchr Harry	
Achievement beyond core subjects is valued by the Ministry of Education, society and whanau	6	1	4	8	5	6	6	2	4	42

Summary of findings

Altogether, fifty-seven categories were identified in the data from the nine semi-structured interviews. The categories were derived from teachers' responses to each interview question and, as explained in Chapter 3, teachers were also encouraged to expand on their answers, and to reflect on previous experiences, in order to tell their story in their own way (see Appendix C). In order to further the specific aims of the research – *to investigate teachers' practices of creativity in education and the*

leadership that enables these practices – the seven interview questions were developed from the three research questions, which emerged from the four key themes identified in the literature review: *defining creativity, barriers to creativity, benefits of creativity,* and *development of creativity*. However, as the interview process sought to avoid deficit theorising and negativity, instead of explicitly discussing *barriers to creativity,* the interviews explored the ways in which participants positively facilitated students' creativity development. This proved effective as the findings revealed that the *barriers to creativity* highlighted in the literature were in essence the opposite of the positive *influences on creativity* as identified by participants.

Conclusion

The findings show that for each question although there was a diverse range of responses, within each data set at least one category was identified by all the participants. For example – in response to questions three, four, and five – three categories were affirmed by all participants. Appendix G shows the total number of participants identifying and responding to each category and also indicates whether the respondents were principals, the deputy principal, middle leaders, or Scale A teachers. The next chapter will explore the data findings in more detail, the key themes emerging from the data findings will be identified, and these will be discussed in relation to the literature on creativity in education, as reviewed in Chapter 2.

Chapter 5. Discussion of findings

Introduction

This research study explored teachers' and leaders' experiences and perceptions of including creativity in their teaching and learning programmes. The nine semi-structured interviews investigated the three research foci – participants' definitions of creativity, their development of creativity, and the influence of school leaders on teachers' development of creativity. As shown in Chapter 4, participants' responses to each question generated extensive data sets with many categories. Through assessing the frequency and total number of responses for each category, and analysing the deeper messages within them, four key themes emerged. These themes are shown in Figure 5-1.

Careful analyses of these themes revealed four important features. In the first instance, participants' definitions of creativity have two key aspects which form Data Themes 1 and 2 – Data Theme 1 concerns participants' beliefs about the benefits of creativity and Data Theme 2 explores how they perceive creativity is displayed by their students. Secondly, the similarity of the components within Data Themes 1 and 2 indicates that diverse creativity definitions were not intrinsic to participants' professional practice for creativity development. Thirdly, Data Theme 1, detailing participants' perceptions of the benefits of creativity development, is of major importance because it is the influential driver for the other three themes – the primacy of Data Theme 1 is shown by its placement at the top of the diagram. Fourthly, Data Themes 3 and 4 also have many aspects in common, indicating that teachers and leaders have very similar perceptions and practices. Finally, there is an apparent linkage between all four themes, as indicated by the horizontal and vertical double headed arrows.

A discussion of the four data themes now follows – each theme will be considered in turn, and the relationship between the themes and the literature concerning creativity in education will also be explored.

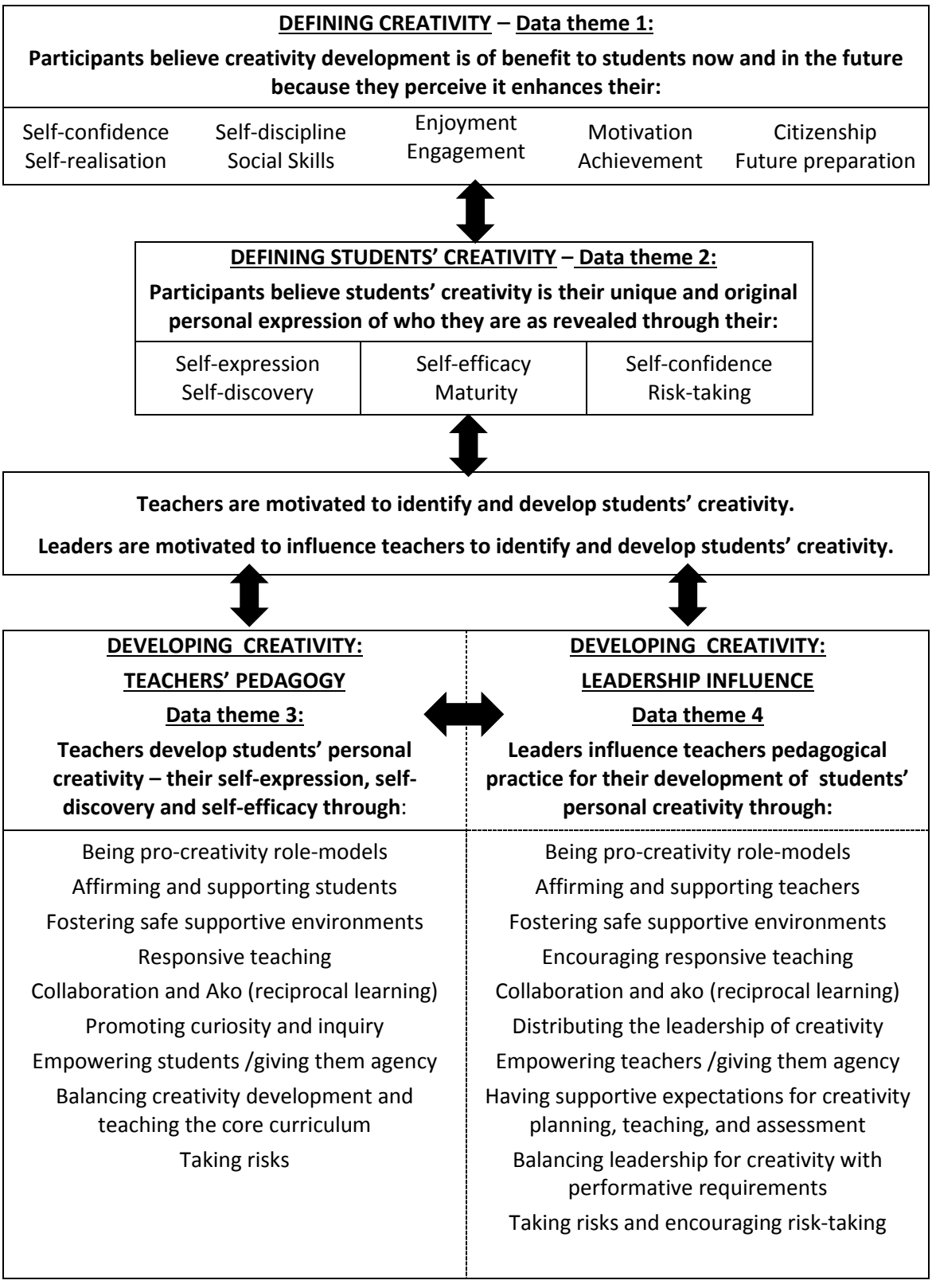

Figure 5-1: **The interrelated data themes**

Data theme 1: Defining creativity – Creativity development is of benefit to students now and in the future

It could be viewed as self-evident that teachers employed in schools known for effective creativity practice would view the inclusion of creativity in education as beneficial for students. Data Theme 1 was noteworthy, however, for many reasons: in the first instance, all the interviewees emphatically and repeatedly stated their passionate belief in the beneficial influence of creativity in education; second, they largely identified the same specific benefits of creativity; third, the benefits identified were the driving force behind participants' definition of their students' creativity; and fourth, these benefits were the prime motivators for participants' professional practice for creativity development. In a 'chicken and egg' scenario, it is unclear which came first, the creativity benefits identified by participants, or their pedagogical practice to enhance those benefits. Furthermore, this situation can be viewed positively or negatively. On the positive side, participants within and across each school are united in their approach and purposefully focussed on the same clearly defined goals for creativity development. On the negative side, the cyclical relationship between benefits, definitions, and pedagogy is a self-fulfilling prophesy indicative of single loop learning (Argyris, 1977). This less favourable diagnosis is cause for concern, because a repeating cycle such as this could inhibit the detection or development of any other types of student creativity beyond this one closed loop. With these two possibilities in mind, the benefits of creativity development for students as identified by teachers will now be explored.

Enhanced self-confidence and self-realisation

Although some participants briefly described creativity as enhancing student achievement in discrete curricular areas – akin to the domain-specific benefits identified by Baer (2016) – the creativity definitions of all participants clearly emphasised the personal benefits of creativity that could be advantageous for students across *all* curricular areas, as described by Craft (2012), and Craft, Cremin, Burnard, and Chappell (2007). Teachers consequently favoured humanistic approaches to creativity development (Craft, 2001) that nurtured students' overall well-being through their self-confidence and self-realisation, as described by Jeffrey (2006).

Improved self-discipline, and social skills

Further personal benefits of creativity development identified by participants were students' improved self-discipline and social skills. Teachers described how creativity development through the provision of opportunities for students to investigate and determine their own learning, had prompted more responsible, co-operative, and conscientious behaviour in their pupils. Developing students' creativity was accordingly seen as raising achievement outcomes through minimising conflict and enhancing student diligence. This beneficial cause-effect relationship counters the literature which suggests that creative students are often perceived by teachers as oppositional or disruptive and thus more likely to impede rather than improve learning outcomes (e.g., Beghetto & Kaufman, 2010; Smith & Smith, 2010). The views of respondents are however indicative of the OECD (2012) research which discovered that skilfully designed student-led co-operative tasks not only developed students' ability to empathise and relate positively to others but, due to the anatomy of the human brain, also increased cognitive ability. It also seems logical that when didactic instruction is replaced by greater student agency, as described by participants, the motivation for creative students to disrupt learning by opposing or challenging teachers is naturally diminished.

A note of caution is sounded however by OFSTED, Office for Standards in Education (2010) who describe what they perceived as the minimal benefits of unproductive creativity in schools. They observed teachers mistakenly seeing creative learning as permitting pupils to follow their interests without planning for the inclusion of the key components of "enquiry, debate, speculation, experimentation, review and presentation" (p.6). OFSTED's advisory comment is indicative of their creativity definition which states that creative processes must generate results that are original and valuable (Office for Standards in Education, 2003). Although students in School 2 were encouraged to follow an inquiry format that yielded tangible outcomes of benefit to others, the main emphasis of my research participants was on students'creative processes rather than creative productivity or specific curricular gains, as expounded by OFSTED. Teachers and leaders viewed creativity development as valuable personal learning journeys for students that nurtured their self-actualisation (Maslow, 1987) rather than increasing their productivity or acquisition of skills and knowledge. It

should be noted that participants' accentuation of the personal gains derived by students from creativity development could imply that respondents may be confusing creativity with confident individuality and self-worth. However, these aspects are clearly interrelated, and differentiating between the two may be unnecessary or even counterproductive. Recognising the interrelationship of students' creativity, self-beliefs, and their confidence to develop and share their ideas, Beghetto and Kaufman (2010) use the term *Creative Self-Efficacy* – a label which effectively encompasses all of the important personal benefits to students identified by participants.

Increased enjoyment, motivation, engagement, and achievement

The key benefits for students of the personalised humanistic approach to creativity development, favoured by participants, resonate with those enumerated by Craft (2001), Plucker et al. (2004), Stoll and Temperley (2009), Beghetto (2010), Kaufman and Sternberg (2010), and Conner et al. (2016). Like these authors, participants viewed creativity as enhancing students' enjoyment, motivation, engagement, cognitive ability, and learning outcomes – perceptions that also align with the beliefs of Dumont et al. (2010) who postulate that:

> Emotions are the primary gatekeeper to learning. Emotion and cognition operate seamlessly in the brain to guide learning. Positive emotions encourage, for instance, long-term recall while negative emotions can disrupt the learning process in the brain at times leaving the student with little or no recall after the learning event. (p.4)

Lubart (2010) asserts that creative people also possess the very valuable personality traits of self-determination, self-belief, commitment and passion. Participants echoed this belief, and they were determined to foster creativity within their individual students rather than developing cognitive creativity (Gorny, 2007) within curricular subjects as advocated by Baer (2016). Teachers also described how students' creative success in one area often led to enhanced achievement in another. This belief reflects the report by OFSTED (2010) who observed that students were more likely to persevere and succeed with subjects they found challenging when these problematic areas were counterbalanced by accomplishment in creative ventures that afforded them confidence and self-belief.

It is apparent, therefore, that participants viewed the benefits of creativity development as more closely related to character than curriculum. However, the data also suggests that their opinions were perhaps not as ideological or as informed as those of Craft (2001), Trotman (2005), Smith and Smith (2010), and Lubart (2010). It is possible that teachers' emphasis on the personalised benefits of creativity, as developed through student-led cross-curricular inquiry, is indicative of their lack of knowledge and confidence in developing cognitive creativity within specific curricular areas. Ann stated for example that she was not sure how to utilise creativity or creative approaches in her literacy programme, whilst other participants expressed similar uncertainty in relation to creativity development within maths and science. Teachers' perceptions that domain-specific creativity is more challenging to facilitate echo the research of Office for Standards in Education (2010). However, this view directly refutes the majority of literature which suggests that creativity taught within specific domains is easiest for students, teachers, and leaders to implement (e.g., Baer, 2016; Beghetto, 2016; Smith & Smith, 2010; Stoll & Temperley, 2009). This situation will be explored further in relation to data theme two: Teachers' pedagogy for creativity development.

Citizenship and preparation for the future

Extending the notion of enhanced social skills, self-discipline, and *Creative Self-Efficacy* (Beghetto & Kaufman, 2010), six teachers saw pupils' creativity development at school as an essential foundation for their future success as confident, competent, and well-balanced twenty-first century citizens. As many authors proclaim (e.g., Beghetto & Kaufman, 2014; Craft, 2003; Mullet et al., 2016; Skiba et al., 2010) the rapid rate of global change prohibits any reliable forecast of what the future holds. They maintain, therefore, that creativity will be a crucial asset for students as they steer their way through the complex future challenges that they will inevitably face. With students' future potential in mind, the contribution of creative students to a buoyant thriving economy must be addressed. The links between the two have been well documented as Zhao (2009) explains; however, like Cremin (2015), Craft (2003) and Burnard and White (2008), teachers did not favour the prevailing neo-liberal logic of fostering children's creativity to bring commercial or economic prosperity. Although participants echoed the need for students to be "creative, energetic, and enterprising"

as per the government's vision in the *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c) the idea that young people have a responsibility to "secure a sustainable social, cultural, economic, and environmental future for our country" (*New Zealand Curriculum* (New Zealand Ministry of Education, 2007c, p.8) was not mentioned.

Data theme 2: Defining creativity – Students' creativity is their unique and original personal expression of who they are

A 2010 survey undertaken in 44 English schools by OFSTED discovered that amongst teachers "the term creativity was subject to a variety of interpretations and applications" (Office for Standards in Education, 2010, p. 5). Within the literature reviewed in Chapter 2 the definitions of creativity are also widely debated, and writers posit that because creativity presents itself in many different ways it is extremely hard to define (e.g., Burnard & White, 2008; Plucker et al., 2004; Runco, 2004).

The participants in this research study partially echoed this viewpoint as everyone identified that beyond the classroom creativity could take many different forms. However, only five respondents identified that defining creativity was problematic, and they did so only in relation to the wider world. In an educational context, the lack of a clear definition for student creativity was not considered a concern by any member of the research group. Participants confidently stated that students' creativity could be cerebral and/or practical, and involve imagination and/or problem solving. Moreover, although teachers asserted that creativity was more easily expressed through the arts, the ideological divide between artistic and scientific creativity, as acknowledged by Robinson and Aronica (2015), was not viewed as worrisome. Participants did not exhibit anxiety over the relative merits of domain-free or domain-specific creativity, a debate acknowledged by many authors (e.g., Baer, 2016; Burnard & White, 2008; Craft, 2003; Plucker et al., 2004). Nor, in the manner of Lubart (2010), did anyone ponder on the contextual and cultural nature of creativity. Student creativity was perceived by teachers to take many different forms because paradoxically their definitions all fell into *one* category – personal creativity. Moreover, all participants unanimously believed that because creativity is the expression by students of *who* they are, students' creativity is as different and individual as the children themselves.

Teachers' definitions of creativity in education therefore aligned fully with their identification of the student-centred benefits of creativity, as discussed in relation to Data Theme 1.

Participants' self-assured interpretations of student creativity are not reflective of the literature. For example, Skiba et al. (2010) state that educationalists usually experience uncertainty and angst over the numerous interpretations of creativity, while Plucker et al. (2004) bemoan the lack of an exemplary definition. The subjective humanistic definitions of student creativity expressed by participants could therefore be cause for concern. Firstly, despite participants' stated intentions to recognise and develop the creative dispositions of *every* student, it is possible that the creativity of some pupils could accidentally be overlooked. Secondly, other different types of creativity, potentially of benefit to students, may be excluded from their teaching and learning programmes. As the data revealed, participants perceived that their eclectic definition and celebration of all types of personal creativity enhanced students' confidence and self-worth. However, the extent to which such indiscriminate affirmation of students' perceived creative behaviours fully or explicitly develops every aspect of their creativity is debatable and will now be explored.

Self-expression, self-discovery, and self-efficacy

Because teachers perceived creativity as intrinsically linked to students' inner-selves and their creative self-efficacy (Beghetto, 2010), they placed their united emphasis on students' individual creative personalities, passions, and self-expression. Creativity was briefly linked with originality by six respondents, reflecting a connection emphasised in the western world (Lubart, 2010). However, all participants focussed less on the different types of creative originality that they observed in their students and more on what teachers should do to enable their pupils to truly be themselves, to reveal their original thoughts, and to develop and share their unique creativity. In teachers' opinions, as noted previously, students' creativity development was a humanistic journey of self-discovery and this belief reflects that of Robinson (2001) who avows that creativity is what defines us as humans and makes us who we are. Participants' pedagogical actions, inspired by their humanistic definition of creativity, also align with Robinson's clarion call for teachers to encourage and support students' exploration

and comprehension of their personal passions, thoughts, ideas, beliefs, imaginations, and emotions in order to draw out and foster their creative individuality.

Degrees of creativity in students

Eight participants stated that *all* children can be creative – a belief which echoes the research findings of Mullet et al. (2016). This manner of thinking harmonises with Maslow's (1987) contention that creativity is a core human attribute, and teachers' recognition of their students' child-like creativity echoes Craft's (2012) notion of possibility thinking. It also aligns with the concept of *mini-c* creativity (the personal insights and meaning-making of the young), as listed in Kaufman and Beghetto's Four C Model of Creativity (2009).

Creativity and academic ability

Reflecting the beliefs of many authors, (e.g., Ings, 2017; Robinson, 2006; Robinson & Aronica, 2015) eight teachers did not see any relationship between creativity and academic ability in the core subjects. Participants did view the knowledge and skills learnt in literacy and mathematics as useful tools to be employed by students within their creative inquiries, as recommended by Baer (2016) and Beghetto and Kaufman (2014). However, somewhat contradictorily, teachers saw no connection between students' academic achievement in these core subjects and students' degrees of creativity. This reflects the disconnection between academic ability and creativity which has been reiterated by many authors over the years (e.g., Guilford, 1950; Ings, 2017; Robinson, 2006; Robinson & Aronica, 2015). Noteworthy too, was the fact that, until asked in their interview, none of the participants had given much thought to the relationship between skills, knowledge, and creativity. Most were also unsure, when developing creativity, what constituted an effective balance between the three components. A belief that an excess of skills and knowledge could actually inhibit creativity was also expressed by one teacher. This is a clearly complex paradoxical issue, as Milne (2008) describes, and worthy of further investigation:

> Naïveté (or innocence) features in creativity. It's as if an innocent mind can somehow see outside the box. At the same time this childish quality has to be accompanied by mature discipline (seeing *inside* the box) to get results. (p.19)

Creativity at different ages

The notion of primary students' creativity naturally evolving and changing, due to their increasing maturity was described by all participants, reflecting the assertion of Smith and Smith (2010) that teachers must understand what student creativity looks like at different ages. However, my research respondents' keen awareness of the crucial relationship between age and creativity is not reflective of the majority of texts about creativity. In the literature reviewed, the focus was less on students' inherent age-related creativity and more on changes in students' creativity due to the influence of teachers and the education system. Beghetto (2008), for example, researched creativity in junior, middle, and senior classes, but honed in on teachers beliefs about creativity, in different year groups, and not the natural evolution of student creativity itself. Closely aligning with the literature, however, were participants' opinions that, as students progress through their schooling, the performative nature of our education system can constrain and inhibit individual creativity – a view expressed by eight teachers and strongly propounded by many authors (e.g., Ball, 2003; Burnard & White, 2008; Ings, 2017; Robinson, 2006). In addition, the requirements of academic accountability in literacy and mathematics due to *National Standards* (New Zealand Ministry of Education, 2010a) had a direct influence on the pedagogical and professional practice for creativity development of teachers and leaders. This will be discussed in relation to data themes 3 and 4

Creativity self-confidence and risk-taking

In their wider definitions of creativity beyond the school environs, participants posited that being creative can be risky. They echoed this belief again in relation to their students, describing the confidence that students needed to be creative especially as they matured and became more self-aware. Participants were acutely conscious of some pupils' understandable reluctance to make mistakes, their embarrassment at being 'shown-up' in front of classmates, and the ignominy of being criticised or mocked by peers. The findings in this research therefore align with the literature, as Milne (2008) states "the ability to take risks is at the heart of creativity"(p.17) and the pairing of risk and creativity is also affirmed by numerous authors, for example Burnard and White (2008), Beghetto (2008, 2010) and Craft (2012). The notion of student creativity involving risk also resonates with the research of Mullet et al. (2016)

who, in examining the literature about teachers' perceptions of creativity, identified that the majority of teachers defined creative students as risk-takers. Teachers recognised too that the risks of creativity were exacerbated in schools, because classrooms are public places with very few private or audience-free creative opportunities. Participants' views thus reflect those of Plucker et al. (2004) who state that creativity for students "requires an atmosphere where risk-taking and experimentation are encouraged rather than stifled" (p.12).

Akin to the notion of risk-taking, teachers also identified that the varying amount of creativity exhibited by students was often more indicative of individuals' self-confidence and self-belief rather than their creative potential, a view aligning with that of Beghetto (2010). Furthermore, the unanimous assertion by participants that students require opportunity, support, and agency, in order to develop the necessary confidence, growth mind-set, and self-efficacy to express and develop their creativity, is seen as crucial by many writers (e.g., National Advisory Committee on Creative and Cultural Education, 1999; Robinson, 2001).

Teachers' subjectivity in defining creativity

Beghetto (2008) and Beghetto and Kaufman (2010, 2014) claim that teachers' own schooling and educational experiences can influence their perceptions of creativity in the classroom. The subjectivity of humans is also described by Branson (2007), Larrivee (2000), Krishnamurti (2000), and Hofstede (2001), who assert that personal bias can result from past events formulating unconscious values and perspectives that influence our current beliefs and behaviour. Participants did not reflect on their potential subjectivity or bias. The more experienced teachers were confident that they recognised and supported any and all types of personal student creativity, and it was only Kate and Ann, with less than fifteen years' teaching experience between them, who admitted to being uncertain at times. This situation possibly echoes the research of Lee and Seo (2006). Their findings indicate that less experienced teachers may have a more open-minded and fairly judged view of creativity than teachers with more experience. Although Lee and Seo's (2006) study was carried out in Korea, it is a viewpoint worthy of consideration in a New Zealand context.

Regarding the dangers of students' creativity being overlooked, the potential for teacher bias, and the surety of interviewees in defining students' creativity, it is noteworthy that, none of the participants, apart those from School 1, had undertaken professional readings or engaged in any professional development about student creativity. Beghetto (2008) Stoll and Temperley (2009), and the National Advisory Committee on Creative and Cultural Education (1999) raise concerns over teachers' inadequate professional development for creativity development. Reinforcing their concerns, the teacher training undertaken by participants over the last three decades had not included any creativity education. Countering this view though, the risk of students' creativity being unseen or unsupported was clearly reduced by participants' fervent and enthusiastic beliefs in the benefits of creativity, their detailed awareness of the multifarious influences on their students' creativity, and their determination to celebrate and foster the individual creativity of every student. Bearing these factors in mind, it is possible that instead of inadvertently missing children's creativity, students' non-creative behaviour could be wrongly acknowledged as being creative. As Smith and Smith (2010) posit, teachers tend to welcome and affirm *all* student ideas as creative places to start because "a bad idea is one step further along the creative path than no idea at all" (p.255).

Data theme 3: Teachers develop students' personal creativity – their self-expression, self-discovery, and self-realisation

Data theme 3 encompasses two aspects of interviewees' professional practice for the development of students' personal creativity – participants' pedagogical approaches; and their specific teaching and learning programmes. The data shows that these two aspects of teachers' professional practice are interrelated and, as one would expect, closely aligned to the benefits and definitions of student creativity identified by respondents. Emphasised as paramount by all participants was their encouragement and facilitation of students' personal and creative expression of who they are.

Participants' pedagogical approaches

This section will discuss the teaching style and classroom approaches that participants believe foster the development of student creativity.

Being affirming and supportive pro-creativity role-models

First and foremost, aligning with the beliefs of Sternberg (1996), Smith and Smith (2010), and Beghetto (2008), participants identified that it was important for them to be affirming and supportive role-models who positively embraced and celebrated creativity in whatever diverse or unexpected ways it was displayed by their students. Schweitzer (1931/2011) stated many decades ago that setting an example is not the most important thing in influencing others it is the only thing – and his contention still rings true. However, it was also recognised by all participants that, to develop students' creativity, positive modelling alone was not enough.

Fostering safe and supportive environments

The literature emphasises the positive influence of safe and supportive environments on creativity development (e.g., Beghetto & Kaufman, 2014; Ings, 2017; Lucas, 2001; Mullet et al., 2016; Stoll & Temperley, 2009) and the findings show that all participants believed that "classroom context matters" (Beghetto & Kaufman, 2010, p. 53). Accordingly, teachers expressed their commitment to creating safe learning spaces that were physically, socially, culturally, and emotionally conducive to creativity development for all ākonga. Participants' beliefs aligned with the opinions of many writers who maintain that because creativity involves risk, establishing an ideal climate for creative endeavours involves numerous contributory features (e.g., Beghetto & Kaufman, 2010, 2014; Craft, 2012; Mullet et al., 2016). Moreover, the pedagogical approaches that teachers and leaders espoused epitomised all the characteristic "creativity fostering" behaviours highlighted by Cropley and Urban (2001):

> They provide a model of creative behavior, reinforce such behavior when pupils display it, protect creative pupils from conformity pressure, and establish a classroom climate that permits alternative solutions, tolerates constructive errors, encourages effective surprise, and does not isolate nonconformers. (p.13)

With these similarities in mind, it is once again noteworthy that the participants had experienced very little professional learning about creativity. Nevertheless, their humanistic philosophical orientation (Esquivel, 1995) and their emphasis on students' personal well-being, self-esteem, and self-expression, intuitively motivated them to

adopt an appropriate pedagogical style for creativity development, as recommended by such authors as Craft (2003), Cremin (2015), Beghetto (2008) and Esquivel (1995).

The comprehensive literature review of Mullet et al. (2016) revealed that most teachers' understandings of creativity are not informed by research or theory, so in this respect the nine participants were not unusual. However, unlike the respondents described by Mullet et al. (2016), none of the teachers felt ill-prepared to identify or develop creativity in their classrooms. It was only in relation to domain-specific creativity development that participants expressed any uncertainty. However, because they did not define creativity in a discrete curricular way, this did not cause them any concern. Like Ings (2017), they placed the individual student rather than curricular achievement at the heart of their pedagogical approach.

Collaboration, ako (reciprocal learning), and responsive teaching

All participants expressed their commitment to teaching responsively through "Engaging in positive and collaborative relationships with learners" and by "Creating a welcoming, caring and creative learning environment that treats everyone with respect and dignity" (New Zealand Education Council, 2017, p. 2). By placing learners at the centre, embracing ako (reciprocal learning), and activating powerful connections with their students, participants perceived that they could comprehend learners' strengths and weaknesses, avoid preconceived ideas about their abilities, nurture confidence where needed, and effectively develop students' individual creativity. With the exception of assessment for learning, the teaching philosophy of participants mirrors the principles of learning advocated by Dumont et al. (2010). In addition, participants' pedagogical approaches which were predicated on knowing "what is going on for our learners" (Timperley et al. 2014) are very reflective of the literature on effective teaching (e.g., New Zealand Ministry of Education, 2015b). It could perhaps be posited therefore that participants are conflating teaching for creativity with high quality ethical teaching. Or it is possible, conversely, that the approaches described by Dumont et al. (2010) Timperley et al. (2014) and the New Zealand Education Council (2017) are inherently conducive to the development of students' personal creativity. The relationship between the two is perhaps worthy of further investigation.

Participants' teaching and learning programmes

Participants' teaching and learning programmes for creativity development were centred on curiosity and inquiry. The beneficial relationship between curiosity, inquiry and creativity, was noted many years ago by Hadow (1931) and more recently affirmed by many authors (e.g., Beghetto, 2008; Bodrova & Leong, 2005; Craft, 2003; Robinson, 2001; Winter, 2008). The extensive research reviewed by Mullet et al. (2016) revealed that teachers also frequently link these concepts and the nine participants in my research were no exception.

Promoting creative curiosity through play-based learning

In the junior departments of the three schools, the ideal pedagogical approach for young students to develop their personal creativity through inquisitive exploration was unanimously affirmed as play-based learning. This pedagogical approach, first advocated by Pestalozzi in the late 18th century (Chambliss, 2013), encourages children's free unstructured spontaneous play which springs naturally from their curiosity, enthusiasm and love of discovery. The beneficial elements of learning through play recounted by participants mirrored those described by Pestalozzi – children should be permitted to be free and happy; self-discipline should grow gradually and naturally; pressurising students to learn at speeds beyond their natural ability damages their emotional well-being and self-esteem; and encouraging experimentation and learning from one's own mistakes enhances character development and cognitive ability. Teachers' espoused methods for creativity development also echoed the approaches to play-based learning recommended by educationalists in more recent years (e.g., Bodrova & Leong, 2005):

> Children create a pretend scenario by negotiating and talking with peers, and they use props in a symbolic way. Children create specific roles – and rules – for pretend behavior and they adopt multiple themes and multiple roles… There are other children to play with, a setting that can be organized to encourage imaginative play, and adults who can encourage the play, guiding children to play effectively with each other. Indeed, this is the cornerstone for all learning. (p.6)

It is noteworthy that participants' analysis of the benefits of play-based learning comprised of two inseparable aspects; one was students' creativity development and the other was students' personal development as confident, motivated, well-rounded,

and successful young learners. Once again, it appears that participants are viewing teaching for creativity and high quality teaching as one and the same. If pupils are reaping the dual benefits of play-based learning, distinguishing between the two concepts could be regarded as unnecessary. However, by conflating creativity development with teaching excellence it is possible, that other key aspects of explicit creativity development, especially within the core curriculum, are being overlooked and omitted.

Promoting creativity through student inquiry

Beyond the junior school, students' creative curiosity was encouraged not through play but through class, group, or individual inquiries authentically prompted by real problems, different learning contexts, and students' own diverse passions and interests. This change of pedagogical approach is reflective of the literature. The majority of teachers surveyed by Beghetto (2008) transitioned their middle and senior students away from carefree and imaginative curiosity towards more purposeful learning, and worryingly Trotman (2005) states that creativity development in schools frequently becomes intellectual, and bereft of emotion. Although Trotman's description is somewhat harsh, it has an element of truth in the context of this research. The data showed that empathetic and affective imagination, so crucial to play-based learning in the junior school, was not as strongly emphasised by teachers as students matured.

Aside from *playfulness* however, participants' teaching and learning programmes in the middle and senior syndicates encompassed three of the four Ps of creativity as recommended by Rhodes (1961) – *pluralities* of wide ranging opportunities for exploration and experimentation; *possibilities* of collaborating, connecting, constructing, and thinking; and *participation* with peers and others in the community. By focussing on these 3Ps students' creativity development was further supported by teachers' rejection of rigid lesson blueprints in favour of thoughtfully responsive and adaptive planning, teaching, and assessment, born out of ako, empathy, and collaboration, as noted previously. Once more, a pedagogy supportive of creativity development, as advocated by Craft (2012), is also an exemplar for teaching excellence. It also epitomises professional practice recommended by Bishop et al. (2007):

> In short, a pedagogy is needed that is holistic, flexible and complex, that will allow children to present their multiplicities and complexities and their individual and collective diversities, rather than a pedagogy that perpetuates teacher images. (p.11)

Balancing creativity development and teaching the core curriculum

In all three schools the divergent cross-curricular inquiry programmes, led by students and prompted by their individual passions and interests, contrasted with the more traditional convergent instruction for the core subjects, led by teachers and prompted by the requirements of *National Standards* (New Zealand Ministry of Education, 2010a). It would be inaccurate to say that the core subjects were completely divorced from creativity, as literacy was employed by students to research and present their inquiries, writing was sometimes presented creatively, and creative problem solving was occasionally utilised in numeracy. However, participants did not regard the core curriculum as an integral part of their pedagogy for creativity development. For the most part, in all three schools, two different types of teaching and learning programmes were simultaneously employed, and contrasting educational journeys were undertaken with their students. When teaching the core curriculum, in order to keep students on-track for their achievement benchmarks of *National Standards* (New Zealand Ministry of Education, 2010a), teachers did not diverge from a direct clearly-defined course. Conversely, when creativity was the focus, participants followed their students on an organic journey of inquiry and exploration, via different curricular areas, into the creative unknown, with many twists and turns en-route.

In some respects teachers' pedagogical approaches to creativity development echo the strategy described by Isaksen (1988) who states that "the first, and most ubiquitous method for dealing with creativity appears to be through weaving it into the existing curriculum" (p. 173). However, the fact that creativity is not regularly woven into literacy and mathematics belies this notion and is perhaps indicative of the current educational situation in New Zealand. Three decades ago when Isaksen was writing, teachers did not face the performative pressures and accountability for student achievement in literacy and mathematics that they do today. The limited creativity within teachers' pedagogical approaches to the core subjects is very reflective of more recent literature. For example, Smith and Smith (2010) state that creativity and education often "look at each other from distance" (p. 251); Trotman (2005) contends

that adhering to measurable content standards leads teachers to seek the security of structure and prescription; Craft (2003) asserts that in such situations creative artistry is diminished by technicality; and Beghetto (2010) compassionately empathises with teachers who succumb to pressures of accountability and default to a convergent, safe and secure approach for the core curricular areas. It seems reasonable to deduce therefore that the performative pressures of achieving *National Standards* (New Zealand Ministry of Education, 2010a), in combination with participants' uncertainty about the inclusion and development of creativity within the core curriculum, has resulted in their utilisation of a more safe and secure pedagogy in reading, writing, and mathematics – one which is largely creativity-free.

With this in mind, Trotman (2005) and Beghetto (2010) posit that creativity is often seen by teachers as an entertaining alternative to real curricular academic work and is allocated very little time or attention. However, the marginalisation of creativity in this way does not reflect participants' pedagogy. The teachers and leaders in my research were passionate believers in creativity development and committed to providing wide-ranging and extensive opportunities for students' creative exploration and inquiry. Therefore, a more accurate description could be that participants are creatively and ethically making the best of what they perceive as a difficult situation by doing what Ings (2017) describes as ticking just enough accountability boxes in one area whilst continuing to be creatively disobedient in the others. It cannot be ignored however, that, due to their unfamiliarity with theory, research, and best practice, as advocated by Jackson & Temperley (2007), teachers could be missing valuable learning opportunities to include and develop creativity within the core subjects too. This notion is of particular importance considering that, like many countries with standards-based assessments, New Zealand's attainment levels in the core subjects are not rising, as shown by the *Programme for International Student Assessment* (PISA) (Organization for Economic Cooperation and Development (OECD), 2015).

Reflecting the above concerns in their recent writing Baer (2016) and Beghetto, Kaufman, and Baer (2014) express their dismay over the paucity of creativity teaching within the core subjects and deplore teachers' misconceptions concerning creativity and the acquisition of skills and knowledge in literacy and mathematics. They maintain that by adopting a cognitive approach to creativity development (Gorny, 2007)

creativity can also be beneficially utilised within the core curriculum to bring about the much needed enhancement of learning outcomes in these important subjects. Moreover they argue that, because students' personal creativity, is enhanced by domain-based skills and knowledge, the explicit development of students' creativity within discrete curricular areas is of benefit to their domain-free creativity too. In Baer and Beghetto's view, creativity and curricular achievement standards are allies not enemies. In my three research schools, this alliance was not in place, and teachers' pedagogical approaches to creativity development through student inquiry differed fundamentally from the professional practice for creativity development advocated by Baer (2016) and Beghetto et al. (2014).

Empowering students and giving them agency

All participants acknowledged that creativity development through inquiry requires a flexible student-led pedagogical approach that enhances personal growth through agency and self-expression (Craft, 2001). This is very indicative of the literature over the last two decades – the document *All Our Futures*, (National Advisory Committee on Creative and Cultural Education, 1999) recommends that teachers give students the opportunity for self-directed exploration of their individual creativity; Flowerday and Schraw (2000) highlight the links between creativity and student choice; while Jeffrey and Woods (2003) stress the importance of teachers allowing students' self-expression through agency and self-determination. Of like mind, Beghetto (2010) decries convergent teaching in which teachers' pre-planned and rigid pathways set the learning direction; and Robinson (2001, 2006) and Ings (2017) postulate that creativity is born out of the self-directed pursuit of your personal interests and passions. Student agency, as advocated by these authors was perceived by middle and senior school teachers as pivotal to effective creativity development.

It could be claimed that the notion of teachers or leaders empowering students and giving them agency is an apparent contradiction in terms, as personal agency – having the independent power to act on one's will – clearly belongs to an individual and cannot be given by another. However, the personal agency of individuals is influenced by their experiences of initiating and controlling their own actions within the circumstances of their environment. Therefore, due to a history of traditional hierarchical systems within schools, spontaneous and educationally purposeful

individual agency from students is unlikely to happen without overt and explicit permission from teachers, complemented by trust, encouragement, opportunity, and support. Furthermore, as participants explained, in an educational context, learner agency isn't simply about handing over control – the careful scaffolding by teachers is required (Garrity, 2015). Before students can exercise agency, and transition from being passive recipients to active participants and decision makers in their own learning journey, they must understand their learning and believe that their actions are actually going to make a positive difference (New Zealand Ministry of Education, 2007b).

Taking risks

Beghetto (2010) Stoll and Temperley (2009), Craft (2003), and Smith and Smith (2010) posit that, compared to convergent didactic instruction, adopting a divergent student-led approach requires teachers to journey away from familiarity, safety and predictability. Reflecting this notion, participants admitted that fostering creativity through inquiry required them to accept elements of professional and personal risk. The main risk they described was losing full command of students' learning processes and outcomes. Participants' concerns are reflective of the literature, as Burnard and White (2008), for example, explore in detail the counterpoint of freedom and control in education, and the complexity and conflict that lies therein. They recognise that the inherent tensions within these two opposites have important implications for teachers' pedagogical practice. As teachers and leaders explained, because they are professionals who pride themselves on their careful planning, organisation, and management skills – key attributes for which they are frequently praised – relinquishing control goes against the grain and requires courage and commitment.

Reflecting these professional challenges, Smith and Smith (2010) and Ings (2017) contend that many teachers view creativity as wasteful of time, planning, and resources. Although teachers implied that, due to the performative pressures of National Standards (New Zealand Ministry of Education, 2010a) this could be the case within the core subjects, for their inquiry programmes none of these concerns were conveyed. It is possible that there may be a discrepancy between teachers' espoused theories about creativity and their theories in practice (Argyris & Schön, 1974) or that participants' stated beliefs about creativity and their actual classroom behaviour are

not in alignment (Beghetto & Kaufman, 2010; Makel, 2009; Mullet et al., 2016). It is also feasible that, due to the focus of this research study, teachers were reluctant to admit having conflicting outlooks towards creativity (Beghetto, 2010). However, these unfavourable eventualities appear improbable because the semi-structured interviews encouraged teachers' honest and open expression of their thoughts and experiences. Moreover, as advocated by Berg et al. (2004) and Wellington (2000), a professional rapport between researcher and participants was developed. It seems more likely that, when students are engaged in their inquiries, teachers can see the benefits and are happy to adopt more relaxed and flexible approaches that are benignly tolerant of creative disruption. Further evidence of this was the wry amusement and not anxiety, with which participants described the untidiness, uncertainty, noise, and excitement of creative students leading their inquiries in a creative classroom.

Data theme 4: Leaders influence teachers by encouraging their pedagogy to develop students' self-realisation, self-confidence and self-expression

This section identifies and explores teachers' perceptions of their senior leaders' influence on their pedagogical practice for students' creativity development. It also relates these findings to the literature reviewed in Chapter 2. However, as noted in Chapter 2, despite a wealth of writing about educational leadership globally and some valuable examples of guidance for senior leaders specific to New Zealand (e.g., Cardno, 2010; Cardno & Youngs, 2013; New Zealand Ministry of Education, 2008, 2010b, 2012; Stoll & Temperley, 2009; Youngs, 2014) only a limited amount of literature addresses school leadership explicitly for the development of students' creativity (e.g., Beghetto, 2016; Brundrett, 2004; Stoll & Temperley, 2009). Therefore, the influence of school leaders on teachers' development of students' creativity will be discussed in relation to three sources – literature related to creativity development in education, literature concerning leadership for creativity development, and literature about school leadership in general.

It is important to note at this point that although three of the nine participants in this research study were middle leaders, with formal leadership responsibility for their respective syndicates, the three most influential leaders of creativity school-wide were the principals, and to a lesser extent the DP.

The indirect influence of leaders on students through those who perform the direct act of teaching is described by Cardno (2012), while Leithwood et al. (2008) declare that leadership influence is second only to teaching quality as a crucial lever for enhancing students' learning and achievement. Timperley et al. (2007) and Robinson (2017) are of like mind identifying that virtually all examples of improvement in schools can be attributed in some way to the effectiveness of school leadership. Accordingly, it is not surprising that Stoll and Temperley (2009) believe educational leadership is crucial to the development of student creativity. Endorsing these authors' claims, all teachers confirmed that their senior leaders fostered a school-wide climate conducive to enhancing student creativity and their behaviour also had a positive influence on teachers' pedagogical practice for creativity development. Moreover, the key components of leadership influence described by participants, epitomise the effective leadership behaviours for creativity recommended by Stoll and Temperley (2009).

Being affirming and supportive creativity role-models

First and foremost, Stoll and Temperley (2009) maintain that it is essential for leaders to guide others' learning and development by being exemplary role-models. Cardno (2012), Bush (2011), Gunter and Ribbins (2003), and Louis et al. (2010) also emphasise the importance of leaders epitomising the behaviours they wish to foster in their staff. All participants echoed these authors' beliefs. In the same way that teachers perceived they could enhance student creativity by being creativity role-models (Sternberg, 1996), the modelling of school leaders was viewed by all teachers as positively influencing their pedagogical practice for students' creativity development. This cause-effect relationship was not accidental; the senior leaders (two principals, and a DP) emphatically expressed their determination to consistently 'walk the talk'. Their pro-active role-modelling encompassed the following behaviours – responding to teachers' creativity in the way they believed teachers should respond to their students' creativity; taking creative risks; affirming and supporting creative risk-taking in others; encouraging school-wide creativity; and building a safe environment conducive to creativity development. Their clearly expressed intentions were for their personal leadership visions to become practical realities not just theoretical rhetoric. The data findings reveal that the senior leaders' espoused theories and their theories in practice (Argyris & Schön, 1974) were in alignment, as the three teachers and three middle

leaders wholly endorsed their senior leaders' autobiographical descriptions and clearly respected and regarded them as creativity champions.

The teachers' and middle leaders' emulation of the behaviour of their principals and DP is indicative of their admiration for their leaders and also a measure of Frank, Eric, and Suzy's leadership influence. The followship (Raelin, 2016) shown by the teachers in my research study is clearly supportive of student creativity. However, as noted by Stoll & Temperley (2009) there is also a potential downside to teachers having unqualified respect for senior leaders, namely that those involved could become deferential rather than inquiring. However, because the teachers in this research were clearly exploring different pedagogical approaches and experimenting with their teaching and learning programmes, it is too harsh to describe their leadership reverence as examples of complacent "just show me what to do" attitudes (Stoll & Temperley, 2009, p. 66). Nevertheless, as the findings revealed, the teachers and middle leaders had experienced little or no creativity training or professional learning, nor were they familiar with literature about creativity in education. Teachers were therefore seeking to develop students' creativity based only on their own subjective experience, their own creative intuition, and the influential input of their leaders, without the added benefit of information, ideas, and evidence from professional readings and research. Concerns over teachers' reliance on their school leaders are somewhat reduced however in the light of the other influential leadership behaviours demonstrated by the three senior leaders which will now be explored.

Taking risks and encouraging risk-taking

The findings reveal that Eric and Frank were the antithesis of the overly cautious and fearful leaders described by Burnard and White (2008). They were creative risk-takers – firstly because of the daring and innovative changes they were making to their school curriculum and physical environment, as outlined in Chapter 4, and secondly because they encouraged risk-taking in their staff. Teachers described how their leaders emphatically encouraged them to experiment with different pedagogical approaches and <u>not</u> "to 'play it safe' in terms of their teaching" (Burnard & White, 2008, p. 673). The notion of creativity development requiring leaders who champion innovation (Lubart, 2010, p. 273) is very indicative of the research, and it is evident that the

teachers were influenced by their senior leaders' courageous actions which were regarded as proof of their genuine commitment to creativity.

The principals and DP also displayed growth mind-sets (Dweck, 2006) by regarding their own and others' mistakes as important chances to learn (Beghetto, 2008; Burnard & White, 2008; DeBono, 1970; Sternberg, 1996). In this manner, they exemplified the advice of Bryk et al. (2015) – try something new, fail quickly, learn fast and move on. Therefore, it could be suggested that, regardless of teachers' lack of professional or theoretical knowledge, they were constructing their own contextual understandings of creativity (Perkins, 1999), and seeking to find the appropriate repertoire of pedagogical tools for their unique situation and students, as advocated by Craft (2001) and Woods and Jeffrey (1996). The literature also unanimously maintains that an absence of suspicion and doubt is conducive to creativity and experimentation (Burnard & White, 2008). Echoing this notion, all the teachers valued the active encouragement of their senior leaders to follow their own professional compass (Ings, 2017) and " work outside the safe, the known and the predictable" (Burnard and White, 2008, p. 672). They enjoyed taking risks and exploring different or unconventional approaches to creativity development free from senior leaders' judgement, blame, or censure.

Empowering teachers and giving them agency

The senior leaders' trusting and empowering behaviour, described by participants, also reflects essential components for creativity development identified by Burnard and White (2008) who advocate "pedagogical autonomy… professional agency" (p.672). Once again, as noted in relation to Data Theme 2, the notion of autonomy and agency being granted from above by someone in authority is rather an oxymoron. Nevertheless it is important to note that, semantics aside, the teachers and middle leaders greatly valued not having to fight for their pedagogical freedom and professional self-determination. Several authors highlight the relationship between teacher autonomy and creativity development (e.g., Burnard & White, 2008; Ings, 2017; Trotman, 2005; Woods, 1990). All of the teachers that I interviewed, much like those described by Stoll and Temperley (2009), stated that the permission and professional licence given by senior leaders contributed immensely to their own

motivation to encourage creativity in the classroom. Teachers' pedagogical practice for the development of their students' creativity was therefore positively affected by their leaders' emancipating and confidence-building behaviours.

It is noteworthy too that, although creative autonomy offered by senior leaders epitomises that which is recommended in the creativity literature (e.g., Burnard & White, 2008; Mullet et al., 2016; Stoll & Temperley, 2009), it does not reflect what many authors contend is often the less favourable reality. For example, Cremin (2015) posits that teachers need to forcibly assert their agency, while Craft (2003) and Woods and Jeffrey (1996) describe teachers' inclusion of creativity in the classroom as a form of active resistance. In an even more radical fashion, Ings (2017) refers to creativity development in schools *as disobedient teaching.* All participants acknowledged that the encouragement and professional trust of their school leaders minimised the risks of creativity that they experienced. Consequently, it could be argued that because the senior leaders are being assertive, disobedient, and resistant, their teachers can safely experience creative autonomy – remaining supported and shielded from risk and disapproval.

Collaborating with teachers and embracing ako (reciprocal learning)

The benefits of sharing professional practitioner knowledge to build professional learning communities through honest and open collaboration is advocated by many authors (e.g., Jackson and Temperley, 2007; Cardno, 2012; Education Council of Aotearoa New Zealand, 2015). These authors submit that this approach more fully utilises the diverse expertise within a group, increases commitment to jointly agreed goals, and through better decision making, enhances students' achievement outcomes. The teachers and leaders echoed this viewpoint and described three influential leadership approaches apparent in their schools – fostering professional collaboration, as advocated in the literature (e.g., Burnard & White, 2008; Cardno, 2012; Davis, 2013; Stoll & Temperley, 2009); establishing positive relationships with their staff that exhibit horizontal trust and professional respect, as recommended by Cardno (2012) and Tamati (2011); and embracing the beneficial concepts of ako, as advocated by Bishop et al. (2007). These egalitarian leadership behaviours were

welcomed by all participants, who stated that not only were teachers learning from students and from their fellow teachers, leaders were also learning from teachers.

However, despite these positive aspects, the data findings reveal that professional development to enhance student creativity within the three schools was not being as effectively implemented as Cardno (2012) and Hattie (2009) recommend. Effective and ethical educational leadership is widely described as a process of positive social influence that enhances educational outcomes for all learners by promoting and fostering productive pedagogies for improvement (Cardno, 2012; Duignan, 2012; Robinson & Timperley, 2007; Yukl, 2012). Cardno (2012) also posits that organisational learning is contingent on continued scholarship, and Hattie (2009) states that increasing the professional capacity of all teachers is an effective route to improved student outcomes. Regarding these crucial aspects – *pedagogies for improvement*, *continued scholarship*, and *increasing professional capacity* – the data suggests that the principals were not fully adopting the roles of instructional or pedagogical leaders as described by Leithwood et al. (1999) and (Cardno, 2012). They had not yet offered their staff professional learning opportunities, informed by literature and research, about the many different ways to include and enhance creativity development. There is a danger therefore that, despite beneficial collaboration, the effective development of school-wide professional learning (Cardno, 2012) is being inhibited by participants' wholly subjective experiences of creativity. The data suggest that, because only humanistic personalised creativity development is being encouraged by school leaders and fostered by teachers, other types of domain-specific creativity (Beghetto et al., 2014) are not being recognised or utilised.

Distributing the leadership of creativity development

The Education Council of Aotearoa New Zealand (2018) assert that leadership should be shared and not constrained by title or position, while the Education Review Office (2016), postulate that effective leadership, is the process of influencing others due to character or calibre of ideas regardless of rank. In addition, the evidential base identifying the positive contribution that distributed forms of leadership can make to teaching and learning has been summarised by many writers (e.g., Hargreaves & Fink, 2012; Harris, 2003, 2004; Harris, 2008, 2013; Harris & Gronn, 2008; Louis et al., 2010).

Reflecting the literature, the two principals expressed their determination to eschew top-down leadership in order to fully utilise the combined knowledge and abilities of all their teaching staff. A non-hierarchical structure, such as this, with low power-distance between leaders and those beneath them in standing, is described by Lubart (2010) as being very conducive to creativity, as it reduces fear and enhances honest and open communication between members at all status levels within an institution. The nine participants in my research endorsed Lubart's (2010) analysis and confirmed that their ability to promote students' creativity development was enhanced by the egalitarianism of their leaders. However, Lubart (2010) also acknowledges that while the elimination of a leadership hierarchy enhances the formulation and sharing of creative ideas, the lack of an authoritative leader is more likely to hinder the successful implementation of the ideas that have been created.

My research data showed that in Schools 2 and 3 this was not the case. Although Frank and Eric's lack of hierarchical leadership encouraged collaborative creativity, they still maintained sufficient power-distance, jurisdiction, and respect as leaders to effectively implement their teachers' creative initiatives. The influential leadership for creativity in these schools thus seems to be an optimum balance of authoritative and positional capital in combination with two types of distributed leadership, as follows – one, the organised distribution of responsibilities (Youngs, 2013) to middle leaders; and two, an holistic typology, as described by Spillane (2005) and Youngs (2013), which enables all staff members to provide leadership, regardless of their authoritative capital or experience. However, in School 1, despite the respect afforded to Suzy by her colleagues for her commitment and authentic role-modelling of creativity, her school-wide influence on creativity development is more limited because she does not have the same wide-ranging positional capital and leadership authority as the two principals.

Having supportive expectations for creativity planning, teaching, and assessment

In order to promote creativity development and nurture divergent curiosity within student inquiry, leaders encouraged teachers to adopt responsive and personalised teaching, together with retrospective record keeping rather than adhering to rigid teaching plans and evaluations. This approach, valued by all the teachers, is reflective

of the literature and aligns with the recommendations of Esquivel (1995). However, for the core subjects, where creativity was not a focus, senior leaders required detailed goal setting, together with pre-planning, frequent assessments, and regular overall teacher judgments (OTJs) of student achievement against *National Standards* (New Zealand Ministry of Education, 2010a). This was especially the case in Schools 1 and 2. Because of these differing leadership expectations, as shown in Figure 5-1, teachers adopted two contrasting pedagogical approaches – divergent and convergent – which offered them two different teaching experiences.

Participants also commented that when teaching literacy and mathematics, the accountability requirements of their senior leaders, meant they experienced performative stress – a situation reflecting the literature (e.g., Ball, 2003; Burnard & White, 2008; Codd, 2005; Cremin, 2015; Olivant, 2015). Teachers also stated that judging and reporting students' educational achievement solely against *National Standards* (New Zealand Ministry of Education, 2010a) felt unfair and unethical, because it discriminated against those who despite their creativity did not make the grade – a situation decried by Robinson and Aronica (2015). In this context one teacher commented very briefly on the beneficial effects of creativity development for priority learners (Education Review Office, 2017) – Māori and Pasifika students who were achieving below standard. However, none of other teachers or leaders referred to culturally responsive, teaching as recommended by the Education Review Office (ERO) (2017), New Zealand Ministry of Education (2007a), New Zealand Ministry of Education (2007c), New Zealand Ministry of Education (2011), and New Zealand Education Council (2017). Nor did they describe any explicit creativity development strategies for responsively meeting students' diverse cultural needs. This omission echoes the research findings of ERO (Education Review Office, 2017). Moreover, it indicates that, within the three schools, there was not the necessary leadership influence to prevent Māori and Pasifika students from being absorbed and lost within an amorphous group of students who are creative yet consistently under-achieve in the core subjects.

Balancing leadership for creativity with performative requirements.

Many authors assert that in the complex relationship between creativity and performativity it is performativity that usually dominates, (e.g., Ball, 2003; Blackmore,

2002; Sachs, 2005). For this reason, Burnard and White (2008) call for a more creative educational future in which performativity and creativity are rebalanced more equitably. An evenly matched relationship, they assert, will invigorate and re-energise teachers because they will be pivotal to a positive creative educational transformation that benefits all ākonga. Echoing this inspiring notion, all participants identified that due to their school leaders' influence, despite what they perceived as the unavoidable pressures of accountability, their pedagogical practice for creativity development was still personally rewarding. They experienced teaching for creativity as reducing stress, increasing job satisfaction, and renewing their passion for the job – factors crucial to effective teaching and enhanced learner outcomes (Banerjee et al. 2017). These positive factors together with teachers' and leaders' enthusiasm and excitement about student creativity indicate a beneficial shift towards Burnard and White's (2008) re-balanced ideal. It is possible too that with the removal in 2018 of *National Standards* (New Zealand Ministry of Education, 2010a) teachers and leaders will no longer be forced into "both/and thinking" (Duignan, 2012, p. 77) in order to promote creativity whilst also managing the discriminatory demands of academic accountability. Instead, leaders will influence teachers to take risks, explore, and implement creativity throughout the whole curriculum for the benefit of all ākonga, free from the performative stress of meeting narrow academic benchmarks in the core subjects.

Conclusion

This chapter has discussed the data findings outlined in Chapter 4 and related these to the literature and research about creativity in education reviewed in Chapter 2.

Key areas in which teachers espoused professional practice reflected the authors' interpretations of creativity and recommendations for creativity development in education were as follows: the importance of pro-creativity role-modelling, the establishment of safe and supportive environments conducive to creative curiosity, inquiry, risk-taking and self-expression; the embracing of ako; and the adoption of responsive and collaborative pedagogical approaches which enhance students' self-esteem, motivation, engagement, learner-agency, and creative self-efficacy. Also redolent of the literature and research were the influential leadership behaviours of the two principals and, to a lesser extent, the DP. They championed and role-modelled

creativity, built environments conducive to creativity development, and consistently empowered teachers through collaboration, distributive leadership, ako, professional trust, and respect. In this way the senior leaders positively influenced the pedagogical practice of teachers and middle leaders for creativity development. There were however some disconnections between creativity theory and participants' professional practice.

There is an important difference between teaching *for* creativity and the teaching *of* creativity. It is evident that participants were adopting only the former approach to creativity development. Apropos of this, and of cause for concern, some teachers were not sure if students were aware when they were being creative or if they knew what creativity actually was. It appears that although teachers diligently provided all the necessary elements *for* students' creativity to flourish, they did not clearly define creativity or engage in specific creative instruction. Torrance (1972) contends that there are many ways to explicitly teach students to think and behave creatively. Participants, however, only identified one way and adopted a pedagogical approach focussed solely on the empathetic nurturing of students' personal and unique *mini-c* creativity (Kaufman & Beghetto, 2009). Teachers did not engage in the focussed teaching of creative skills or creative thinking, they were unsure how or why to develop students' domain-specific creativity, and they did not develop and utilise students' creativity within the core subjects.

There are several reasons for these omissions. In the first instance, participants had received no initial teacher-training about creativity nor had they participated in any professional learning about the diverse ways to develop student creativity during their careers. Secondly, leaders had not provided instructional guidance for teachers concerning the explicit teaching of creativity or promoted the development of creativity within the core subjects. Thirdly, because of these omissions, participants' perceptions of the benefits of creativity, their definitions of student creativity and their pedagogical practice for creativity development were subjective, guided by personal experience, intuition and their inner values, but not informed by expert knowledge or research findings.

Chapter 6 explores these conclusions and also provides recommendations to build upon, expand, and enhance teachers' teaching and learning programmes in order to further develop students' creativity.

Chapter 6. Conclusions and recommendations

Introduction

This chapter is divided into four sections – an overview of the research study, the conclusions arising from this study, the limitations of this study, recommendations for future practice, and suggestions for further research.

An overview of the research

This study investigated teachers' practices of creativity in three New Zealand primary schools and the leadership that enables and influences these practices. Three conclusions are presented which relate to the three research questions guiding this study.

Conclusions

Conclusions related to Research Question 1

How do teachers and school leaders define creativity in relation to their students and their teaching and learning programmes?

Conclusion 1: The teachers' and leaders' definitions of student creativity were pivotal to their pedagogical practice and leadership behaviour for creativity development. All of the participants adopted humanistic personalised definitions of creativity that emphasised the development of students' self-confidence, self-expression, and self-actualisation as advocated by Esquivel (1995), Robinson (2001), and Plucker et al. (2004). Aligning with the beliefs of many authors (e.g., Beghetto, 2010; Craft, 2012; Stoll & Temperley, 2009) they believed their definitions and professional practice benefitted their students socially, emotionally, and educationally whilst also providing an excellent foundation for their pupils' future success as adaptable, co-operative, and productive citizens. However, participants' definitions of student creativity, and the consequent benefits for students, could be further expanded and enhanced.

This research study identified that, although the nine participants were passionately committed to the inclusion of creativity within their pedagogical practice, they had received no creativity professional development and engaged in limited professional

reading about creativity in education. As a result, the respondents' definitions of student creativity were based on their own inner-values, philosophies, and belief systems combined with their subjective experiences of education throughout their lives. In addition, the creativity definitions adopted by Scale A teachers and middle leaders were influenced by the beliefs and behaviours of their senior leaders. Due to their unfamiliarity with creativity literature and research, participants did not identify that student creativity could be defined, explicitly taught, and developed many different ways.

For these reasons, it appears that by defining student creativity solely as personal and domain-free, teachers are omitting to explore and develop other beneficial types of creativity within different curricular areas especially literacy and numeracy. Hattie (2009) maintains that increasing the professional capacity of teachers is fundamental to enhancing student outcomes. By engaging with literature and research about creativity in education, participants could expand their definitions of student creativity, extend their knowledge, understanding, and ability to include the teaching of domain-specific creativity in their pedagogical practice, and so enhance the benefits of creativity development for their students. This point relates to Conclusion 2, which focuses on teachers pedagogical practices for creativity development.

Conclusions related to Research Question 2

What pedagogical practices do teachers use to include creativity in their teaching and learning programmes in order to develop the creativity of their students?

Conclusion 2: Through their pedagogical practice, participants believe that they are fostering safe and supportive environments conducive to students' self-confident creativity development. They are also committed to nurturing the personal creativity of students, firstly through responsive holistic teaching, and secondly by facilitating student-led inquiries within a diverse range of learning contexts. However, to fully optimise students' creativity development, creativity must be taught explicitly and also utilised and enhanced within the core subjects of literacy and mathematics as well as through exploration and inquiry.

As Beghetto (2010), Cremin (2015), Cropley (2001) Makel (2009) and Smith and Smith (2010) contend, due to educationalists' misunderstandings about creativity and the creativity inhibiting influences upon them, there is often a paradox between teachers' self-professed support for creativity development and their insufficiency of associated pedagogical practice. Time-wise, this was not the case within the three participating schools, as creativity development filled a large portion of students' schooling. However, there were some areas in which teachers' pedagogical practice did not capitalise on, or fully develop, students' creativity. On the positive side, this research study concluded that participants' responsive, student centred professional practice for creativity development not only had the potential to engage and motivate students, it also epitomised many elements of powerful high quality teaching as outlined in the following guiding documents for New Zealand teachers; The *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c), *Our Code Our Standards* (New Zealand Education Council, 2017), and *Tataiako* (New Zealand Ministry of Education, 2011). Furthermore, the pedagogical approaches and teaching and learning programmes employed by teachers were appropriate for developing the type of personalised student creativity that teachers and leaders specifically defined and valued.

Conversely though, it was apparent that teachers' pedagogical practice did not include the development or explicit teaching of any other types of creativity. Aside from the writings of Robinson (2001), who firmly endorses the pedagogical approach and type of creativity development already favoured by participants, teachers had not engaged in any professional readings or learning about any other types of creativity, nor had they investigated or utilised any specific resources or programmes to stimulate students' creativity development. For example, although 'thinking outside the box' was mentioned as an example of student creativity, teachers did not explicitly try to enhance creative and critical thinking as advocated by Martin, Craft, and Tillema (2002) and Wegerif (2010). There was also a dichotomy between participants' divergent pedagogy as seen in their student-led inquiry programmes for creativity development, and their more convergent pedagogy for the core subjects within which creativity was not a key component. This division was prompted in part by the performative requirements of *National Standards* (New Zealand Ministry of Education,

2010a) but also by participants' lack of knowledge about how to utilise or develop students' creativity within these core subjects.

Baer (2016) and Beghetto et al. (2014) maintain that teachers' skilful employment of creativity within specific curricular areas can elevate students' domain specific learning whilst also providing valuable skills and knowledge that enhance students' development and application of creativity in other learning contexts. Because participants were not familiar with this notion, they were not enabling their students to reap the additional creative benefits of integrating creativity into the core curriculum. As noted in Conclusion 2, by engaging with literature and research about creativity in education, participants could extend their pedagogical knowledge and understanding about the explicit teaching of creativity. They could also increase their confidence, competence, and commitment to including creativity within all subject areas, the core curriculum in particular.

Conclusions related to Research Question 3

What school leadership practices influence classroom teachers' implementation of creativity focussed pedagogical practices in their teaching and learning programmes?

Conclusion 3: The leadership behaviours of the senior leaders were influential in supporting the teachers and middle leaders to adopt pedagogical practices conducive to the development of students' personalised creativity. The professional practice of the senior leaders aligned with many aspects of effective and ethical influential leadership as outlined in recent leadership literature (e.g., Alvesson & Spicer, 2014; Branson & Gross, 2014; Gunter, Hall, & Bragg, 2013; Raelin, 2016). Furthermore, principals' collaborative, distributive leadership style, and the positive professional relationships they fostered with teachers exemplified effective leadership practice for creativity development as described by Stoll and Temperley (2009).

However, for teachers to explicitly develop all types of student creativity through their pedagogical practices and to also integrate creativity into teaching and learning within the core subjects, further leadership influence is necessary. As noted in Conclusion 2, students' creativity could be nurtured more fully through explicit teaching of creativity and could also be developed and utilised beneficially within the core curriculum if

teachers had a greater understanding of how to achieve these objectives and were influenced to do so by their leaders. Favouring a distributive leadership approach, the two principals welcomed teachers' input into creativity development. However, as Weber (1987) maintains, even high performing teachers cannot be consistently self-renewing, and supervision and direction from leaders is also required. Macbeath (2006) asserts that "Leadership for learning means being accountable" (p.38) and Cardno (2014) concurs, stating that principals are responsible for ensuring the very best pedagogical practices in their teachers.

This research therefore concludes that for teachers to enhance their professional practice for creativity development and to adopt a pedagogy that fosters *all* types of students' creativity, senior leaders must engage in pro-active well-informed instructional and andragogical leadership (Cardno, 2012). Through the provision of professional learning opportunities that utilise effectively the *Three Fields of Knowledge* – practitioner, public, and new knowledge (Jackson & Temperley, 2007, p. 6) leaders must encourages, challenge, support, and influence teachers to inquire into their practice and to widen their pedagogical approach to the development of student creativity in order to enhance the learning and achievement outcomes for all ākonga.

Limitations

It is recognised that due to the small number of participants involved, this research study may not accurately represent the experiences and perceptions of all teachers and leaders seeking to include creativity in their teaching and learning programmes in order to develop the creativity of their students. However, as noted by Anderson and Arsenault (1998), small scale qualitative studies can be of relevance to other settings if readers make contextual connections that are personally appropriate to them. The audience of this research can gauge accordingly the extent to which the findings and conclusions can be applied to their own particular circumstances (Cohen et al., 2000; Denzin & Lincoln, 2011). For interpretive research involving the empathetic comprehension of human behaviour, it must also be acknowledged, as Bishop et al. (2007) posit, that "self-reporting by teachers is generally less reliable than more objective measures because of compliance with preferred answers and enthusiasm" (p.189). For this reason, it is advisable to spend extended periods engaging with and

observing research participants (Miles et al., 2014) and confirming data findings through repeated interviews (Wellington, 2000). Unfortunately, the timeline of this study did not permit such sustained interactions. There was also insufficient time in the interviews to explore in detail other important aspects that influence creativity development in education such as teacher collaboration, distributed leadership, the relationship between creative leaders, teachers and students' creativity development, the assessment of creativity, and the links between creativity and culture. Finally, there also appears to be a lack of research globally and in New Zealand concerning creativity development specifically within primary schools and the influence of educational leaders on teachers' development of students' creativity. Therefore, this research study cannot be compared, or tested against the theories and hypotheses distilled from similar research carried out by others.

Recommendations

The findings of this research study have led to the development of five recommendations. It is important to acknowledge the small size of this research study and also to recognise that the following recommendations are only applicable to the findings related to the participants and schools engaged in this research study. The four data themes in relation to students' creativity development – benefits, definitions, teachers' pedagogical practice, and leadership influence – have been investigated and discussed separately. However, as noted previously, the data themes are inseparable and relationship between them crucially important. Therefore, the following recommendations acknowledge their interconnectedness.

Recommendation 1: That Universities, the New Zealand Ministry of Education, the Education Council, and educational data bases ensure that literature and research about creativity in education is more easily accessible for all teachers. Sahlberg (2007, p. 153) describes the benefits of teaching being a research-based profession, and with greater access to public knowledge, from theory research and best practice (Jackson & Temperley, 2007) participants could engage in on-going scholarship and augment their awareness and understanding of student creativity development. The dissemination of this valuable information would facilitate the use of research to inspire teacher and leadership practice (Dumont et al., 2010) which would also benefit professional

learning communities within schools or wider networked learning communities (Jackson & Temperley, 2007) such as Communities of Learning (CoLs) (New Zealand Ministry of Education, 2015a). Through professional collaboration and increased knowledge and understanding, teachers and leaders could then extend the ways in which they include creativity within their teaching and learning programmes, strengthen their pedagogical practice, and enhance the benefits of creativity development for all of their students.

Recommendation 2: That senior leaders become life-long learners who inquire into their practice, explore literature and research about creativity development in order to provide on-going knowledgeable instructional leadership about all types of creativity in education, as discussed in this research study. With this enhanced understanding, principals and senior leaders will be equipped to implement transformational professional learning development (PLD) that that engages, challenge, and inspires staff. Effective PLD builds upon and complements teachers' current experiences whilst recognising and acknowledging teachers' existing theories of action (Robinson, 2017). In this way, through self-inquiry, professional dialogue, based on empirical evidence as well as personal experience, teachers can gain the skills, understanding, and motivation necessary for them to widen their aspirations for student creativity. In order to lift educational outcomes in all curricular areas for all ākonga, especially priority learners, teachers' pedagogical practice can be improved and robust culturally inclusive teaching and learning for creativity development can be implemented within and across all areas of the curriculum.

Recommendation 3: In addition to leading whole-school professional learning opportunities, that senior leaders and school Boards of Trustees allocate sufficient time and money to support the professional growth of teachers' pedagogical practice for the development of students' creativity. This requires the provision of materials and resources, and the funding of release time for observations, mentoring, and guided support so that teachers can reflect upon and inquire into their own and others' pedagogical practice in relation to the development of students' creativity.

Recommendation 4: That with the removal of *National Standards* (New Zealand Ministry of Education, 2010a) the Ministry of Education and the Education Review

Office adopt a more holistic view of education, which more closely aligns with the vision and values in the *New Zealand Curriculum* (New Zealand Ministry of Education, 2007c). This pedagogical approach would emphasise the crucial links between contextually appropriate, culturally inclusive creativity development and students' confidence, engagement, motivation, and learning outcomes. It would also acknowledge and embrace the role of creativity in preparing students for an uncertain and potentially exacting future. For this positive change of direction to effectively enhance student achievement, teachers will require expert professional support, targeted resources, and on-going Ministry-funded professional development.

Recommendation 5: That universities and teacher training institutions ensure that they are including the development of students' creativity within their curriculum, so that future teachers are better prepared to include effective creativity development within their pedagogical practice. These newly qualified teachers will then be able to share their knowledge, understanding and effective practice with their colleagues through collaboration and dialogue within professional learning communities in schools or across Communities of Learning (CoLs) (New Zealand Ministry of Education, 2015a).

Suggestions for future research

This research has highlighted future research possibilities that would add to primary school teachers' and leaders' knowledge and understanding of creativity in education. These possibilities are as follows:

- Because this research study was restricted to a small geographical area with only nine participants from three schools taking part, similar qualitative research into creativity development within a larger and more wide spread sample of New Zealand primary schools could usefully be undertaken;
- As noted in Chapter 2, there is very little specific research into leadership for creativity and because of this shortfall there is limited guidance for school principals and senior leaders who wish to promote teachers' pedagogical practices for the development of students' creativity. Additional research into leadership for creativity development would consequently be of value to leaders, teachers, and students;

- Beghetto (2008) posits that teachers' own educational experiences as children and tertiary students may have an influence on their definition and development of students' creativity – this connection is worthy of further exploration;
- The important relationship between the training received by teachers, their perceptions of creativity and their pedagogical practice for creativity development has been commented on by various authors (e.g., Beghetto, 2008; National Advisory Committee on Creative and Cultural Education, 1999). Therefore, it would be beneficial to undertake research in teacher training institutes to investigate the experiences and opinions of educationalists who train teachers, and to discover more about their andragogical practice for creativity development;
- It would appear that, with the exception of Conner et al. (2016), the vast majority of research into creativity in education, including this research study, has been undertaken with teachers not students. As student voice is crucial to enhancing learning outcomes, investigating the experiences, perceptions, and perspectives of school pupils of all ages, concerning creativity in education, would therefore be a valuable direction for future research.
- Participants in this research study were unsure of the relationship between domain-specific skills and knowledge (acquired in different curricular areas), creative exploration, and students' creativity. They were also uncertain about how to achieve an optimum balance between these different components that would enhance students' creativity development. This area is worthy of further investigation.
- This research has touched briefly on the relationship between the creativity of teachers and leaders and the creativity development of students. It is unclear whether creative leaders foster creative teachers, or whether creative teachers foster creative students. The effect of educationalists' own creativity on the development of their students' creativity offers avenues for further study.
- Throughout this research study the similarities between teaching excellence and teaching for creativity have been revealed. The relationship between these two concepts consequently warrants more research.

Conclusion

This research study investigated the experiences and perceptions of nine participants who are seeking to develop the creativity of their students – three Scale A teachers, three middle leaders, and three senior leaders. The findings and recommendations are made available to teachers and leaders who wish to include creativity development in their teaching and learning programmes. They also add to the body of literature and research on creativity in education currently available.

To engage all students in education, to enhance their capability in all curricular areas, and to prepare them for the uncertainty and challenge of a rapidly changing world, there is a need for school teachers and leaders to be committed to enhancing all aspects of student creativity. In order to adopt pedagogical approaches that include explicit development, exploration, and application of creativity across and within all teaching and learning programmes, teachers and leaders must have an extensive knowledge and understanding of creativity in education. By engaging with creativity theory, research, and definitions of best practice, primary school educators will be better equipped to adopt inclusive pedagogical approaches for the multi-faceted teaching *of* and *for* creativity that will fully develop and utilise every aspect of students' creativity. Such an all-encompassing pedagogical approach toward creativity development would not only facilitate students' confident self-expression and creative efficacy, it would also employ the explicit teaching of creativity within and across every subject to raise students' learning and achievement across all areas of the curriculum. Enhanced educational and personal outcomes would then ensue for all ākonga now and in the future.

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Appendices

Appendix A: Semi-structured research interview questions

NOTE: I will meet with participants in advance to briefly go through the 'interviewee version' of these questions (see Appendix D) prior to our semi-structured interview and their signing of the participants' consent form (see Appendix E). For the actual interview, the basic order of questions will be as suggested by Berg et al. (2004, p. 113). However within each section, as appropriate for each interview, questions may be phrased slightly differently or asked in a different order. Questions will also be followed up with suitable probes to encourage more detail e.g. "could you tell me more about that?"

Introduction – spoken to interviewee

"Thank you for giving your consent to be involved in this research study and also for giving your valuable time to take part in this interview; your input is very important and greatly appreciated.

This interview will be flexible in its approach, because the purpose is to gain an understanding of your individual views and experiences regarding creativity in a primary school context. I will be asking some questions to help me do this, however, please do not feel I have all the answers; I certainly don't. However, I am very interested in students' creativity and that is why I am undertaking this research project. My intention is that our interview will not resemble an interrogation or rigid survey; instead, I hope that we can discuss and explore creativity together. I am very happy therefore for you to expand on your answers, to digress, go into detail, or reflect on previous experiences, in order to tell your story in your own way. In addition, if you would like to, please feel free to show me examples, to illustrate what you are saying or add clarity.

As explained previously, I will be recording this interview, which will subsequently be typed up word for word. You will then be given the opportunity to review the typed transcript and check for accuracy before I begin my analysis. Please also be assured that this interview process is confidential and your anonymity will be protected throughout the research study."

Non-threatening demographic questions

1. When did you qualify as a teacher?
2. What is your teaching qualification?

3. How many years teaching experience do you have?
4. How long have you been teaching at this school?
5. What age group are you currently teaching?

Questions related to the research questions, but not the most sensitive

6. How would you define creativity in relation to your students?
7. Do you think there are different types of student creativity?
8. Can you give me any examples of student creativity you have experienced?
9. What aspects of your teaching and learning programmes do you feel encourage your students to develop their creativity?
10. What aspects of your teaching style or approach do you feel encourage your students to be 'creative'?

More sensitive questions related to research questions

11. How do you think creativity is linked to students' abilities?
12. In your experience are some students more 'creative' than others?
13. Do you think it is important for students to develop their creativity?
14. Do you feel confident when including creativity in your classroom programmes or developing your students' creativity?
15. Can you share any experiences of teaching creativity that you have experienced?
16. How do you see creativity in relation to the curriculum areas?
17. Do you feel that it is easier to include 'creativity 'in some curricular areas rather than others?
18. How often do you include creativity in your classroom programme?
19. Why do you try to include creativity in your classroom programme?
20. How do you feel about the amount of time you spend on creativity in the classroom?
21. What leadership practices do you feel are influencing or supporting you to include creativity in your teaching and learning programmes in order to develop your students' creativity?
22. What school structures or expectations have a bearing on your experience of teaching creativity in your classroom?
23. Are there any other leadership behaviours or practices that you believe would influence or support you to include creativity in your teaching and learning programmes and to develop your students' creativity?
24. Within your school leadership structure, who would be responsible for implementing these additional leadership practices?
25. Is there anything else about creativity in education that you would like to share?

Appendix B: Principal's consent form

Principal's permission for researchers to access the school staff / students.

Project title: ***Including 'creativity' in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership.***

Project Supervisor: ***Alison Smith***

Researcher: ***Julie Crimmins-Crocker***

- ○ I have read and understood the information provided about this research project in the Information Sheet dated 14 June 2017.
- ○ I agree for this research to take place in ..... School .

Principal's signature: .....

Principal's name: .....

Principal's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on **28/01/2017**
AUTEC Reference number 17/244

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

2 July 2015 page 1 of 1 This version was last edited in June 2016

Appendix C: Participant information sheet

Participant Information Sheet

Date Information Sheet Produced:

22 August 2017

Project Title

Including 'creativity' in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership

An Invitation

Kia ora; thank you so much for allowing me to speak at this staff meeting, and for taking the time to read this information sheet. My name is Julie Crimmins-Crocker, and I am usually the deputy principal at Parawai School in Thames. However, I am currently on study leave as the recipient of a Teach NZ study award, and I am in the final stages of completing my Master of Educational Leadership degree at AUT. A component of this master's degree is the writing of a thesis, which involves the completion of a small scale research project. As a primary school teacher of over 30 years, my research will be within the primary school sector and, as fellow primary school practitioners, I greatly value your input. Therefore I would like to invite you to participate and join me on this research journey. This sheet provides information about this research study, and, should you wish to participate, it explains what taking part would involve. This sheet also outlines how your contribution will be of value and greatly assist me in my research, and it explains how your participation could potentially be of benefit to you too.

What is the purpose of this research?

The purpose of this research is to investigate 'creativity' in primary school education. It seeks to discover how you define and develop students' 'creativity' and the influence of school leadership.

'Creativity' can mean different things to different people, depending on their culture, gender, beliefs, background, and experience. This research study will

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therefore explore your subjective experiences of 'creativity' in education, your thoughts, actions, and the influences upon you. I would like to find out more about your definitions of student 'creativity', how you plan learning programmes to promote 'creativity' development and the important influence of leaders in this process.

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

I am inviting you to take part, because my professional contacts inform me that your school exhibits effective practice concerning 'creativity', and your principal has kindly given me permission to speak at this staff meeting and carry out my research in your school. For this research project, in order to glean a range of perspectives, I am seeking to engage with three participants from three schools. From each school I would like interview one school leader, one beginning teacher (or a teacher with less than four years experience) and one experienced teacher (who has been teaching for over ten years). If you fall in to either of those groups, I would welcome your participation. However, due to ethical principles, friends, relatives, or people with whom I currently have or previously have had a close collegial relationship are prohibited from taking part.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

If you would like to take part, I invite you to contact me, within a week. Please use my email contact details indicated on this form and also please provide a little more information by answering the following questions:

- How many years have you been teaching for?
- Do you hold a position of responsibility at your school related to 'creativity'?
- Are you a member of your school's senior leadership team?

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If you are selected to take part, I will then contact you by telephone to discuss our research partnership and your participation and protection. At the conclusion of our pre interview discussion, I will also invite you to provide in writing your informed consent to participate in this research study.

The purpose of the discussion is to

- provide you with further details about the research purpose, process and answer any queries you may have;
- outline in detail the ethical procedures that will be taken by me to ensure that your consent is informed and voluntary, that you are not harmed or deceived, and that your confidentiality and privacy will be maintained;
- discuss, consult, negotiate and come to a mutual agreement concerning your role in the research project and your participation in the semi-structured interviews;
- arrange a date and appropriate location for our interview;
- discuss any cultural protocols, customs and preferences that you may have concerning the interview process so that I can respect your wishes; and
- give you broad summary of the interview questions for your consideration.

What will happen in this research?

As a participant in this research study you will be invited to take part in a semi-structured interview of approximately one hour, which will be held, confidentially one-to-one, with me. You may also bring a support person with you if you would like. The interview will be captured on a digital audio recording and then subsequently typed out, word for word, by an AUT approved transcriber. In the interview I will ask you some specific questions, but you will also be invited to expand on your answers, so that you can give your valuable personal perspective and we can explore the topic of 'creativity' in detail together. After your interview has been transcribed, you will be given the transcript to affirm, edit, or clarify the content. Confidentiality will be paramount; each participant will only see their own individual transcript. I will then analyse all the transcripts in consultation with my university supervisor and the findings will be presented in my thesis. Findings will be shared with individual participants, I will also explain how to

access the completed thesis, and if the output of this research appears in a journal or conference paper, you will also be informed.

What are the discomforts and risks and how will these discomforts and risks be alleviated?

I do not anticipate that the interview process will put you in any discomfort or risk. However, you will be free to take a break or stop at any time should you so wish.

What are the benefits?

It is hoped that you will benefit from your involvement in this project in the following ways. The interview discussion will give you the time and opportunity to explore 'creativity' in education, to share experiences and ideas, express concerns, ask questions, and to consider how teaching and learning programmes can further develop the 'creativity' of students. During our discussion, we will also explore what leadership practices are influential and supportive of 'creativity in education. I hope too that the benefits of this research, may reach beyond the three participating schools, to the wider community of teachers and leaders. In this way it is possible that more young learners will also benefit from an enhanced awareness of creativity' in the classroom.

How will my privacy be protected?

As researcher, I will keep all information about this research study confidential. I will know the identity of all participants, but individual teachers, their schools and the names of any persons referred to in interviews will be excluded from all documents, in hard copy and on the computer. Carefully chosen generic school descriptors and pseudonyms, will be allocated, and any information that allows for the recognition of locations or participants will be omitted.

For the protection of all involved, participants are also advised to maintain the same level of confidentiality, concerning the involvement of your school in the research study, your individual participation, your awareness of others' participation, and also what was said during the interview.

Furthermore, if you choose to participate, you should be aware that despite concerted efforts to maintain confidentiality, there is a risk that other people, including school leaders, may become aware who has taken part and may also be able to attribute comments to individuals. To minimise the risks involved because of this possibility, participants will not be encouraged to

critique the practice of colleagues, but conversely they will be invited to identify behaviours they feel are currently, positively enabling of creativity or would be so in the future. The audio-tapes will be typed out by an AUT approved transcriber, who has signed a confidentiality agreement and the rigorous protection and safe storage of data will also be of paramount concern, during and after the completion of the research project. Electronic data will be stored on a password protected memory stick, and hard copy data will be stored securely at AUT in AR120.

You will also be given the opportunity to review your transcripts and omit or amend any data that you feel could breach your privacy or confidentiality. Furthermore, if you withdraw from the study, you will be offered the choice between having any data, that is identifiable as belonging to you, removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What are the costs of participating in this research?

It is anticipated that the time you will be asked to give to this research study will be two hours maximum: 15 - 30 minutes for pre-interview telephone discussion, plus an interview of one and half hours maximum.

What opportunity do I have to consider this invitation?

You are invited to please respond to this invitation within a week.

Will I receive feedback on the results of this research?

I will send a summary of the research findings to you after the completion of the research, and inform you how to access any other subsequent research outputs.

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

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Alison Smith

alison.smith@aut.ac.nz Phone: 90 921 9999, ext. 7363

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC,

Kate O'Connor *ethics@aut.ac.nz* Phone: 921 9999, ext. 6038.

Whom do I contact for further information about this research?

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

Researcher Contact Details:

Julie Crimmins-Crocker juliendave@xtra.co.nz

Project Supervisor Contact Details:

Alison Smith alison.smith@aut.ac.nz Phone: 90 921 9999, ext. 7363

Approved by the Auckland University of Technology Ethics Committee on 28/01/2017
AUTEC Reference number 17/244

Appendix D: Participant pre-interview information sheet

Research title:

Including creativity in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership

Thank you for giving your consent to be involved in this research study and also for giving your valuable time to take part in this interview; your input is very important and greatly appreciated.

This interview will be flexible in its approach, because the purpose is to gain an understanding of your individual views and experiences regarding creativity in a primary school context. I will be asking some questions to help me do this, however, please do not feel I have all the answers; I certainly don't. However, I am very interested in students' creativity and that is why I am undertaking this research project. My intention is that our interview will not resemble an interrogation or rigid survey; instead, I hope that we can discuss and explore creativity together. I am very happy therefore for you to expand on your answers, to digress, go into detail, or reflect on previous experiences, in order to tell your story in your own way. In addition, if you would like to, please feel free to show me examples, to illustrate what you are saying or add clarity.

As explained previously, I will be recording the interview which will subsequently be typed up word for word. You will then be given the opportunity to review the typed transcript and check for accuracy before I begin my analysis. Please also be assured that this interview process is confidential and your anonymity will be protected throughout the research study.

The questions below are indicative of the topics will be discussing

1. How would you define creativity in relation to your students?
2. Do you think there are different types of student creativity?
3. Can you give me any examples of student' creativity that you have experienced?
4. What aspects of your teaching and learning programmes do you feel encourage your students' to develop their creativity?
5. What aspects of your teaching style or approach do you feel encourage your students to be 'creative'?
6. Do you feel confident including creativity in your classroom programmes or in developing your students' creativity?

7. How do you see creativity in relation to the curriculum areas?
8. How often do you include creativity in your classroom programme?
9. What school structures or expectations have a bearing on your teaching of creativity?
10. What leadership practices do you feel influence or support you to include creativity in your teaching and learning programmes?
11. Are there any other leadership behaviours or practices that you believe would influence or support you to develop your students' creativity?

Is there anything else about creativity in education that you would like to share

Appendix E: Participant consent form

Consent Form

Project title: ***Including 'creativity' in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership.***

Project Supervisor: ***Alison Smith***

Researcher: ***Julie Crimmins-Crocker***

- O I have read and understood the information provided about this research project in the Information Sheet dated 22/Aug/2017.
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that notes may be taken during the interviews and that they will also be audio-taped and transcribed.
- O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- O I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- O I agree to take part in this research.
- O I wish to receive a summary of the research findings (please tick one): YesO NoO

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on **28/01/2017 AUTEC Reference number 17/244**

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

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Appendix F: Transcriber confidentiality agreement

Confidentiality Agreement

For someone transcribing data, e.g. audio-tapes of interviews.

Project title: ***Including 'creativity' in primary school teaching and learning programmes: Teachers' pedagogical practice and the influence of school leadership.***

Project Supervisor: ***Alison Smith***

Researcher: ***Julie Crimmins-Crocker***

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature: .....

Transcriber's name: .....

Transcriber's Contact Details (if appropriate):

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.....

.....

.....

Date:

Project Supervisor's Contact Details (if appropriate):

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Approved by the Auckland University of Technology Ethics Committee on **28/01/2017 AUTEC Reference number 17/244**

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

Appendix G: Participants' responses for each category – numerical data

Interview question		Sub-categories for each question	Tchrs	Ldrs	DP	Prcps	Total participants	Total responses
1	How do you broadly define creativity and creative people?	Is original or different	1	3	1	2	7	8
		Involves risk			1	1	2	6
		Promotes fulfilment and well-being	1		1		2	6
		Is inherent in all			1	1	2	6
		Requires perseverance to see ideas through to completion	2	2		1	5	5
		Is hard to define			1	1	4	5
		Can be unexceptional – everyday creativity	2		1		3	5
		Is driven by personal passion	2	2			4	4
		Is purposeful and adds value		2		2	4	4
		Can be exceptional – God given to a few	1	1			2	4
2	How do you define creativity in relation to your students?	Requires opportunity, support and agency	3	3	1	2	9	40
		Exists in diverse forms	3	3	1	2	9	23
		Reveals originality of thought and action	3	3	1	2	6	22
		Needs confidence/growth mind-set	2	3	1	2	8	21
		Differs with age	3	3	1	2	9	20
		Is most easily expressed in the Arts	3	3	1	2	9	17
		Involves risk	1	1	1	2	5	16
		Involves problem solving	2	3		1	6	16
		Is not linked to academic ability	3	3		2	8	15
		All students have it	3	3	1	2	9	8
		Exists in differing amounts	3			1	4	7
		Involves imagination	2	2	1		5	5

3	Do you think it is beneficial for students to develop their creativity? (What is enhanced by creativity)	Learning and achievement	3	3	1	2	9	31
		Self-confidence / mental well-being	3	3	1	2	9	24
		Enjoyment, motivation engagement	3	3	1	2	9	19
		Self-realisation and fulfilment	3	1	1		5	15
		Citizenship, contribution to society	3	3	1	2	9	13
		Preparation for 21st century life	1	2	1	1	6	11
		Social and behavioural skills	2	2	1	2	7	9
		Teacher enjoyment satisfaction	2	2	1	2	7	8
4	What aspects of your teaching and learning programmes develop your students' creativity?	Cross-curricular inquiry approach	3	3	1	2	9	50
		Providing knowledge tools skills	3	3	1	2	9	32
		Scaffolding for independence	3	3	1	2	9	23
		Flexible planning	2	3	1	2	7	23
		A broad range of experiences	2	2	1	2	8	22
		Creativity in core subjects	3	3	1		7	19
		Giving time	1	3	1	2	6	13
		Authentic cross curricular learning	2	2	1	2	7	11
5	What aspects of your teaching style and approach develop your students' creativity?	Reacting positively	3	3	1	2	9	31
		Relationships and responsive teaching	3	3	1	2	9	29
		Collaborating with students	3	3	1	2	9	25
		Inquiring reflecting and up-skilling	2	3	1	1	7	23
		Collaborating with colleagues	3	3		2	8	22
		Facilitating student-led learning	2	3	1	2	8	19
		Taking pedagogical risks	2	3	1	2	8	14
		Encouraging risk-taking in students	1	2	1	2	5	11

6	What leadership practices influence and support you to develop your students' creativity?	Affirms and supports	3	3	1	2	9	23
		Collaborates with teachers	2	3		2	7	23
		Allows responsive planning and assessment	2	2		2	7	23
		Trusts and permits	3	3	1	2	9	18
		Fosters school-wide creative ethos	2	3	1	2	8	17
		Challenges status-quo	2	3	1	2	3	12
		Builds a creative environment	2	3		2	6	11
		Has vision and self-belief	1	1	1	2	5	11
		Encourages risk-taking in teachers	2	3		2	7	9
		Takes creative risks	1		1	2	4	9
7	What else helps you, or could help you to develop your students' creativity?	Achievement beyond core subjects is valued by the Ministry of Education, society, and whanau	4	6	2	4	16	42