

Meeting the demands of a new curriculum philosophy: A study of
the challenges of curriculum implementation for small rural
schools in New Zealand

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Table of contents

TABLE OF CONTENTS.....	1
ABSTRACT	4
1. INTRODUCTION.....	5
<i>A rationale for this study.....</i>	<i>7</i>
<i>Research aims and questions.....</i>	<i>8</i>
<i>Thesis organisation</i>	<i>10</i>
2. LITERATURE REVIEW	12
CURRICULUM DESIGN	12
<i>Curriculum defined.....</i>	<i>12</i>
<i>New Zealand’s National Curriculum history.....</i>	<i>13</i>
<i>National curriculum design</i>	<i>14</i>
CURRICULUM IMPLEMENTATION AND CHANGE	22
<i>The scale of change.....</i>	<i>23</i>
<i>Change is context-sensitive.....</i>	<i>24</i>
<i>A need and direction for change</i>	<i>25</i>
<i>Change is about learning</i>	<i>28</i>
<i>Developing the capacity for change.....</i>	<i>30</i>
<i>Sustainability.....</i>	<i>34</i>
<i>Leading curriculum change.....</i>	<i>38</i>
<i>Change for revised New Zealand Curriculum implementation</i>	<i>41</i>
THE SMALL RURAL SCHOOL CONTEXT.....	42
<i>Small rural school leadership</i>	<i>43</i>
<i>Small school teaching and learning</i>	<i>47</i>
<i>The small rural community</i>	<i>47</i>
3. METHODOLOGY	49
<i>Methodological approach.....</i>	<i>50</i>
<i>Data collection</i>	<i>51</i>
<i>Sampling</i>	<i>53</i>
<i>Analysis</i>	<i>55</i>
<i>Research validity.....</i>	<i>57</i>
<i>Ethical considerations</i>	<i>57</i>

4. FINDINGS	60
PERCEPTIONS OF THE REVISED NEW ZEALAND CURRICULUM.....	60
<i>Comparisons with the previous curriculum</i>	65
THE CONTEXTUAL CONDITIONS OF SMALL RURAL SCHOOLS	67
<i>The small rural school context</i>	67
<i>The role of the small rural school principal</i>	69
<i>The role of the small rural school teacher</i>	72
THE PROCESSES OF CURRICULUM IMPLEMENTATION AND CHANGE	73
<i>Establishing a need and direction for change</i>	74
<i>Capacity building</i>	75
<i>The alignment of systems</i>	78
<i>Resistance to change</i>	79
<i>Changing pedagogical practice</i>	80
<i>Community involvement</i>	84
<i>National standards</i>	85
HOW CONTEXTUAL CONDITIONS HAVE IMPACTED ON CURRICULUM IMPLEMENTATION AND CHANGE	87
<i>Being the centre of the community</i>	87
<i>Impact of the small staff team</i>	88
<i>Impact of the principal's role</i>	89
<i>Impact of the teacher's role</i>	91
<i>Impact of principal and staff turnover</i>	92
<i>Impact of the small school budget</i>	93
CURRICULUM IMPLEMENTATION SUPPORT	95
<i>School cluster groups</i>	95
<i>Informal school support</i>	96
<i>Ministry of Education principal support days</i>	97
<i>Leadership and management advisors</i>	97
<i>The Education Review Office</i>	98
5. DISCUSSION	100
CURRICULUM PERCEPTIONS	100
RURAL SCHOOL CONTEXTS	103
<i>Contextual conditions of small rural schools</i>	103
<i>The small rural principal's role</i>	105
<i>The small rural teacher's role</i>	106
CURRICULUM IMPLEMENTATION AND CHANGE	107
<i>The need, direction and scale of change</i>	107
<i>Collaboration and partnership</i>	109

<i>Developing and utilising reflective inquiry</i>	111
<i>Professional community</i>	113
<i>Teacher and organisational learning</i>	114
<i>Putting learning in context</i>	115
<i>Leadership - A direct and indirect connection to NZC implementation</i>	116
<i>Curriculum sustainability</i>	119
<i>Support and guidance</i>	122
6. CONCLUSION	125
<i>A new curriculum philosophy</i>	125
<i>School and community relationships</i>	126
<i>Professional communities</i>	126
<i>Small school leadership</i>	127
<i>Staff turnover and sustainability</i>	129
<i>Limitations of this study and further research</i>	130
REFERENCES	132
APPENDICES	146
<i>Appendix 1: Interview questions for principals, teachers and advisors</i>	146
<i>Appendix 2: Analysis codes generated from the interviews with principals, teachers and advisors</i> ...	149
<i>Appendix 3: Participant information sheets and consent forms</i>	157

Abstract

This study investigated the implementation of New Zealand's revised National Curriculum (NZC) in small rural schools to determine how the specific contextual factors of these schools impacted on curriculum design, implementation and change. This curriculum represents a new educational philosophy for New Zealand schools and one that, for many schools, requires a fundamental change in current school practices and beliefs. Qualitative semi-structured interviews were conducted with principals and teachers of seven small rural schools and with leadership and management advisors. These were designed to understand participant's perceptions of the NZC, the contextual conditions of their schools, the processes utilised for curriculum design, implementation and change, the support available, and how contextual factors impacted on curriculum. The findings revealed that the contextual conditions of these small rural schools impacted on NZC implementation in many ways, creating both opportunities and challenges. Close staff and community relationships aided successful collaboration in collective curriculum design and implementation, small staff teams worked together as effective professional communities, these communities were focused on developing capacity for shared reflection and inquiry to improve learning, schools improved practice through shared professional learning, and small rural principals exerted a significant impact on learning at every level of the school system. However, small staff teams were considered to limit exposure to new ideas and staff turnover was considered a considerable barrier to sustaining curriculum change. These findings suggest that small rural teachers, principals and communities are united in a collaborative commitment to providing better learning opportunities for their students.

1. Introduction

In late 2007, the revised New Zealand Curriculum (NZC) was distributed to all schools in New Zealand. Schools were given until 2010 for its full implementation (Ministry of Education, 2007a). For schools to achieve the Ministry of Education's (Ministry) vision for the NZC to develop "young people who will be confident, connected, actively involved, lifelong learners" (Ministry, 2007a, p.8) requires them, the Ministry (2007b) advises, to focus on a number of key emphases. These are understanding and meeting the specific needs of students, developing students' holistic (academic, social, personal and learning) competencies, investigating and integrating changing knowledge of effective teaching and learning, inquiring and reflecting on current personal and curriculum practices and how they may be improved, developing a school curriculum appropriate to the local context while supporting the general intent of the NZC, and involving all stakeholders (teachers, leaders, parents, students and the wider community) in school curriculum design.

This curriculum represents a significant shift in curriculum policy from the Ministry. It encompasses a much broader range of requirements than the previous national curriculum and represents a change in education philosophy for New Zealand (Hammonds, 2008; O'Neill, Clark & Openshaw, 2004). As such it creates a number of new demands for educators (Flockton, 2008), demands that Dewey (2008) suggests may require significant change at every level of the school system. Change on this scale, Fullan (2003) believes, requires simultaneous, co-ordinated transformation of multiple aspects including practice, thinking, systems, behaviour and beliefs throughout the school. Achieving these demands will require considerable leadership capability from school principals (Dewey, 2008). Some of these capabilities, as outlined by the Ministry (2007b), include engaging and working collaboratively with staff, students and the wider community; clarifying and building essential knowledge of students' needs and how they may best be met; comprehensive understanding about what constitutes essential, desirable, and meaningful learning and effective pedagogy; developing staff ability to critically reflect, challenge and change current practice; and implementing effective

change processes for evaluating, modifying and developing curriculum programmes to best meet students' needs.

Although achieving the curriculum emphases may require a broad range of capabilities, NZC implementation may not be a problem for all school leaders. As Flockton (2008) notes, many schools are already well down the path for successful curriculum development. Where I do believe these demands may be particularly challenging, however, is in small, rural primary schools and it is the recognition of this concern that leads to this study. Such schools are common in New Zealand; almost 40% of all primary schools have fewer than 100 pupils, and of these, more than 90% are in rural areas (Ministry, 2009a).

There are numerous factors that have an influence on any school and the leadership of it (Mintzberg, 1994). These include both external environmental factors such as economics, culture, educational policy, social factors and geography, and internal school factors such as school culture, role conditions, capacity and school stakeholders (Davies & Ellison, 2003; Mintzberg, 1994). Context, Southworth (2004) believes, is the unique condition that the interrelation of these factors creates. An increasing body of literature suggests that there are a number of common factors for small rural school contexts, and that these create a number of unique contextual challenges. These challenges may impact on successful curriculum implementation in ways not experienced in other contexts. For example, many small school leaders are already coping with significant challenges in their dual-role of both teacher and principal and are struggling to manage the workload (Barley & Beesley, 2007; Livingstone, 1999) and therefore extensive curriculum change may require focus that these principals are just not able to give. With small school principals generally being less experienced (Gilbert, Skinner & Dempster, 2008), they may not yet have the range of leadership skills to successfully manage change of this complexity (Hopkins, 2007) and their location may limit their opportunities for professional learning opportunities and support (Clarke & Stevens, 2006; Murdoch & Schiller, 2002). The scale of curriculum change may also be a bigger challenge in small schools due to the smaller number of people to share the workload and a more limited pool of ideas (Wilson & McPake, 2000). It requires staff to have a broader range of deep curriculum knowledge than in urban schools and there is often little opportunity to discuss and develop ideas

with other teachers at the same curriculum level (Starr & White, 2008). If individuals are resistant to change, the negative impact on the overall change process is also likely to be greater. Southworth (2004) suggests one ineffective or reluctant staff member is likely to have significant impact in a small school. Compounding this, Barter (2008) found that these schools often found it hard to attract and retain quality teachers.

This combination of the demands of a new curriculum philosophy, the need for considerable leadership capability and unique contextual challenges may therefore make the successful implementation of the revised NZC a considerable challenge for many small rural school principals. It is this challenge that provides the basis for this study through the investigation of the impacts that small rural school contextual factors have on the implementation of the NZC, and the justifications for this research are considered in the rationale below.

A rationale for this study

I believe that this study provides a much better understanding of the extent to which small, rural schools and their leaders are able to meet the demands associated with implementing the NZC. This improved understanding is significant for a number of reasons.

Firstly, the findings of this study provide a rich and broad knowledge of how small rural schools in New Zealand have implemented the NZC. Fullan (2001) suggests that unless change is relevant and appropriate to its context it is unlikely to lead to sustained improvement. This study may therefore allow practices and strategies for curriculum implementation that are particularly relevant to the small school context to be identified and used as examples to aid implementation in similar schools.

Secondly, this study explores the challenges that are faced by principals and teachers in these schools. These results may be used to target and tailor professional support and development where it is most needed, both in participant schools and to other schools in similar contexts. With small school principalship often taken up by those new to principalship, leadership, or even to teaching (Barter, 2008; Clarke & Stevens, 2006), this

improved support could, in particular, provide vital support and development to these less experienced principals.

Thirdly, although our knowledge of small rural school contexts are improving, Southworth (2004) suggests research has tended to concentrate on contextual conditions rather than examine the way different combinations of contextual factors combine to create specific leadership challenges and opportunities. This study may overcome this limitation in the area of curriculum by providing greater understanding of the influence that different small, rural school contextual factors may have on NZC implementation.

Fourthly, the NZC represents a national curriculum policy that places considerable control of curriculum design and implementation in the hands of schools themselves (Ministry, 2007b). Although there is already a considerable body of literature that has examined the previous New Zealand Curriculum Framework and the implementation of national curriculum policies in other countries, the philosophy behind these curriculum policies varies considerably from that of the NZC. This study therefore provides insight into how the NZC differs from its predecessor and those in other countries and what these differences mean for the current education of New Zealand students.

Finally, much of the literature in the relevant fields for this study, such as leading change, curriculum design and curriculum leadership is generic in nature and aimed towards larger urban, and commonly American, schools (Begley, 2008), contextual conditions that may require considerably different processes for leading change than small rural schools in New Zealand. In New Zealand, almost half of all schools are situated in provincial or rural areas and forty percent have fewer than 100 pupils (Ministry, 2008). This is a considerable proportion of schools that we know little about regarding how they manage complex change processes (Southworth, 2002). I believe we owe it to the 40,000 children currently learning in such environments to ensure they have the best possible educational opportunities through more clearly understanding how the implementation of the revised curriculum may lead to improved learning in small, rural schools.

Research aims and questions

The research aims and questions are separated into a primary research aim and a number of secondary aims and these are outlined below.

To determine how the contextual factors of small rural schools in New Zealand have impacted upon the implementation of the New Zealand Curriculum (NZC).

The primary aim of this study is to determine how the contextual factors of small rural schools in New Zealand have impacted upon the implementation of the NZC. This will be achieved by examining how curriculum implementation and change has been led, shaped, supported or challenged as a result of the local contextual factors that affect small, rural schools, seeking to answer the research question – *How have small, rural school contextual factors impacted on the implementation of the NZC?*

Answering this question requires understanding a number of interconnected themes, including curriculum perceptions, rural school contextual factors, curriculum implementation and change, and the support available to schools. These themes will be investigated through four secondary aims as detailed below.

To determine participant's perceptions of the NZC

The revised NZC represents a considerable shift in educational policy and philosophy. However, official policy prescription and perceptions at the school level may be two quite different things. It seeks to answer the following research questions - *What do participants perceive to be the key features of the NZC? What do they believe it offers and demands?*

To identify and understand the processes used for curriculum implementation and change

This aim seeks to identify how schools have led curriculum implementation, to determine factors such as how the process has been led, what change strategies have been utilised and aspects of curriculum implementation that have presented particular successes, opportunities and challenges. It answers the questions - *How have schools managed the process of implementing the NZC? What have been the successes and challenges?*

To understand the contextual factors that affect New Zealand's small rural schools

Reference has already been made to research into the contextual factors that impact upon small rural schools. There is a need, however, to have a clear understanding of the contextual factors that are currently affecting the participants and schools in this study. This aim answers the question - *What contextual factors do participants believe impact on small, rural schools and their staff?*

To identify the support available to schools for NZC implementation

Successful curriculum implementation may require considerable support to achieve due to the scale of change that may be required as a result of the change in curriculum philosophy for New Zealand. This final aim seeks to answer the questions – *What support is available to small, rural schools? What is its effectiveness?*

Thesis organisation

This thesis is divided into six chapters and each is outlined below.

Chapter one, the Introduction, introduces the problem being investigated, the implementation of the revised New Zealand Curriculum in small, rural schools, and explains why curriculum implementation may be a particular problem for these schools. It provides a rationale to justify this research then outlines the primary and secondary research aims and questions.

Chapter two, the Literature Review, examines international and New Zealand research and theoretical literature in three areas, curriculum design, small rural schools and curriculum implementation and change. These themes provide a background both for examining current understandings of this research problem and for evaluating the findings of this study.

Chapter three, the Methodology, outlines and justifies the methodological approach utilised for this research, qualitative interviews. It introduces the three groups of participants, small rural school principals and teachers, and educational leadership advisors, and how and why they were selected. It also describes how the findings were analysed and what the ethical considerations were.

Chapter four, the Findings, provides an overview of the main themes that emerged from the interviews. It focuses on the views of principals but highlights where teachers and advisors offered views that supported or differed from the principal view. It is organised according to the different research questions.

Chapter five, the Discussion, considers the findings against the research presented in the literature review and identifies key themes, commonalities and differences. Although considering all findings, it gives particular emphasis to the primary research question, *how have small, rural school contextual factors impacted on the implementation of the NZC?*

Chapter six, Conclusion, offers a thesis for the primary research question and areas of particular significance for the secondary research questions. It considers the implications of these findings and outlines limitations of the study and recommendations for further investigation.

2. Literature review

This literature reviews explores three themes that are relevant to this research problem of the impact of small rural school contextual factors on the implementation of the revised New Zealand Curriculum (NZC). These are curriculum design, curriculum implementation and change, and the small rural school context. Curriculum design presents an overview of the history of New Zealand's National Curriculum. It considers different curriculum design types and how the past and current New Zealand Curriculum relates with these. It then outlines the emphases of the NZC. Curriculum implementation presents a detailed review of literature focused on change factors that may have particular relevance for NZC implementation. These are the scale of change, sensitivity to context, a need and direction for change, a focus on learning, developing capacity, reflective inquiry and sustainability. It then considers curriculum leadership before comparing an early study of NZC implementation with the more generic change and change leadership literature. The small rural school context explores the contextual factors reported as having an impact on small schools and their leadership. It gives particular emphasis on small rural school leadership, teaching and learning and the community.

Curriculum design

This section presents a comprehensive review of literature related to curriculum and curriculum design as related to this current study.

Curriculum defined

The general purpose of curriculum, McGee (1997) suggests, is making decisions about what is the most worthwhile knowledge for students to learn, why they should learn it, and how they should learn it. Within this broad scope there is considerable variation in the definition of what actually constitutes curriculum. Bradley (2004) offers a view that perhaps represents the common everyday understanding of curriculum, considering it the plans and activities created for guiding learning in schools. Whitson (2006) however, considers such a perception as deficient of its most essential features. What curriculum

should encompass he suggests is the recognition that such artefacts serve merely to provide direction, scope and sequence of what students are to learn. Curriculum should be considered in a broader, more substantive way as the course of formative experiences through which student development takes place, both as individuals and as part of wider institutions, cultures and societies. As O'Neill (2005a) elaborates, curriculum development is the area where politics, state policy, accountability, assessment, teachers work, theories of learning, knowledge and pedagogy, school and classroom climate, local community, wider culture and the contextual factors shaping students' learning and their lives all converge.

New Zealand's National Curriculum history

In 1989, sweeping changes were applied to the New Zealand education system (O'Neill et al., 2004). State schools, as in numerous other Western countries, became autonomous, self-managing units, overseen by a slimmed down Ministry of Education (Ministry) (O'Neill, 2005b). This self management, O'Neill (2005b) explains, was promoted as providing a partnership between the Crown, individual schools and their local communities to best meet local needs. However, while the state divested much of the responsibility and accountability for school management to schools themselves, it simultaneously adopted a stronger policy making, evaluation and monitoring role (O'Neill et al., 2004; Philips, 2000). Even considering this increased policy making role, Timperley, Wilson, Barrar and Fung (2007) suggest that New Zealand's approach to self-management was one of the most far-reaching in terms of the control given to schools.

One of the key policies implemented by the New Zealand government following decentralisation was the introduction of the New Zealand Curriculum Framework (NZCF) in 1993 (Philips, 2000). Its primary purposes were to provide guidance to schools in planning programmes for all students, to ensure even curriculum coverage and to improve achievement levels in essential curriculum subjects (Ministry, 1993). Between 1992 and 1999 draft then mandated National Curriculum Statements for each subject were issued to every New Zealand school for implementation. This adoption of a national curriculum, McGee (1997) explains, was one of the most comprehensive revisions in New Zealand's state education history, with the entire primary and secondary curriculum

reshaped and realigned, and as McGee (1997) highlights, the scale of its impact on primary schools in particular was enormous; “primary school teachers are faced with the daunting prospect of having to revise their teaching approach to the teaching of every subject in just a few years” (p.76). Widespread concern across the schools sector about this pace and scale of change (Harold, Hawksworth, Mansell & Thrupp, 1999) led to a pause in the release of further Curriculum Statements in 1996 and the introduction of a two year transition period between publication and application (Ministry, 2009b).

Three years after the implementation of all learning areas, the New Zealand Curriculum Stocktake Report (Ministry, 2003) was released. Based upon international curriculum research, international and national assessment data, international curriculum researchers, school sampling of 4000 teachers, stakeholder reference groups and learning area reference groups (Ministry, 2003), it made a number of recommendations aimed, the Ministry (2003) outlined, to improve the national curriculum to better support teachers and schools to help achieve national curriculum policy. These included the review and refinement of learning areas, better integration of essential skills and values, strengthening school ownership, a focus on supporting quality teaching and learning, and making more explicit links between outcomes, pedagogy and assessment. As a result, between 2004 and 2007, a number of academic and professional bodies and groups worked on the development of the revised New Zealand Curriculum (NZC) (Ministry, 2009b). Most notably, this process also involved consultation on a draft curriculum, through a Ministry funded release day, with all schools and teachers within New Zealand (Ministry, 2007b). The end result was the release in September 2007 of New Zealand’s revised National Curriculum, with schools given until 2010 to implement it.

National curriculum design

A number of types of curriculum design are evident in educational literature (Bradley, 2004; Glatthorn, 2000; Henderson & Gornik, 2007). However, for those countries that have adopted a national curriculum, the only paradigm of widespread adoption is that of a standardised management paradigm (Henderson & Gornik, 2007), referred to by Bradley (2004) as the curriculum of organisational control.

Standardised management paradigm

The standardised management paradigm is based on the idea of a 'right' curriculum, one that meets the needs of all students. By identifying a range of essential skills, knowledge and subjects that all students need to know, by directing instruction to achieving these educational outcomes, by carefully assessing progress through pre-determined and standardised tests, and assessing instructional effectiveness through management systems of accountability (Bradley, 2000; Henderson & Hawthorne, 2000), logic suggests that students will progress in their learning. Social behaviours too, may similarly be moulded through a model of authority based discipline; students (and teachers and leaders for that matter) learn to behave according to sanctions and rewards (Hargreaves, 1994; Henderson & Hawthorne, 2000). In essence it focuses on the 'what' questions of curriculum design - what should be learned, what should be taught and what should be assessed (Preedy, 2002), thereby, the theory suggests, eliminating teacher and school weaknesses (McGee, 1997). In acquiring this 'right' basic knowledge and skills it is considered a successful and efficient model (Henderson & Gornik, 2007).

The logic of the standardised paradigm model, O'Neill et al. (2004) suggest, is taken from the world of manufacturing where the ultimate aim is to consistently produce products of a pre-defined type and quality. In the educational world, however, it appears less appropriate and creates a number of problems. Firstly, its one size fits all logic lacks inflexibility to meet specific needs in specific contexts. As Henderson and Gornik (2007) pointedly describe, "*particular* students in a *particular* classroom in a *particular* school year may benefit from *particular* practices aligned to *particular* standardised tests, but this does not hold for *all* students at *all* times and for *all* educational goals" (p.9). Secondly, by focusing on and assessing particular skills or knowledge, Glatthorn (2000) suggests learning quickly becomes valued on achieving minimum standards rather than what is achievable. This narrow focus also fails to recognise or value deeper and more important understandings (Henderson & Gornik, 2007). Thirdly, in a curriculum based on standardisation and accountability, teachers serve to most efficiently impart this pre-determined knowledge. It fails to consider that those who work closely with students in particular contexts may in fact be the ones who are best able to shape and direct learning opportunities to best meet learning needs (Henderson & Gornik, 2007), or the negative

impact that the pressures of such a system have on teachers, school leaders and, in fact, on students (Glatthorn, 2000).

The original New Zealand Curriculum Framework (NZCF) implemented between 1993 and 1999 represented such a rational orientation to curriculum design, moving away, McGee (1997) believes, from the previous reasonably open-minded, school-led syllabuses in use since the 1950s to a more prescriptive, structured design. Its alignment to a standardised management approach was strongly emphasised by O'Neill (2005a), whose overall consideration was one of the NZCF as an assumed object provided by the state and delivered to passive students by the teacher through the school. The NZCF imparted a standardised framework of eight separate curriculum areas, eight levels within each, and specific achievement objectives for each level. Each curriculum area, contained in its own considerable volume, also set out examples for teaching, learning and assessment. This McGee (1997) believes, resulted in a tick-box style of teaching with a focus on achieving levels and coverage rather than on what students needed to learn. This view is supported by O'Neill (2005a), who suggests that this framework divides and segments knowledge up into artificial bite-sized pieces, accommodating and emphasising technical knowledge, information, conventions, rules, skills, and procedures. Irwin (1999) offers considerable criticism of this enforcement of a standard structure, suggesting it was added only for bureaucratic ease, ignoring the very essence of the foundations, nature and structure of the learning areas. It also, Irwin (1999) adds, fails to allow for the individual and idiosyncratic ways that knowledge develops.

With consideration for the impact the NZCF had on student learning, McGee (1997) believes its introduction did not offer improved educational opportunities or outcomes for all students (McGee, 1997). Instead, Irwin (1999) suggests it served to maintain the status quo, reflecting the educational beliefs of the dominant white culture and failing those that didn't fit into that mould. As Karen Sewell, 2008 Secretary for Education recognised, despite up to fifteen years of this curriculum model being applied in New Zealand schools, there were still a "disproportionately large number of Maori and Pasifika students who are not achieving their potential within the current education system" (Ministry, 2008, p. 4). What it also failed to do, McGee (1997) believes, was to get support from parents, students and teachers, those key stakeholders who greatly

influenced the potential success of curriculum change. Young (1998) talks of the difference between the curriculum of fact being that prescribed in the documents and the curriculum of practice being the interpretations that are evident in the classroom. For New Zealand, McGee (1997) believes there was a considerable disparity between fact and practice. The end result in many cases, Harold et al. (1999) add, was a veneer of compliance, with documentation and policies masking the fact that there was little change in teachers' existing beliefs or practices.

Discussion thus far has recognised the alignment of the NZCF to a standardised management approach to curriculum design and has questioned its effectiveness in meeting the educational needs of all New Zealand students. Focus now turns to the revised New Zealand Curriculum (NZC) to consider how its emphases differ.

The revised New Zealand Curriculum's emphases for curriculum

The Ministry's resource for principals and curriculum leaders, *From the New Zealand Curriculum to School Curriculum* (Ministry, 2007b), provides a number of key emphases of the NZC. These provide a clearer understanding of the thinking, beliefs and philosophies behind the revised NZC and each is outlined below.

Emphasis one: "Young people who will be confident, connected, actively involved, lifelong learners" (Ministry, 2007a, p.8)

As the vision for the revised NZC, this statement provides a starting point for what the New Zealand government currently deems important in education and serves as the guide for the development of values, key competencies and learning areas to help achieve it (Ministry, 2007b). These four virtues emphasise the importance of holistic learning for students, to develop not just skills required for students to succeed educationally, but the skills deemed important for making a positive contribution to the social, cultural, economic and environmental well-being of New Zealand society (Ministry, 2007a).

Emphasis two: “The focus of the New Zealand Curriculum is on students and their success” (Ministry, 2007b, p.5)

The revised NZC emphasises four key facets in focusing on students, as summarised by Ministry (2007b); “professional leaders at every level – from principals to classroom teachers – need to take time to clarify and build essential understandings about students needs and how these needs can best be met” (p.4). It places the responsibility for curriculum leadership both upon individual staff and on staff as a collective, highlights the necessity of gaining deep understanding of the needs of all students within a school, promotes exploring teaching strategies that may be most effective to achieving success, and emphasises the importance of developing a vision to guide this drive for success, and one that is shared by the different groups within the school community.

Emphasis three: “The values and key competencies have moved to share centre stage with the learning areas” (Ministry, 2007b, p.6)

The revised NZC still emphasises the importance of the eight learning areas, or curriculum subjects, but it now also articulates the need to actively teach broader, more holistic life skills – the key competencies and values – to develop the skills and beliefs, the Ministry (2007a) states, to; “live, learn, work and contribute as active members of their communities” (p.12).

Emphasis four: “The New Zealand Curriculum recognises that understandings about knowledge and about how knowledge is formed and acquired, are changing” (Ministry, 2007b, p.6)

There is considerable emphasis throughout the document that, while maintaining and building upon current effective practices, schools also need to develop curriculum that take into account social change, new understandings into effective teaching and learning, and the future requirements of today’s learners (Ministry, 2007a; Ministry, 2007b). These require schools to consider how student learning can be maximised both in terms of changes in learning areas and teaching and learning strategies. A number of pedagogical practices considered most effective in achieving this are highlighted, including teaching as inquiry, encouraging reflective thought and action, and making connections to prior learning and experience (Ministry, 2007a).

Emphasis five: “The New Zealand Curriculum emphasises the importance of effective pedagogy and inquiry into teaching and learning practice” (Ministry, 2007b, p.6)

Particular emphasis is given to an inquiry model of teaching as a basis for curriculum design to best meet students’ needs, through enquiring into the specific needs of individuals and groups of students then, using evidence from research linked to student outcomes and past practice, designing and implementing effective teaching and learning opportunities (Ministry, 2007a). This process is recognised as particularly important for those students for whom current practice is not having the desired impact.

Emphasis six: “As well as teachers, students, families, whānau, and the wider community must be involved in the process of designing curriculum” (Ministry, 2007b, p.7)

This emphasis is on ensuring that curriculum design is not restricted to the views and ideas of school leaders or teachers, but is a responsibility to be shared amongst all those with an interest in the education of students. Schools are charged with not only reaching out and listening to the ideas and concerns of different groups, but to value and reflect these in curriculum design.

Emphasis seven: “The purpose of The New Zealand Curriculum is to set the direction for student learning in our schools and to provide guidance for schools as they give shape to its intent by the actions they take within their particular contexts.” (Ministry, 2007b, p.5)

The revised NZC continues to set the general direction for learning intent and schools are required to align with its overriding philosophies and directions for education (Ministry, 2007b). However, the revised NZC offers a considerable degree of flexibility for schools to develop their school curriculum to best meet the needs of students in their particular context.

These emphases clearly reflect a different focus for curriculum design from that of the original NZCF and, as expanded upon below, closely align with more student-centred perspectives of curriculum design (Glatthorn, 2000; Henderson & Gornik, 2007; Preedy, 2002).

Student-centred perspectives of curriculum design

Student-centred curriculum design is based upon an overriding view that curriculum should be guided by a more holistic and student-focused approach to meeting pupils' current and future needs to learning and life (Preedy, 2002). There appears to be considerable congruence between authors regarding the emphases of what needs to be encapsulated in curriculum design to achieve this (Glatthorn, 2000; Henderson & Gornik, 2007; O'Neill, 2005a; Preedy, 2002). It represents a curriculum philosophy, Preedy (2002) suggests, that moves beyond the *what* of curriculum to the *who*, the *why* and the *where* before the *what*.

To achieve this, Preedy (2002) suggests five main concerns need to be addressed; that students are active participants, developing their own understandings and building on their own previous knowledge; that broader life and learning skills need to be developed as well as traditional curriculum subjects; that students' specific learning needs, attitudes and motivations are met; that social and interpersonal values and capabilities are fostered, and; that learning is emphasised as a holistic, ongoing, scaffolding and lifelong activity. Glatthorn (2000), while supporting these needs, also raises the important considerations of ensuring the mastery of essential skills and knowledge as the foundation stones for other learning, and separating learning into two strands, specific knowledge and skills and those that require nurturing at every suitable occasion. Henderson and Gornik (2007) meanwhile, give particular emphasis to the importance of developing the both high educational standards and the democratic values of society, realising the "best" and the "good" in each student. All three authors, it is noted, continue to recognise the importance of meeting particular standards in the learning of essential skills and knowledge. As Henderson and Gornik (2007) explain, the aim of such education is not to focus entirely on social learning at the expense of academic learning. What each advocates is for a balanced, holistic education that integrates, using Henderson and Gornik's (2007) terminology, subject, self and social learning.

Comparing the NZC's emphases with theories of student-centred perspectives on curriculum design reveals considerable congruence. The first three emphases advocating the NZC's current and future-focused vision, a student-centred orientation and an

emphasis on more holistic learning, form the basis of the student-centred perspectives widely advocated in theoretical literature (Glatthorn, 2000; Henderson & Gornik, 2007; Hipkins, 2006; O'Neill, 2005a; Preedy, 2002). Emphases four and five, exploring and inquiring into alternative pedagogical practices for improved teaching and learning, are central to Henderson and Gornik's (2007) approach to transformational curriculum design. Both Preedy (2002) and Henderson and Gornik (2007) emphasise the need for active participation of all stakeholders in curriculum design (emphasis six), while Jazzar and Algozzine (2007) in fact suggest this is the key to effective curriculum design. The final emphasis, school-based curriculum design according to student needs can be seen in Lingard, Hayes, Mills and Christie's (2003) and Dimmock and Walker's (2004) suggested approaches to curriculum design. In addition, these last four emphases which focus on the processes for curriculum design are also recognised as effective change practices, as will be explored in greater detail in the literature review section focused on curriculum change. This widespread recognition of the theoretical effectiveness of the NZC emphases provides strong support for suggesting the NZC is based on sound student-centred curriculum principles, particularly when compared to the original NZCF.

This literature, however, is limited by its basis on theory and small-scale curriculum implementation in overseas contexts, with no consideration of New Zealand school's perceptions or implementation of the revised NZC. This is due to research on revised NZC implementation being very limited to date. The only study located thus far was a Ministry funded exploratory study of curriculum implementation released in late 2009 based on curriculum implementation in twenty New Zealand primary, intermediate and secondary schools, fifteen of whom had been early-adopter (pilot) schools for the draft revised curriculum. Their findings suggested that schools generally believed that the NZC gave prominence to the challenges of preparing learners for the 21st century, the achievement of both traditional knowledge and other types of broader learning and knowledge, a perceived freedom for school-based curriculum design, a shift in focus from what to how and why of learning, and a student-centred focus. With regards to curriculum implementation emphases, they also reported successful participant schools focused on distributed curriculum decision making, inquiring into teaching and learning and engaging the community in the process. These findings suggest that schools in this study

recognised and supported the emphases of the NZC. It also suggests that these foci were similar to those supported in the theories of student-centred perspectives on curriculum design (Dimmock & Walker, 2004; Glatthorn, 2000; Henderson & Gornik, 2007; O'Neill, 2005a; Preedy, 2002). This study therefore provides early support for the suggestion that New Zealand has moved towards a national curriculum based on student-centred perspectives of curriculum design.

A second limitation of current literature in aiding understanding of student-centred curriculum design is that, although New Zealand may have moved towards such an approach, there appears to be little evidence to date for the successful adoption of such policy on a large scale through state mandated national curriculum or its effectiveness in achieving its perceived benefits on a large scale elsewhere (Henderson & Gornik, 2007; Lingard, Hayes, Mills & Christie, 2003). In one of few studies, Lingard et al. (2003) reported on 24 Australian schools implementing state-supported large scale reform aimed at better meeting local student needs. Their findings suggested that although there was state-level support for schools adopting approaches that moved beyond rational curriculum design towards student-centred philosophies, existing school and state systems, structures and policies were often misaligned with this view of curriculum which prevented teachers from adopting more effective pedagogical practices. As a result, Lingard et al. (2003) suggest that rethinking curriculum in student-centred ways requires a system-wide paradigm shift in thinking regarding the management and purpose of schools. As this limited research therefore implies, not only is New Zealand adopting a policy that is somewhat unique, but if implementation of the NZC is to be successful, then it needs to be supported as part of a much bigger change in national and local education systems, structures, policies and even beliefs. How schools may enact such change throughout the school system to better ensure NZC implementation achieves its potential benefits is considered next.

Curriculum implementation and change

The emphases of the NZC create a number of new demands for New Zealand educators (Flockton, 2008), demands that Dewey (2008) suggests may require significant change at every level of the school system focused on the primary task of improving student

learning. Change on this scale, Fullan (2003) believes, requires simultaneous, co-ordinated transformation of multiple aspects including practice, thinking, systems, behaviour and beliefs throughout the school. With change in education being an area of great interest for a number of decades (Fullan, 2001), there is an extensive knowledge base on the critical factors for successfully enacting educational change. The factors that may have particular relevance for NZC curriculum implementation are considered below.

The scale of change

As already introduced, Dewey (2008) suggests NZC implementation may require significant change at every level of the school system. This is supported by the Ministry's own description of anecdotal reports of NZC change. They suggest that, as schools "have begun to unpack the curriculum, principals and teachers have typically reached the conclusion that quite major change is required – and that it is going to take time" (Ministry, 2009c, p.3). The level and demands of change required, however, appear different for different schools (Cowie et al., 2009; Flockton, 2008). A critical determinant for successful change, Waters, Marzano and McNulty (2004) believe, is whether leaders properly understand the magnitude of change they are leading and can adjust their leadership practices accordingly. Change in education varies in both magnitude and complexity (Waters et al., 2004), presenting differing implications for leaders, staff, students and other stakeholders. Mayeski, Gaddy and Goodwin (2000) suggest there are essentially two different types of change, a view supported in idea if not in name by a number of others (Fullan, 2003; Waters et al., 2004; Heifitz & Linsky, 2002), incremental change and fundamental change.

Incremental change is a way of fine tuning and modifying existing practice to do particular tasks more smoothly, efficiently or successfully. Better ways of working develop or emerge as individuals or groups attempt to achieve desired outcomes (Waters et al., 2004). Such change, Mayeski et al. (2000) believe, is a normal and ongoing part of most schools. It is not a form, however, conducive to the large scale change that may be required (Fullan, 2003; Waters et al., 2004). Fundamental change is profoundly different. Instead of the modification of existing practices, it is an attempt to break from the past through alteration of the very essence of a school system (Mayeski et al., 2000),

challenging and changing core beliefs, values and school structures (Waters & Grubb, 2004). Such change, Fullan (2003) contends, requires simultaneous, co-ordinated transformation of multiple aspects including practice, thinking, systems, behaviour and beliefs throughout the school. Change at this level, however represents a considerable challenge as this vivid quote from Heifetz and Linsky (2002) explains; “adaptive change stimulates resistance because it challenges people’s habits, beliefs and values. It asks them to take a loss, experience uncertainty, and even express disloyalty to people and cultures. Because adaptive change forces people to question and perhaps redefine aspects of their identity, it also challenges their sense of competence” (p.34). NZC implementation therefore appears to require schools to both recognise the scale of change required for their particular context and to adopt the appropriate type of change accordingly, although, as Dewey (2008) and Lingard et al. (2003) report, with NZC implementation potentially requiring change in schools’ systems, structures, practices and beliefs to be successful, implementation is likely to require meeting the challenges of fundamental change. This view is supported by Fullan (2008) who suggests the need for teachers and leaders to develop new shared understandings of teaching and learning so that underlying beliefs change rather than merely adopt new behaviours or practices. NZC implementation may therefore require schools to meet the considerable challenges highlighted above by Heifetz and Linsky (2002).

Change is context-sensitive

Despite the New Zealand government adopting a policy of mandating curriculum change reforms extensively for the past twenty or more years, the outcomes of these ‘top-down’ reforms in general is a situation of little change in student outcomes (Hopkins, 2007; Thrupp, 2005). In addition, there is evidence of a range of negative impact on New Zealand schooling conditions such as narrowing of the curriculum, increased stress and turnover, a decrease in professional autonomy, growing conflict between teachers and principals and the erosion of professional communities (Harold et al., 1999; O’Neill, 2005a). Schools have a much clearer understanding of the needs of students and staff for their particular context (Henderson & Gornik, 2007; O’Neill, 2005a), and therefore are in the position of being able to lead change according to their specific needs (Bailey, 2000; Bell, 2002). However, Fullan (2003) believes that relying on schools to implement their

own large scale change from the bottom-up is equally unsuccessful, with only some schools making improvements while others either fail to move or move in ineffective ways. One potential answer to this bottom-up top-down change dilemma is to create a negotiated compromise between schools and policymakers (Busher, 2002; Fullan, 2003; Hopkins, 2007). Governments may set potential directions through providing the policy initiatives or 'grand experiments' to set schools on a path of reform (Fullan, 2003), while schools with their local knowledge of what their particular context needs, are empowered to implement *their* change processes to most effectively make a positive difference to *their* students. This appears to be the approach that the NZC emphasises, through setting the broad direction for student learning then allowing schools to shape its intent as appropriate to their contexts (Ministry, 2007b). This combination of national reform and local design may make NZC implementation more successful (Fullan, 2003). However, it may also require more trust being given to schools and may require ongoing support and consistent policy, conditions that are commonly reported elsewhere as being short-term at best (Datnow, 2005; Davies, 2007; Fullan, 2001).

A need and direction for change

Teachers have a pivotal role and are essential to the success of any plan for fundamental school change (Bailey, 2000; Lambert, 2003). Teachers need to recognise a genuine need for change and to have a shared responsibility for its inception and implementation in order to generate the desire to commit to it (Hargreaves, 1994; Heifitz & Linsky, 2002). The NZC, in recognising the importance of student, teacher and community ownership and involvement, both emphasises the need for schools to adopt a shared approach to curriculum design and for that design to reflect the local needs of its students (Ministry, 2007b). It also emphasises the need for schools to reinvestigate their understandings about knowledge and pedagogy. How schools may achieve these is considered below.

Recognising the need for change

As has already been established, for change to be effective it needs to consider the specific contextual conditions in which it is to be enacted. By understanding these, schools are able to identify local strengths and needs that may shape the scope and direction for NZC implementation and change. Fidler (2002) suggests leaders need to

employ comprehensive analysis to develop a deep understanding of what these factors are and the influence they may have. It is recognised that such analysis should include an understanding of the strengths and weaknesses of a school (Davies & Ellison, 2003), the school's underlying cultural values and beliefs (Fidler, 2002), the views of the key stakeholders (teachers, staff, students, parents and the wider community) (Foskett, 2003), and the opportunities and challenges of the local social, cultural and economic context (Davies & Ellison, 2003; Mintzberg, 1994). However, this appears an enormous challenge and Bell (2002) questions whether analysis on this scale is actually possible.

Considering new opportunities

One of the drawbacks with basing change exclusively on local needs and on alignment with curriculum policy appears to be that it may result in incremental improvements rather than a real change in educational philosophy (Fullan, 2001). Atkin (2008) believes the NZC provides an opportunity to do so much more than conform and align. Instead she considers it provides the opportunity to revisit and reframe the big ideas underpinning learning and the curriculum with the key questions 'what is powerful to learn' and 'what is powerful learning?' It is through shared investigation and discussion of these questions that a greater understanding of both what students should learn and how students learn may be attained. Atkin's (2008) suggested approach appears to offer considerable potential for schools to seize the opportunity to redesign school curriculum based centrally on local student needs and on current best evidence of the principles underlying student learning. Although supportive of this need, Hipkins (2007) found in an investigation of eight teachers rethinking the revised science curriculum (one of the eight NZC learning areas) and attempting to redefine some quite fundamental aspects of their practice, significant support was required through time for reflection and exploration, facilitator supported professional learning, and practical and emotional support for trying new ideas and working to change practice. Without this, Hipkins (2007) suggests, it is likely that curriculum revision may be squandered with change that is superficial at best. Reinvestigating big ideas therefore appears to require considerable support, focus and time if it is to lead to meaningful change.

A direction for change

The idea of a vision for guiding change has long been considered an essential facet of successful change (Kotter, 1995). Its purpose is to provide a direction for seeking to move a school from its current situation to a desired and improved future state (Davies, 2007). The Ministry (2007b) supports this need for establishing a vision as the foundation of school curriculum design. What is increasingly realised is that successful change is not the result of the leader developing a vision then persuading others to follow, but rather the co-construction of a shared vision through considering local student needs that all believe in (Dimmock & Walker, 2004). As Fullan (2008) states, “shared vision or ownership is more an outcome of a quality process than it is a precondition” (p.2). Middlewood (1998) believes it is only with such a vision that change can be successful as it helps ensure objectivity by considering all short-term decisions within the context of the broader vision. It also helps ensure focus and momentum by considering the impact that problems, issues and decisions may have on broader aims (Fidler, 2002). Lumby (2002) does however caution that co-construction and aiming to meet everyone’s needs can create a vision so broad it becomes largely meaningless. Bell (2004) also highlights a potential challenge related to externally directed change like the NZC in that there may be conflict between the Ministry’s (2007a) ‘official’ vision and that created locally by schools. School’s own priorities, Bell (2004) believes, may be devalued and narrowed through the need to align their vision to wider curriculum policy.

A plan for change

A vision for change provides a crucial first step for getting the process started. However, as Davies (2007) states, a vision that cannot be translated into action has no impact. Educational policy commonly adopts a rational approach to change planning which uses a formal, logical, analytical and sequential process (Mintzberg, 1994). This approach, however, is widely considered to be over-simplistic and unrealistic (Bell, 2004; Davies, 2004; Mintzberg, 1994), making assumptions about the nature and processes of education, that Bush and Coleman (2000) suggest, fail to relate to the reality of educational organisations. Schools are assumed to be places of order, simplicity and conformity where logical processes can be applied to achieve logical ends (Bell, 2004). As has already been discussed, for many schools, the NZC will require fundamental change

at many levels of the school system and the exploration of new ideas, practices and beliefs. Such complex change, Davies (2004) asserts, is unattainable through rational planning, instead requiring more ongoing, evolving and uncertain planning processes to be adopted (Bush & Coleman, 2000; Davies, 2004; Mintzberg, 1994). However, with New Zealand school leaders accustomed to more rational planning processes, they may be less confident leading complex change in less structured ways.

Change is about learning

Improving school-wide student outcomes, Dimmock and Walker (2004) believe, requires change at every level of the school system. MacBeath (2009) offers a compelling argument that such change need to focus on learning at all levels of the school system to most effectively bring about change that best meets the needs of students and this assertion appears to align closely with the emphases of NZC design and implementation (Ministry, 2007b). Enabling such a learning focused school, MacBeath (2009) suggests, requires a focus on learning at four levels, the student, the teacher, the organisation and the system.

Student learning

If, as Fullan (2001) suggests, change is about doing things differently to improve student outcomes, then a focus on the needs of students appears a logical starting point for change and is the basic premise of student-centred curriculum in general (Henderson & Gornik, 2007) and an emphasis of the NZC in particular (Ministry, 2007b). Understanding what students really know and need, however, represents a complex challenge. Despite schools collecting ever-increasing amounts of data on students' progress, Claxton (2002) suggests this typically represents just one aspect of student learning, their ability to complete subjective academic tests. Such assessment provides little understanding of children's physical, social and emotional needs, as well as their needs in learning areas outside the core of literacy and numeracy. Exacerbating this problem further, there is often a considerable dissonance between what teachers are trying to teach and what students actually learn (MacBeath, 2009). Through means such as mutual observation and shared discussion of pupils actual work, better insight may be gained (MacBeath, 2009). The most overlooked resource, perhaps, is the students themselves and their

descriptions and explanations of their own learning (Claxton, 2002). With the NZC's emphasis on more holistic learning for broader knowledge development (Ministry, 2007b), this complex problem represents a challenge that needs to be addressed for the NZC's intent to be realised. Such insights into classroom learning are also required to provide the basis for effective teacher learning (MacBeath, 2009).

Teacher learning

Underlying knowledge about aspects of teaching and learning is constantly changing. Keeping up to date with this knowledge and considering how it may be evaluated, adapted and implemented to better meet student needs is at the heart of both teacher learning (Busher, 2002) and the NZC (Ministry, 2007b). Fullan (2001) suggests it is important to consider updating knowledge through a process of developing deep meaning and understanding rather than just the adoption of alternative pedagogical practices or resources. MacBeath (2009) believes this requires teachers to focus on learning by building their professional knowledge through practices such as observation, inquiry, discussion with colleagues, reading theoretical texts, reflection on practice and keeping up to date with developments in the field, both in curriculum and in the art and science of teaching. Teachers, however, are rarely in the position to enact such learning opportunities to the pressures of their role and the constraints of the system in which they work (Lingard et al., 2003). The only way that teacher learning can be successful, Fullan (2001) suggests, is through developing appropriate school-wide infrastructures and processes that engage teacher in developing new understandings. In other words, organisational learning.

Organisational learning

Organisational learning is based on the idea that collective efforts of teachers and leaders will generate enhanced practices and a deeper understanding of how needs may be met. It focuses on the ways in which new ideas are brought into the school organisation, how they are considered and evaluated and the ways in which the knowledge generated from them may be used (Kruse & Louis, 2009). Fullan (2008) contends that such learning may be accomplished when the culture of the school supports the day-to-day learning of teachers engaged in improving what they do in the classroom and school. This collective

effort, strongly emphasised by Ministry (2007b), is considered essential for the development of school curriculum.

System learning

There is increasing recognition of the benefits that learning with and from other sources can offer (Lambert, 2003; Tschannen-Moran, Uline, Hoy & Mackley, 2000). Parents, communities, inter-school networks and outside agencies, MacBeath (2009) believes, may provide multiple perspectives of both problems and solutions. These may help question existing ideas about students and their learning and how their needs may best be met. The Ministry (2007b) strongly supports this emphasis on wider participation of families, whanau and wider school communities.

This discussion on learning at every level of the school system to improve student learning has highlighted some of its potential benefits and challenges. The discussions have also identified the close alignment with all of the emphases of the NZC (Ministry, 2007a; Ministry, 2007b). Enabling such learning however, may require considerable development of individual, collective and system-wide capacity (King & Newmann, 2001). This capacity building is considered next.

Developing the capacity for change

According to King and Newmann (2001), student achievement is most directly influenced by the quality of instruction (including the curriculum, instruction and assessment), which is in turn most directly influenced by a number of social, technical and structural resources, collectively considered as school capacity. Although there is considerable literature devoted to the idea of building school capacity building, King and Newmann's (2001) perspective and their research into elementary schools that demonstrated promising and diverse approaches to professional development for comprehensive reform upon which it is based (Newmann, King & Youngs, 2000) appears particularly relevant with regards to NZC implementation for its focus on the dimensions of capacity that they suggest may have the greatest contribution to improving the quality of instruction and student achievement. Although not an end in itself, capacity development may provide the means for school leaders to more effectively address goals focused on

student achievement (Kruse & Louis, 2009; Newmann et al., 2000). School capacity, King and Newmann (2001) suggest, consists of three dimensions, teachers' knowledge, skills and dispositions, professional community, and programme coherence. Each of these is considered in more detail below.

Developing teachers' knowledge, skills and dispositions

Newmann et al., (2000) believe the first area of capacity development is ensuring that teachers, leaders and other staff are professionally competent in instruction and assessment appropriate to the curriculum for their particular students, and that they hold high expectations for all students' learning. Timperley et al's (2007) evidence synthesis found that in all studies where student outcomes had shown substantive improvement, the common theme was a process of systematic development of teacher knowledge. Such learning conforms closely with the NZC's emphasis on the importance of effective pedagogy and inquiry into teaching and learning practice (Ministry, 2007b). Timperley et al. (2007) do note, however, that the greatest improvements in the quality of teaching are not made at the individual level, but rather through shared learning within professional communities.

Developing professional community

Numerous studies document the fact that professional communities are critical for the implementation of attempted large-scale reforms (Fullan, 2003). Professional communities provide the opportunities for the knowledge, skills and dispositions of individuals to be utilised in providing a basis for discussing, extracting, generating and building a much broader range of potential strategies that the whole school may benefit from (Fullan, 2003; King & Newmann, 2001). A number of features are recognised as key building blocks for such a professional community. Professional communities are based upon an overriding shared vision, and shared goals, norms and values that enable schools to become strongly connected to a collective responsibility for improving student learning throughout the school (King & Newmann, 2001; Kruse & Louis, 2009). Staff actively collaborate in real and meaningful ways to support the improvement of both individual and collective practice (James, Dunning, Connolly & Elliott, 2007; Lambert, 2003; Kruse & Louis, 2009). Reflective inquiry forms the basis of decisions, requiring staff

to recognise their own beliefs and values, to value the ideas and beliefs of others (both from within and outside of the school) and to use evidence to better inform decision-making (Cardno, 2003; James et al., 2007; Timperley et al., 2007). Differences, Earl and Timperley (2008) suggest, are viewed as having the potential to increase the quality of ideas or information that can be brought to improving practice. Evidence, meanwhile, enables a deeper understanding of a problem. Teachers and leaders frequently observe each other, generating useful evaluations of progress and shared references for further ideas (Fullan, 2008; Kruse & Louis, 2009). Robinson and Lai (2006) suggest that open and honest dialogue provides the means for describing, explaining and evaluating different ideas and beliefs, and for using this information to recommend agreed improvements. A high sense of trust prevails, creating conditions that support open expression and constructive discussion of ideas and beliefs, promoting honest reflection and dialogue and reducing defensive behaviours (Park, Henkin & Egley, 2005; Tschannen-Moran, 2001). Professional communities have the autonomy to design and implement strategies for change according to their participants' best professional judgement (Bailey, 2000; Lambert, 2003). The ability of a professional community to lead itself can also ensure that when key individuals leave, change can still be maintained (Lambert, 2003). Although each of these features offer the potential for increasing capacity, Kruse and Louis (2009) suggest that it is the combination of many of these features that allow professional communities to have a positive impact on student, teacher and organisational learning. As such, significant time and effort may be required for the development of such communities.

Developing programme and system coherence

King and Newmann's (2001) third area for capacity building, programme coherence, suggests that a school's instructional capacity is enhanced when its programmes for student and staff learning are coherent, focused on clear school goals and sustained over a period of time. Too often, the authors note, schools adopt a range of unconnected development innovations and pursue them for short periods of time, approaches they consider unlikely to improve instructional quality. Expanding on this theme, Southworth (2004) emphasises that systems and structures also need to be aligned to support goals. As Hopkins (2007) vividly explains, "the more the organisation of the school remains the

same the less likely will there be changes in classroom practice that directly and positively impact on student learning” (p.156). This requires staff and leaders to identify areas of conflict and then to evaluate, modify, develop and deploy organisational, curricular, staff and leadership structures and systems that directly support instructional goals (Southworth, 2004). Robinson, Lloyd and Rowe (2008) suggest such alignment has a direct and positive impact on students by ensuring change processes are well resourced and supported and focused directly on the most pertinent needs, leaving teachers to focus on improving teaching.

Wider capacity building

Lambert (2003) suggests that professional communities can be further enhanced by broad-based skilful participation of all those with an interest in improving student outcomes. This, she believes, includes the involvement of parents, students, the wider community and other organisations. Supporting this, Gurr, Drysdale and Mulford (2006), in a study of Australian leadership practices most likely to influence student outcomes, found that, in addition to King and Newmann’s (2001) three areas of capacity building, the development of wider community capacity served to generate further positive conditions for improving learning. Working with these groups, however, must be both meaningful and provide opportunities for learning if it is to be successful. True involvement, Lambert (2003) believes involves co-leading, participating, advocating and assuming collective responsibility for the learning of all children. Cardno (1998) offers the notion that collaboration can vary through five categories, information, consultation, discussion, involvement and participation. Lambert (2003) believes that the benefits of collaboration emerge in a spiralling way, that is the greater the participation the greater the potential opportunities. Using Cardno’s (1998) categories, this suggests it is through participation, taking a full part in plan formulation and programme implementation, that the benefits of wider capacity building may be realised. Cardno (1998) does, however, caution that too much collaboration can make decision making unwieldy and time consuming.

The discussions on capacity building above have highlighted the four levels of capacity building that may be required if curriculum change is to most effectively impact on

student outcomes and the benefits they offer. Utilising such capacity appears at the heart of the NZC's emphases for implementation (Ministry, 2007a; Ministry, 2007b). However the NZC appears to assume that teachers and leaders already have this capacity. Such an assumption, as Cowie et al. (2009) found, is quite unrealistic. Each individual feature of capacity at each level, let alone system wide capacity, may require considerable development, focus, effort and time for development (MacBeath, 2009), time that Timperley et al. (2007) suggest may be better focused upon change that directly impacts on student learning. Such specific focused change, however, aligns more closely with incremental change rather than the fundamental change that NZC implementation may require (Lingard et al., 2003). With schools facing a fixed time frame for NZC implementation, with differing contextual capacities for change between and within schools (Lambert, 2003), and with teachers already facing considerable workloads (Hopkins, 2007), whether schools are able to focus on developing capacity through teachers' knowledge, professional community, programme and system coherence, or wider capacity building appears an issue that may significantly impact on how school level curriculum is developed and implemented. It is also an issue that appears unclear from current literature.

Sustainability

It is relatively easy, Hargreaves and Fink (2006) suggest, to create surface level change in practices. This generally, however, results in short-term shallow change that neither changes the beliefs that underpin actions nor creates change that becomes embedded in the wider school culture (Argyris, 2002; Fullan, 2001). Although writing for business change, Kotter (1995) supports this idea, suggesting that "until new behaviours are rooted in social norms and shared values, they are subject to degradation as soon as the pressure for change is removed" (p.67). Achieving deep-level change with positive impacts that can be sustained and maintained for the long-term benefit of students is the ultimate goal (Hargreaves & Fink, 2006). This goal, Davies (2007) adds, needs to be considered from the very start of the change process. However, almost all literature agrees that it is something that is extremely difficult to do (Davies, 2007; Fullan, 2003; Hargreaves & Fink, 2006).

Hargreaves and Fink (2006), using the experiences of teachers in US and Canadian schools over a thirty year period, created an explanatory framework of seven principles of sustainable leadership. They suggest sustainable leadership is characterised by *depth* (of learning and real achievement); *length* (of impact over the long haul); *breadth* (of influence where leadership becomes a distributed responsibility); *justice* (in ensuring leadership actions actively benefit students locally and in other schools); *diversity* (of networks and cohesion); *conservation* (that builds on the past); and *resourcefulness* (that conserves and renews teachers' and leaders' energy) (Hargreaves & Fink, 2006; Hargreaves & Fink, 2007).

Many of the factors recognised so far for effective change for NZC implementation offer the potential for meeting these principles. Using this framework as an analysis tool, NZC implementation may achieve *depth* through a continual focus on improving local student outcomes and meeting student needs and building individual and collective capacity (Fullan, 2001; King & Newmann, 2001), *length* and *breadth* through building the skills and capacity for curriculum development throughout a school (Lambert, 2003; MacBeath, 2009), *justice* through developing capacity for improved and mutually-productive relationships with the school community, wider school network and other agencies (Kruse & Louis, 2009; Tschannen-Moran, 2001), *diversity* through valuing and promoting the contribution everyone in a school makes to improving student outcomes, *conservation* through recognising both current practices and alternative potential change opportunities (Atkin, 2008; Dimmock & Walker, 2004), and *resourcefulness* through valuing school-wide opinions on the need for change and developing the capacity to maintain momentum (King & Newmann, 2001; Lambert, 2003).

However, even if such factors become part of the culture of the school, that is they become the beliefs, norms and values of how the school works (Kruse & Louis, 2009), the school is not an organisation that remains in some static state. Multiple impactors, from both within and outside schools are constantly working to erode and alter the change process and reduce its chance of leading to sustained improvement (Fullan, 2001; Hargreaves & Fink, 2006). The key impactors that may impact on successful NZC implementation are considered below.

Lack of support

The time required for deep, sustained change to occur, Davies (2007) believes, is consistently and considerably underestimated. With Fullan (2001) suggesting bringing about institutional reforms such as NZC implementation can take five to ten years, lack of time, lack of money to support continued developments, lack of encouragement, lack of professional development, limited external support and changes of policy or priorities at the local or national level are all factors that may serve to take focus away from change efforts (Datnow, 2005; Davies, 2007; Fullan, 2001; Fullan, 2003; Hargreaves & Fink, 2007). Hargreaves and Fink (2006) suggest that unless change gets embedded into teachers' beliefs or the school's structure it will not be sustained, and without ongoing support embedding appears unlikely.

Lack of capacity

King and Newmann (2001) consider that school capacity is an essential pre-cursor to improving student outcomes. When schools don't have the capacity required for implementing complex change, the likelihood of success is diminished (Datnow, 2005). In a comparison of collaborative school restructuring efforts of a successful and a struggling school by Bascia (1996), considerable differences were found between the success of the schools in their reform efforts. One of the key reasons was found to be the difference between the two school's institutional capacity, with the successful school already having the capacity to envision and enact change. With some schools requiring considerable capacity building for NZC implementation (Cowie et al., 2009), Bascia's (1996) findings would suggest deep sustainable curriculum change is less likely. Of further concern, Malen and Rice (2004) found that certain accountability-based reform policies actually resulted in a reduction in school capacity and a subsequent failure to develop collegial networks, collaborative relationships and comprehensive coordinated approaches to school improvement that the school initiatives were designed to improve. With the more rational and standardised curriculum philosophy of the NZC's predecessor (Irwin, 1999; McGee, 1997; O'Neill, 2005a), there may be a considerable difference between school's current capacity and that required for successful NZC implementation.

Repetitive change syndrome

Previous negative experience of change, Datnow (2005) suggests, can greatly influence staff and leaders in their attitude to future change. Goodson, Moore and Hargreaves (2006) provide a damning criticism of the multiple change initiatives schools have been subjected to and its impact on teachers through the eyes of mature teachers. Their summary of their findings suggested “the effects of cumulative demographic and educational change and the resulting nostalgias have left teachers feeling resistant to mandated reform, insecure about their own professional capacity, disenchanted with their students, and pessimistic about their schools’ future” (p.42). Harold et al. (1999) reported on a number of negative impacts on schools as a result of previous New Zealand Curriculum Framework implementation. With the combined efforts of teachers and leaders being perceived as central to successful NZC implementation (Lambert, 2003; Ministry, 2007b) then this possible negativity brought about by previous curriculum implementation experience is of concern in terms of the chances of successful NZC implementation.

Staff turnover

Fullan (2001) suggests that staff turnover impacts on the change process both through the loss of personal capacity and knowledge when someone leaves and through the watering down of community capacity when someone arrives. Although it is essential, he adds, that new staff are supported in being brought up to speed both in terms of the change initiative and their personal capacity to contribute to it, he suggests very few programmes actually plan for this. Changes in principals, Fink and Brayman (2006) contend, create additional difficulties that threaten the sustainability of school improvement efforts and undermine the capacity of incoming principals to lead their schools. New principals not only inherit complex change processes in mid-flow rather than having the opportunity to work collaboratively with staff to develop them (Fink & Brayman, 2006), but often lack the knowledge to meet the considerable demands of contemporary student-centred leadership (Southworth, 2007). As a result, the chance of existing change initiatives leading to sustainable change appears doubtful. With NZC implementation occurring over a fixed time period, staff and principal turnover appears an issue of considerable concern.

These discussions have considered in detail the processes of change that most closely support the emphases of the New Zealand Curriculum. It has also identified many of the potential challenges that schools may face. What is apparent is that for many schools, curriculum implementation may require a process of fundamental change, the shared design of a school curriculum that best meets current and future student needs, learning and capacity building at every level of the school and wider community, reflection on and change of practices and beliefs, and a consideration for ensuring curriculum change can be sustained. Clearly then, NZC implementation will be a considerable challenge for all those involved. It is also a challenge that requires an approach to leadership that offers the potential to achieve these demands.

Leading curriculum change

New Zealand principals are responsible for the day-to-day management and leadership of everything that happens in schools (Ministry, 2008). However, as Waters and Grubb (2004) emphasise, principals assume a myriad of responsibilities in schools that are important in running a school but are not essential in improving student achievement, and research by Hogden and Wylie (2005) suggests that New Zealand principals spend considerably more time on management rather than leadership tasks and almost twice as long as leaders in most other countries. Leadership for NZC implementation requires leading a complex and comprehensive process of change (Dewey, 2008) focused on the improvement of educational opportunities and outcomes for students. The Ministry (2009c) is quite clear in what is required of leaders for successful NZC implementation, stating, “a principal's number one priority is to create an environment in which learning flourishes and all students achieve” (p.1), and has produced a supporting document *Kiwi Leadership for Principals* (KLP) (Ministry, 2008) to provide an overview of how this may be achieved. For principals to most effectively lead NZC implementation therefore requires them to not only manage the day to day tasks of school management but to lead the process of NZC implementation in ways that are most likely to have a positive impact. How this may be achieved is considered below.

The role of the principal in leading school change, Dempster (2009) suggests, has seen a considerable change over an extended period of time from leadership as an individual

action to leadership as a collective activity focused on improving educational outcomes. The learning-focused change for NZC implementation discussed previously supports this suggestion, with an instructional approach to leadership appearing most aligned to it (Robinson, Lloyd & Rowe, 2008). Its potential for making a difference, Robinson et al. (2008) believe, is significant, suggesting; “the closer educational leaders get to the core business of teaching and learning, the more likely they are to have a positive impact on students’ outcomes” (p.664). Current definitions of the role of the principal as instructional leader vary greatly (Dempster, 2009; DiPaola & Hoy, 2008; Ministry, 2008) although all clearly place the principal in the centre of the push for improved student outcomes. The definition that perhaps best aligns with both the practical and the aspirational aspects of leading NZC implementation with the principal in a supporting role of leading the creation of the capacity and conditions most conducive to a shared focus on successful learning and teaching comes from New Zealand’s own official leadership guide, *Kiwi Leadership for Principals* (Ministry, 2008) which suggests;

effective educational leadership builds the pedagogical, administrative and cultural conditions necessary for successful learning and teaching. Principals do not do this alone. They use their leadership and management skills in ways that motivate and develop the capabilities of others so the responsibility for strengthening and sustaining the work and direction of the school is shared.
(p.7)

As this definition indicates, the role of the principal in NZC implementation appears a primarily indirect one of leading and facilitating curriculum change and capacity building, a view supported by Cardno and Collett (2004). Although a principal’s actions may impact on student outcomes directly, Hallinger and Heck (1998) suggest that it is their indirect actions that are most likely to influence student outcomes. Cardno and Collett (2004), in fact, found that principals’ attempts to maintain a direct influence on students may actually lead to negative impacts.

There has been an increased research focus on the ways that principals can most effectively influence student outcomes. Robinson et al., (2008), in a considerable meta-analysis of 27 published studies on the relationship between leadership and student

outcomes, found that when principals focused on three key dimensions - establishing goals and expectations; planning, co-ordinating and evaluating teaching and the curriculum, and; promoting and participating in teacher learning and development – they had a moderate to large impact on student outcomes. Resourcing strategically also had a small impact. An earlier meta-analysis completed by Waters et al. (2004), which focused on school-level practices and their influences on student achievement, also supported the effectiveness of particular instructional leadership practices. It found that establishing a guaranteed and viable curriculum, setting challenging goals and providing effective feedback, supporting collegiality and professionalism and encouraging parent and community engagement were educational leadership practices that had a positive influence on student achievement. Although these results were based only upon studies from the USA, and a large number of them unpublished, it reveals a considerable congruence with Robinson's findings. A primary leadership focus on changing teaching and learning through strategies such as establishing shared goals, working with teachers to improve professional knowledge and curriculum planning, and developing collaborative relationships with teachers, parents and the community therefore appears to have the potential for improving the educational opportunities of students. As such it may offer an effective model for NZC implementation.

Despite its promises, however, whether principals are currently in the position to be able to enact such instructional leadership practices is questioned. Robinson (2006) suggests there are significant mismatches between the context in which principals currently work and the conditions that would enable them to be stronger instructional leaders. These include the already over-burdened role of principals (Robinson, 2006; Wiseman, 2005), the intensity of focus required to lead or oversee a successful programme of instructional improvement, the currently loose coupling between the classroom and the school as a whole (Robinson, 2006), and the need for significant and in-depth opportunities to extend and update both pedagogical (Stein & Nelson, 2003) and instructional leadership skills and knowledge (Robertson, 2005; Robinson, 2006). As MacBeath and Dempster (2009) describe, such problems are not only common but currently leading to significant frustration; "In every country to which our research has taken us, we find heads and principals experiencing the ambivalence of leadership: problems and opportunities,

momentum and direction, frustration and fulfilment. All are touched by the managerialist and performativity agendas, struggling to put authentic learning first” (p.2). As already described this may be particularly the case for New Zealand principals with their considerable administrative burden (Hogden & Wylie, 2005).

Change for revised New Zealand Curriculum implementation

This literature review on curriculum implementation and change has highlighted the considerable challenges that may face New Zealand schools in implementing the NZC and how leaders may be able to meet the challenges. With curriculum policy changing from a management to student-centred philosophy, there appears the need for quite fundamental change to be enacted. As Smith and Piele (2006) accurately capture, schools and their leaders are currently being asked to make a considerable move into the unknown; “the reality is that schools today are in the midst of fundamental change, moving from a comfortable century-old structure to something that is not yet well defined. Principals must not only ensure that things go smoothly each day, they must simultaneously develop new ways of doing things” (p.46). Moving from an era of prescription to one of professionalism, Hopkins (2007) believes, will require change throughout the school system.

There is little literature to date focused on how schools have led the complex change process for NZC implementation to compare it with the more generic change literature detailed above. Cowie et al. (2009) appear to provide the first comprehensive investigation of NZC implementation in New Zealand schools. In their case-study analysis of twenty New Zealand primary, intermediate and secondary schools, they identified eight key change themes that successful schools demonstrated in their implementation of the NZC. Briefly summarised, these were:

- The importance of getting started, and in ways appropriate to the school context
- Developing shared understandings of the curriculum
- Considering school leaders as lead learners and the key to change

- Accepting that the process of change is a complex, slow, iterative and ongoing process that requires deep professional learning and capacity building at multiple levels
- Considering pedagogical change as central to NZC implementation
- Engaging the community and other sources of support in meaningful ways
- Aligning structures to support the NZC
- Avoiding mixed messages from other initiatives

These findings show numerous similarities to the literature already explored for leading change and none represent a theme unique to NZC implementation. This suggests that the processes for successful NZC implementation and the processes for effective change are closely linked.

One important consideration that Cowie et al. (2009) stress is that although NZC curriculum implementation may be a complex and slow process, schools are not beginning from scratch. Successful schools in this study commonly began by linking ideas in the curriculum to existing effective practices and programmes. They also noted that recent professional learning in New Zealand schools has commonly been supported the NZC's emphases. Many schools were therefore, as Flockton (2008) believes, already well down the path of NZC implementation. However, Cowie et al. (2009) found that schools beginning curriculum implementation later often required the development of capacity at different levels and the addressing of other issues prior to focusing on the NZC, making their change and implementation processes more complex. This provides further support for the consideration of context as a critical factor in the implementation of the revised curriculum. It is literature focused on the context of small rural schools that is therefore considered next.

The small rural school context

There are numerous factors, Mintzberg (1994) suggests, that have an influence on any school and the leadership of it. These include both wider environment factors - economic, social, cultural, geographical, political, educational (Mintzberg, 1994) - as well as internal school factors such as culture, role conditions, individual and school capacity and

stakeholders (Davies & Ellison, 2003; Southworth, 2004). Southworth (2004) considers context to be the unique conditions that the relation and interrelation of these factors creates. Most significantly, and as Ministry (2008) expands upon, this context influences almost everything that happens in a school; “context has major implications for leadership and management arrangement, professional development, shaping the curriculum, developing learning environments, managing resources, and engaging with communities” (p.15). If context does have such an influential impact on schools, then it is important to gain a greater understanding of what these factors are and how they may affect the ability of school leaders to successfully lead the implementation of the revised NZC. This section considers the contextual factors that impact on small and rural schools as reported on research into small schools and small school leadership.

Small rural school leadership

There is a general assumption, Southworth (2004) notes, that the larger the school, the more there is to manage and the greater the levels of responsibility and complexity. However, there appear to be some considerable problems with this assertion, leading Dunning (1993) to suggest that school complexity is not in direct ratio to their size, and that small school leaders face both similar and different challenges to other school leaders. Two main challenges appear evident, the challenges of the small rural principal’s role and principal experience.

Challenges of the small rural school principal’s role

Since the introduction of self-management, New Zealand principals in all schools are required to manage the same administrative and accountability requirements (Livingstone, 1999; Wylie, 1997). However in larger schools, principals are often able to distribute many of these requirements within the leadership structure to maintain focus on educational leadership (Leithwood & Mascal, 2008). Barley and Beesley (2007) suggest that in small schools these tasks fall largely upon the principal, resulting in increased workload. In supporting this, Wylie (1997), in a broad study of New Zealand principals, found that although the workloads of all principals increased as a result of self-management, it was principals in small schools that were working the longest number of hours to meet them. Livingstone (1999) found that New Zealand teaching principals spent

the vast majority of release time on meeting administrative demands, leaving little time for leadership focused on improving student outcomes. As Livingstone (1999) clearly states, “professional leadership roles do not figure largely in this time allocation, and it could well be argued that they should do, but have been shouldered out of the way by more vociferous compliances” (p.25).

A second consistently reported challenge concerns the dual-role dilemma of small school principals. With principals serving two roles as teacher and school leader, there has always been a challenge for teaching principals between devoting sufficient time and energy to the leadership of the school as a whole and to the professional concerns of teaching a specific group of students (Dunning, 1993; Murdoch and Schiller, 2002). In recent years, it has however become a dilemma, Clarke and Stevens (2006) believe, due to the increasing scope of management and leadership responsibilities that face modern teaching principals. It has also led to a reduced ability to either achieve either role effectively (Clarke, 2002; Ewington et al, 2008; Waugh, 1999) or to a reduction in the quality of teaching (Starr & White, 2008) or school management (Wilson & McPake, 2000) as time is increasingly spent on other responsibilities. As one principal in a study by Ewington et al (2008) noted, “try as I might I cannot do both jobs to the best of one’s ability. It is impossible to be the best principal I can be and the best teacher I know I can be” (p.551). Such impacts are reported to result in increasing tensions, frustrations, workload and stress, and in decreasing professional satisfaction (Clark & Wildy, 2004; Livingstone, 1999; Wylie, 1997).

New Zealand small school principals also face additional role responsibilities not typically considered as part of the principal’s role (Livingstone, 1999; Murdoch & Schiller, 2002). Livingstone (1999) found these included computer maintenance, fundraising, school bus management, property maintenance, special needs support and swimming pool management. Murdoch and Schiller (2002) found that it is limited financial and personnel resources lead to this, a situation they suggest is made worse by principals’ desire to avoid additional burden being passed on to teaching staff.

The collective result of these role challenges appears to be that New Zealand’s small rural principals face considerable demands on their time, all of which result in increased

pressure on both their leadership and teaching roles. With already high demands for management tasks reported by Hogden and Wylie (2005) for all New Zealand schools, small rural principals may therefore have even less time to devote to leading NZC implementation as a result of their dual role, limited time for leadership, lack of other leaders to share workload and completion of other responsibilities.

Principal experience

Small school principal positions are commonly taken up by those new to principalship, leadership, or even to teaching (Barter, 2008; Brooking, Collins, Court & O'Neill, 2003; Gilbert et al., 2008). As such, they may be unprepared for the scope and challenges of the complex leadership required for NZC implementation (Robinson, 2006), and overcoming such limitations may require a comprehensive programme of professional development. However, context may create further problems here for three reasons. Potential time for professional development is limited by the principal's dual role and workload and to limited budgets (Murdoch & Schiller, 2002), development programmes that relate to the contextual needs of small school principals are rare (Clarke, Stevens & Wildy, 2006), and for rural schools in particular, school location may act as a barrier by restricting both the informal sharing of practices and experiences with other principals and by preventing new pedagogical or leadership developments being considered (Dunning, 1993).

Opportunities of small school leadership

Despite these concerns, there is some evidence that other small school principal role factors offer positive and at times unique potential for small school leaders. A small number of United Kingdom studies found that certain role contexts may also create beneficial conditions that may facilitate the implementation of the NZC.

Principals' teaching responsibilities appear to offer a number of benefits. Southworth (2002) found that principals were able to use their teaching practice to model and lead by example. As well as supporting this finding, Wilson and McPake (2000) also found that small school principals were more up to date with their curriculum and pedagogical knowledge. They were also more aware of the logistical implications of new practices (Wilson & McPake, 2000). Such factors, may put them in a strong position for the

leadership of curriculum change in terms of their practical knowledge, understanding of student needs and how they are perceived by the rest of the staff (Wilson & McPake, 2000). These proposed benefits were supported by the UK school inspectorate (Office for Standards in Education (OFSTED), 1999), who suggested that small school principals' teaching had a very strong influence on the quality of teaching throughout the school.

The need for effective instructional leadership has already been discussed as an important condition for successful change. In small schools, not only is there evidence that successful leaders use effective instructional leadership strategies to influence student learning, but there is some evidence that their closeness to both staff and learners enables them to have a greater influence than those in larger schools (Southworth, 2002; Wilson & McPake, 2000). Southworth (2002) found that this occurs both directly through classroom teaching, and indirectly through goal-setting, modelling, monitoring, peer and principal evaluation, professional dialogue and discussion of student learning to aid learning from one another (Southworth, 2002). Much of this was completed in an informal manner as a part of everyday discourse. The effectiveness of such practices, Southworth (2002) believes, is enhanced by the close proximity, working relationships and face to face interactions between staff. Richards (2008) also highlights how principals' (and teachers') in-depth knowledge of students built up over a number of years through both direct and indirect relationships enables individual and group learning needs to be more effectively recognised and met.

Not only do small school principals enjoy close relationships with their staff and students, but they may develop these into successful collaborative units where individuals both support one another and work cooperatively to improve student learning (Southworth, 2004). Principals in Wilson and McPake's (2000) study viewed themselves as part of the 'teaching team', working with others as professional colleagues and leading from within the group rather than directing from the outside. In this way leaders ensured the active involvement of all, a greater degree of commitment to planned change initiatives, and, Waugh (1999) adds, easier involvement of all staff and a reduced need to persuade others of the need for change.

With the emphases of the NZC including meeting local student needs, knowledge of effective pedagogy and collaborative approaches to curriculum development, small rural principals may therefore enjoy contextual and role conditions conducive to successful NZC implementation. It must be acknowledged however, that these studies are based upon the experiences of those in England and Scotland rather than New Zealand.

Small school teaching and learning

The small number of classes and teachers in small schools creates additional challenges that may inhibit the successful curriculum development and implementation. These include teachers needing to be able to effectively teach and develop appropriate learning programmes for mixed-age classes (Southworth, 2004) and through having only a limited number of teachers with whom to discuss, develop and share curriculum and pedagogical ideas and practices (Wilson & McPake, 2000). These demands however, appear to have little negative impact on student learning. OFSTED (1999) found that the quality of teaching in small primary schools was generally better than in larger ones, while Richards (1998, cited in Richards, 2008) noted a considerable flexibility of learning opportunities and personalisation in small-school teaching thanks to teachers' in-depth knowledge of individual pupils acquired in smaller classes over a longer period of time. Schmidt, Murray and Nguyen (2007) also report both higher achievement levels and narrower achievement gaps between students in small US urban schools. Wright (2003) suggests that small rural schools may actually be in a position to design a curriculum that better reflects local community values. These studies all suggest small schools can offer students quality, appropriate, relevant and challenging educational opportunities. Whether these schools can provide learning opportunities that support the emphases of the NZC, however, is unclear, as there currently appears to be no studies that focus on student-centred curriculum change in small rural schools.

The small rural community

Small schools, especially those that serve rural communities, often feature as a more significant part of the local community than schools in urban areas (Barter, 2008; Clarke & Wildy, 2004). In this role, Barter (2008) suggests schools provide significant social, cultural, economic and environmental contributions to the community. This relationship

is generally reciprocal; small communities are more willing to be involved and support the school in a number of ways (Barley & Beesley, 2007; Murdoch & Schiller, 2002) and this closeness may aid the development of productive community relationships that have a positive impact on student achievement. There is also evidence that these schools help foster a sense of pride and collective responsibility among all stakeholders within the community (Richards, 2008). The collective benefits of these offer better opportunities to develop wider partnerships focused on improving student learning, a key emphasis of the NZC (Ministry, 2007b). However, there is also some evidence that this closeness may also manifest itself negatively, with an increased expectation for principals to understand, fit into and model the community's cultural norms and values (Clarke & Stevens, 2006; Gilbert et al, 2008). This may potentially limit and constrain the scope of a school's curriculum. One potential way to overcome this, Bauch (2001) suggests, may be for schools to engage the community in more educationally-focused ways, working together to both develop learning opportunities that have meaning and relevance for students and to utilise the local community to provide meaningful learning contexts. In this way, and considering the closeness that small rural schools often have with their community (Barter, 2008; Clarke & Wildy, 2004), if schools are able to involve the community in more learning focused ways, a key emphasis of the NZC may be achieved.

The research presented on small school contextual factors has recognised that small schools and the principals and teachers within them, face both challenges and opportunities that makes their context unique in many ways. However, three factors limit the usefulness of this literature. Firstly, it is based predominantly on overseas contexts, with a much smaller representation reporting on New Zealand. This is especially true with regard to the potential opportunities that small school leadership may provide. This may limit the relevance of these findings to this study as working and policy conditions differ between these countries and New Zealand. Secondly, as explained by Collins (2004), the conditions for New Zealand's teaching principals have changed since the time of Livingstone's (1999) and Wylie's (1997) studies into small school leadership and their findings may therefore be of less relevance today. Thirdly, there appears to be almost no research focused on curriculum change in small rural schools, with the majority of literature focusing on contextual conditions. These three limitations therefore make the

examination of NZC implementation in small rural schools in New Zealand of particular importance in improving understanding the impact that the small rural context may have.

This literature review has focused on three key themes. The first, curriculum design, suggested that the revised NZC represents a change in curriculum philosophy for New Zealand to a student-centred curriculum design. It is also a national curriculum philosophy that appears unique to New Zealand and as such there is currently little knowledge on the potential impact of its implementation on students. The second theme, curriculum implementation and change, recognised a number of factors drawn from the extensive body of change literature that may both facilitate and inhibit successful NZC implementation. The third theme, the small rural school context, identified a number of unique challenges and opportunities faced by small rural schools and their leaders and teachers that may impact on the design and implementation of the NZC at the school level. It also recognised a lack of literature related to curriculum change in such schools. This review has therefore served to both provide a clearer understanding of the current issues that may impact on the implementation of the NZC in New Zealand's small rural schools and to identify the gaps in current knowledge that this study aims to fill.

3. Methodology

This chapter provides detail of the methodological, sampling and analysis approaches used for this research into the impact of small, rural school contextual factors on implementation of the revised New Zealand Curriculum (NZC). It begins by outlining and justifying the interpretive methodological approach and qualitative interviewing research design utilised for this study. It then details the interviewing methods utilised for data collection, introduces the three groups of participants and explains the sampling strategies used. It then explains the process of analysis. Finally, it outlines the considerations for maximising validity and ensuring ethical practice.

Methodological approach

Broadly defined, methodological approaches are the strategies of inquiry we use to understand a particular problem (Creswell, 2002), providing a rationale and framework for research design and research activities (Morrison, 2007). Methodology selection is based upon two key factors, philosophical beliefs, commonly termed paradigms, that individuals hold of how the world may best be looked at and understood (Lincoln & Guba, 2005), and the type of approach that may best suit the specific problem under investigation (Morrison, 2007).

The most appropriate paradigm for considering whether the contextual factors of small rural schools in New Zealand have impacted upon the implementation of the revised New Zealand Curriculum (NZC) is an interpretive paradigm. Interpretivism is based upon the premise that individuals develop continual subjective meaning to their lives, relationships and resulting behaviour, actively constructing their social world accordingly. (Cohen, Morrison & Manion, 2007; Lincoln & Guba, 2005). As a result, reality is multi-layered and complex, evolving and changing over time (Cohen et al., 2007; Morrison, 2007). Lofland, Snow, Anderson and Lofland (2006) explain these beliefs most clearly, suggesting “all social settings are constituted by one or more actors (individuals, groups, organisations, etc) engaging in one or more activities or behaviours in a specific place or locale at a particular time” (p.205). In this study this can be seen as the interaction between

principals, staff and school communities, engaging in implementing the NZC, in their small rural school contexts.

Paradigms, Cohen et al. (2007) suggest, give rise to appropriate methodologies. Interpretivism requires strategies that enable understanding of an individual's perspective and the context in which they operate. This is best offered through a qualitative methodology (Morrison, 2007). Qualitative studies focus on attempting to unravel the independent, messy and unique experiences of individuals (Kervin, Vialle, Herrington & Okely, 2006), studying real-world situations as they happen, evolve and change (Patton, 2002). As Denzin and Lincoln (2005) elaborate, "qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (p.3).

A number of different forms of qualitative research exist that, while all conforming to overall interpretive beliefs, provide alternative ways to understand human behaviour (Creswell, 2002; Denzin & Lincoln, 2005). The way this current problem may best be understood is through gaining a deep interpretive understanding of the experiences of those responsible for implementing the revised New Zealand Curriculum in small rural schools. As will be justified in the next section, this is best achieved through a deep interpretive study based on qualitative interviews with the principals and teachers currently involved with this curriculum implementation, and the advisors who are supporting them.

Data collection

Data collection was based on semi-structured interviews of three groups of participants, small rural principals, small rural teachers and leadership advisors. Semi-structured interviewing was selected as the most appropriate method for this study for the following reasons.

Firstly, as Ribbins (2007) believes, interviews provide the opportunity to obtain in-depth information about a participant's thoughts, beliefs, knowledge, reasoning, motivations, or feelings about a topic. With so many different approaches, beliefs, challenges or factors potentially impacting or shaping curriculum implementation, interviews provided a way

to obtain detailed views for different contexts and participants, thereby gaining a rich understanding of individual perspectives (Kervin et al., 2006). Ary, Jacobs, Razavieh and Sorensen (2006) suggest that not all interviewees may be articulate, perceptive or willing to share information. This study therefore also adopted Hinds's (2000) suggestion of developing additional prompts that were used to obtain more comprehensive or additional information, or to clarify responses as appropriate. By providing a copy of the interview questions in advance, interviewing participants at a place, date and time convenient to them and establishing a connection with participants before interviewing began where possible by spending time talking about the research project and my own role as a small school principal were three other interview protocol practices used. Such procedures, Ribbins (2007) believes, may help create an environment where participants feel more relaxed, open and able to focus, thereby increasing the likelihood of honest and free responses.

Secondly, the pre-determination of questions reduces the possibility of bias and limits the influence of the interviewer on responses (Johnson & Christensen, 2008; Ribbins, 2007). This helped improve the validity of the study by ensuring participant responses were a true and honest reflection of their beliefs. Kervin et al. (2006) do caution, however, that this may only be true if questions have been carefully developed, refined and worded to ensure they don't restrict or influence the quality or content of the response. Questions were therefore developed to be open-ended, bias-free and broad, and worded in open ways to encourage participants to respond in their own ways, and the number of questions was limited to encourage depth of response (Ary et al., 2006; Kervin et al., 2006), a process overseen and supported both by my research supervisor and by the UNITEC ethics committee. Questions were written to cover the research questions of this study, considering participants perceptions of the revised NZC, the change processes used for curriculum implementation, successes and challenges of curriculum implementation, school contextual factors, support available and the perceived impact of these factors in curriculum implementation. These questions for each participant group can be seen in appendix one. Predetermination of these interview questions helped ensure that all research questions were addressed, an important consideration that

Johnson and Christensen (2008) believe is of particular benefit for less experienced researchers like myself.

Thirdly, the semi-structured interview utilises an interviewing strategy where the interview agenda, questions and process are largely pre-determined, allowing interview responses to be compared (Bogdan & Biklen, 2003; Ribbins, 2007). The questions in this study were developed to be the same for each participant group, although worded slightly differently according to their role. Johnson and Christensen (2008) suggest such comparison serves to improve the depth and quality of the findings by triangulating findings to better determine commonalities and anomalies. Triangulation is the process of comparing different sources of evidence to determine the accuracy of information (Bush, 2007). By studying a problem from more than one perspective, Cohen et al. (2007) suggest the problem may be more fully understood and the results may offer the potential for inferring their application to similar contexts. In this study, two methods of triangulation were used, perspective triangulation (Denzin & Lincoln, 2005) by using three different participant groups (principals, teachers and advisors) and respondent triangulation (Bush, 2007) through interviewing a number of people within each group. Within this study, triangulation allowed responses from each of the sixteen participants to be compared between the different participants groups, within participant groups, between schools and within schools. This allowed a much fuller picture of the problem of curriculum implementation from different perspectives to be generated.

Before the main interviewing phase began, a practice interview was completed with a local principal to test the interview questions, which led to the amendment of one question and the addition of another. It also determined the approximate time required. Each interview was recorded using two MP3 recorders and later transferred to a PC. All interviews were completed over a three week period.

Sampling

This deep interpretive interview-based study used multiple data sources, seeking the views of small, rural school principals and teachers, and rural advisors charged with supporting schools in the region. As already discussed, this provided greater insight into the problem and improved the validity of the findings by triangulating the responses from

different perspectives to see how they supported or differed from each other (Johnson & Christensen, 2008).

Seven principals and seven teachers were selected from small, rural schools in the Waikato county of New Zealand. Schools were selected using two sampling strategies, school size and school location. Small was considered as schools where the principal had a teaching component in their Ministry of Education (Ministry) provided staffing allocation and where there were at least two other teachers employed at the school. Rural was considered a school where their location was within an area classed by the local district council as a rural district.

Principals were selected using length of time in their position as a sampling strategy to help determine how experience impacts on curriculum implementation, a factor that Collins (2004) suggests may be of great significance for small schools. Teachers were selected by their school principals and a request was made for a varying range of experience. Seven principals and teachers were selected to provide what Lincoln and Guba (2005) term data saturation, the point where a great depth of information has been collected and little new information is forthcoming. It was also chosen to ensure the study remained manageable.

A single county was selected as, while regional factors may affect principal responses (Kervin et al., 2006), the limited time and financial resources available make limiting the sample region a necessary restriction. All schools that were approached volunteered to participate. This meant the participants were within the ideal sampling strategy ranges. The details of the participants can be seen in table one below.

In addition to the seven participant schools, two leadership and management advisors, funded by the Ministry of Education and working through a University department, were selected. Both were former principals with considerable (both over 30 years) leadership experience in numerous schools of different sizes.

Table one: School participants of this study

School one: Hihi School Roll: 95	Principal: John, 1½ years experience, previously Intermediate senior teacher Teacher: Miriama, beginning teacher, 6 months experience
School two: Kakariki School Roll: 75	Principal: Jane, 3½ years as principal, 8 years as a deputy principal (DP) Teacher: Lisa, 6 years experience, teaching DP
School three: Kea School Roll: 70	Principal: Hiri, 6 years as principal, 21 years leadership Teacher: Rapata, 5 years experience
School four: Hoiho School Roll: 55	Principal: Sally, first-time principal, 6 months experience Teacher: Stephanie, 20 years experience, teaching DP
School five: Takahē School Roll: 39	Principal: Rongo, first time principal, 9 months experience Teacher: Kahu, 25 years experience
School six: Tieke School Roll: 81	Principal: Pio, 1½ years experience, 6 years as deputy principal Teacher: Emiri, 15 years experience
School seven: Whio School Roll: 110	Principal: Paul, 5 years experience, second principalship Teacher: Kelly, 30 years experience, teaching DP

Note: School, principal and teacher names have been changed to ensure anonymity.

Analysis

The defining features of qualitative analysis, Lofland et al. (2006) suggest, are that findings arise through an inductive data-driven process, the essential analysis tool is the researcher, the process is highly interactive between researcher and data, and that it is pursued in a persistent and methodical fashion. Analysis for this study followed these principles and consisted of four key stages, familiarisation, categorisation, summarisation and interpretation.

Before attempting to gain deep meaning from data, Creswell (2002) highlights the importance of becoming familiar with it, through full word-for-word transcribing, reading and re-reading, and gaining an overall sense of its content and what may be important. Word for word transcripts for each interview were completed using Dragon Naturally Speaking voice recognition software and Microsoft Word to speed up the process. All

were completed within 72 hours of the interview and were sent to participants for review. No participants wished to make any changes. Through reading and re-reading of the collective interviews, initial thoughts, insights and themes were recorded, a process recommended by Bogdan and Biklen (2003).

The second stage involved more formal categorisation of the data. Each interview was read and as regularities, patterns and topics became apparent, a code was created. In all, over 160 initial codes were created as a result of the different topics raised and these can be seen in appendix two. Each interview was then read in detail and codes were added next to applicable participant responses. Once all the interview data was loosely coded, it was sorted both manually and by code using Microsoft Word's sorting tool. Responses according to code were then carefully considered in a more analytical and focused way to connect together larger chunks of common data into categories and sub-categories. Ary et al. (2006) suggest this refinement serves to strengthen initial codes while reducing their number, making data more related and easier to manage. In this study it also highlighted the strength of common feelings within and between participant groups. These categories and sub-categories formed the basis for the summary and interpretation of the main findings.

Summarisation and interpretation is the point at which theories about data are formally generated, tested and applied (Creswell, 2002; Watling & James, 2007). In this study summarisation involved exploring relationships or patterns across the different categories to understand the findings in depth and whether these findings were replicated for the three participant groups. The eventual result was the identification of a small number of overriding themes for each of the research questions. These themes are presented in chapter four, the Findings. The final stage, interpretation, adopted Watling and James's (2007) approach to evaluating the findings. Their four pronged process of evaluation was used alongside the research and conceptual literature from chapter two to confirm established research and understandings, to critically examine and refine these understandings, to apply established understandings to the context of small rural schools, and to illuminate possible new insights that are currently missing. The results of this process can be found in chapter five, discussion.

Research validity

Validity considers the quality, rigour, worth and value of research (Keeves, 1997). While there is considerable debate regarding the applicability of validity to qualitative research (Cohen et al. 2007), Busher and James (2007) believe interpretive researchers should be as vigilant as other researchers in pursuing validity. Within the aims of this study, two forms appear important, internal validity and external validity.

Internal validity considers the credibility or rigour of the findings and is important in ensuring the findings are considered valid and therefore are of value (Keeves, 1997). In line with recommended qualitative research validity procedures (Bush, 2007; Cohen et al., 2007; Keeves, 1997), validity was enhanced through minimising bias in questions, analysis and the final report, collecting rich and open data, participant transcript checking, and through honesty and accuracy in reporting.

External validity is the extent to which findings can be usefully generalised beyond the cases analysed (Bush, 2007). Although some interpretivists may consider generalisation inapplicable and even inappropriate (Bush, 2007), it was considered important for this study so that the results could be of potential benefit to other small rural schools. The primary source of external validation, and a further aid to internal validity, was through triangulation, a process of comparing different sources of evidence to both determine the accuracy of information (Bush, 2007), and to provide a fuller understanding of the problem (Cohen et al., 2007; Johnson & Christensen, 2008). Through both perspective triangulation (Denzin & Lincoln, 2005) and respondent triangulation (Bush, 2007), common themes were identified that provided a fuller understanding of the implementation of the revised NZC in these small rural New Zealand schools.

Ethical considerations

The ethical treatment of participants in educational research is guided by two key premises, that subjects enter research projects voluntarily, understanding the nature of the study and the obligations that are involved, and subjects are not exposed to risks greater than the gains they may derive (Bogdan & Biklen, 2003). This section details the principles used to ensure these two premises were met. These are based upon the ethical

guiding principles of UNITEC, the University through which this study was approved and completed, and supported by best-practice as identified in literature on ethics in educational research.

Informed and voluntary consent

It is of paramount importance, Wilkinson (2001) stresses, that participants are clearly aware of the purposes, methods, benefits and burdens of the research, and that they have made their own choice, with this adequate information, to be involved. To achieve this, the overall purpose of the research, interview processes and required commitments were outlined verbally over the telephone and in writing through participant information sheets, and opportunities to ask further questions were given. These information sheets can be seen in appendix three. Time was provided for consideration of participation. Participants each completed a consent form, and for schools, the schools' Boards of Trustees approved participation. These can also be seen in appendix three. Attention was also given to the avoidance of any conflicts of interest. This study ensured participants had no professional, social or personal relationship with me and no financial gains were made from this research by me or by participants.

Respect for rights, confidentiality and anonymity

Although anonymity could not be assured as participants became known to me, confidentiality was maintained through avoiding recording names on data or transcripts, disguising key facts, not speaking to others about participants or their information and using pseudonyms both on transcripts and in this report. These followed the principles of confidentiality outlined by Busher and James (2007). Data storage was secure during and after research, with password protected electronic documents and paper copies secured.

Minimisation of harm

It was recognised that participation in this study represented a significant personal commitment so the interviews were carefully planned to provide a supportive, respectful, non-judgemental and open interview environment that made participant welfare of central importance (Bogdan & Biklen, 2003). This also involved ensuring questions were objective, non-judgmental and appropriate (Kervin et al., 2006), with all questions

approved by UNITEC's ethics committee. Convenience was aided by conducting interviews in participant schools and at the advisor's location of choice, at convenient times, and by clearly indicating and sticking to time and commitment requirements. All aspects of the research were undertaken in a culturally sensitive and appropriate manner and in full discussion and partnership with the research participants.

Honesty

Within case study research, Kervin et al. (2006) suggest there is considerable scope for researcher's bias or values to influence the data collected and findings reported, which could cause harm by painting participants in a different, false light. Ensuring honesty was therefore an essential consideration for each stage of this study. Before participants confirmed their involvement, a clear, simple and honest explanation of the purpose, aims and required commitments of the research was provided. During interviews the process for interviews and transcription was explained. A full typed transcript of the interview was provided within 72 hours of the interview and participants were free to make amendments, additions or deletions, or to withdraw their interview transcript if they chose within a mutually agreed period. In this final study write-up, data was presented honestly without shaping from my own bias or values or through inaccurate-representation. These practices closely reflected those commonly cited in ethical research literature (Bogdan & Biklen, 2003; Busher & James, 2007; Kervin et al., 2006).

This chapter has presented a detailed account and justification of the methodological, sampling, analysis and ethical approaches used for this research into determining whether the contextual factors of small rural schools in New Zealand have impacted upon the implementation of the revised New Zealand Curriculum (NZC). It has suggested that it is through a deep interpretive study based on qualitative interviews of the principals, teachers and advisors involved in curriculum implementation that this problem may best be understood. The next chapter presents the findings of this approach.

4. Findings

As introduced in the methodology (chapter three), this study utilised a deep interpretive research design for understanding the problem of the implementation of the revised New Zealand Curriculum (NZC) in small, rural schools, through semi-structured interviews of three participant groups. The participants consisted of seven small rural school principals, seven teachers from these same schools and two leadership and management advisors from the same geographical area. The strengths of this approach are that it provides rich deep data and that this data is able to be compared with and between other participants and participant groups (Johnson & Christensen, 2008; Ribbins, 2007). These findings present this rich data in three ways, by summarising the common themes as expressed by the majority of participants and their degree of congruence, by highlighting where differences occurred between or within participant groups, and by supporting these summaries through extensive use of quoted participant responses to provide a direct participant voice. This approach helps ensure that the findings are an honest and accurate reflection of participant responses (Bush, 2007). The findings for each of the aims of this study are presented in this chapter, each aim is summarised in further detail, and key themes for further discussion in the next chapter are identified.

Perceptions of the revised New Zealand Curriculum

The first aim of this study was to gain an understanding of participants' perceptions of what the revised curriculum in terms of what it offers and what it demands. A number of common themes emerged which are detailed below.

A catalyst for change

The revised curriculum was considered by five principals, both advisors and three teachers to offer a mandate for looking critically at current curriculum design and pedagogical practices and to think how they could be improved. This was seen as important for two main reasons, firstly, as a chance to question school's established curriculum theories and practices and to focus on what is going to make the biggest difference for students;

I think the revised curriculum allows us to have a stock take on what's important to us today about teaching and learning, and takes a shift from the pedagogy to the learner (Pio, Tieke School Principal).

Secondly, for considering how the school curriculum could best serve the current and future needs of its students and the wants of its staff and community. It was also viewed as a powerful curriculum by advisors due to its basis on some strong educational principles;

There are some amazing principles that underline this curriculum, the big picture stuff. [It is] an educative model for the future, it educates the whole person and that's what you want, get away from this Draconian power over stuff (Rose, Advisor).

Flexibility of design

The flexibility the revised NZC offers by providing a framework loose enough to shape a school curriculum to meet specific needs was considered a strength by four teachers, five principals and both advisors. As one participant stated;

I think what it offers us is the chance to take out of it the strengths that fit our school and that can allow us and the kids, our whole school community, to be learning and so take ownership of that learning (Sally, Hoiho School Principal).

These strengths were seen as providing far greater opportunities and freedoms for schools to develop their own school curriculum. Two principals and two teachers, however, questioned whether such a broad curriculum framework was beneficial in terms of providing sufficient depth and clarity for the actual details of classroom-level curriculum design. Concern was also raised over whether this freedom may lead to an overemphasis on some curriculum areas at the expense of others, thereby limiting students learning across all learning areas, and whether all leaders currently have the skills or knowledge to develop a curriculum under such open conditions;

I see that as a potential disaster for schools that aren't well managed and professionally up-to-date, or professionally responsible (Lisa, Kakariki School Teacher).

Student centred curriculum design

There was considerable support for the student-centred focus the curriculum encourages and this was viewed as offering a number of strengths. The learner was viewed as the central focus for school curriculum design under the revised NZC by advisors, five principals and four teachers, with the view that pedagogy is now being shaped primarily by student needs and a shift in perceived curriculum emphasis from the teacher to the learner;

That is the biggest impact I think, we're now not talking just about how people teach we're talking about how people learn (Pio, Tieke School Principal).

Five principals and one advisor believed that it was through an inquiry-based approach that this could most effectively be achieved. There was also the perception of the revised curriculum's expanded view of what student learning means, with almost universal support for its much more explicit focus on key competencies and values education mentioned by all but one principal and one teacher. Their perceived potential benefits were summed up by this teacher participant;

Those life skills will help kids to develop, will take them a lot further than any information you might put into a child's head (Kahu, Takahe School Teacher).

The ability to shape and select contexts that were meaningful for students was also viewed as a strength of the revised NZC by almost half of principals and teachers. This student-centredness was considered to place two key demands on principals and teachers, having a clear understanding of their students' needs, and to actually change practices to meet them;

To actually follow it and implement it will take time and effort because everybody has to make time and change the way that they've done things before (Emiri, Tieke School Teacher).

Four out of seven teachers and principals and both advisors considered that students' knowledge of their own learning was a central and positive feature of the revised NZC. It was also suggested by three principals and one teacher that students needed to be part of this commitment too, with, as this participant explains, a responsibility for their own learning, through;

Taking ownership of their learning and taking that one step further away from the teacher, moving away from the teacher driven curriculum that we had before (Stephanie, Hoiho School Teacher).

A shared commitment to children's learning

The greater involvement of teachers, parents and, for some, the wider community, in the process of school curriculum design was recognised as potentially offering benefits by five principals and both advisors, although the need for parental involvement was mentioned by just two teachers. First and foremost was its potential for developing a curriculum that meets student's needs through greater understanding of what these needs are from different perspectives. It was also viewed as offering a way to develop a shared responsibility for learning which a number of principals felt would help develop more trusting and open relationships with both staff and parents. In three cases, however, participants cautioned that this shared commitment would require changing the attitudes and beliefs of staff, parents and students;

You need to come at it from the perspective of, well we are in this together, and if we've got a problem then let's work out what this problem is then we can move on, as opposed to we have to do this and you think this we think this, what would you know because you are a parent (Hiri, Kea School Principal).

A new curriculum philosophy

There was a general split in principal's opinions on the revised NZC's demands according to the length of time they had been in their position. The two schools that had long-standing principals (of over three years) suggested that the revised curriculum provided support for pedagogical and leadership practices and for curriculum design that had already been recognised in recent years as effective practice. In a sense, the revised curriculum "caught up" with best practices already established in these schools and therefore did not offer or demand anything particularly new. For such schools the revised curriculum was considered to provide a way of integrating these practices into a single framework as this quote highlights;

It offers us opportunities to better integrate all of our knowledge and things that we've been building up over the last three years (Hiri, Kea School Principal).

The five principals employed in schools since the release of the revised curriculum in general painted a somewhat different picture, suggesting the curriculum represented a considerable shift from existing practices and beliefs in their schools. Concern was not expressed by these principals on the demands created by the curriculum itself, but by the significant challenge of implementation in schools that had either not adopted such practices, had not kept pace with professional knowledge, had been through particular challenges or problems that needed to first be addressed or in schools where principals were new and which had not begun to look at the revised curriculum until recently. Almost all saw the revised curriculum's potential benefits in providing a platform for change or "catch up". For these schools, although the demands of the curriculum were considered much greater, it was considered to offer much more too;

This curriculum has been a godsend especially for a new principal that is facing a school that's got a lot of issues (Pio, Tieke School Principal).

In these cases, an additional demand was perceived as one of timescale due to the significant changes required. However, three of these principals suggested the

importance of creating the best possible school curriculum over the demand for compliance.

The advisors unanimously considered the revised curriculum to be built upon new and educationally sound beliefs and considered that, even for well-led schools, it still provided new opportunities for change;

I realised it was, actually yes you could tweak it, yes you could just add the key competencies, but really if you wanted to, you're missing an opportunity if you didn't see, here's the opportunity to change (Hari, Advisor).

Comparisons with the previous curriculum

The majority (five principals, four teachers and both advisors) of participants made some reference to considerable changes when compared to the previous New Zealand Curriculum Framework (NZCF). All but three of these sixteen participants considered the changes positive, moving from a curriculum of coverage with a focus on teaching to a curriculum of needs with a focus on the learner. These beliefs are clearly explained by this participant;

With the old curriculum being very prescriptive people saw it as a bit of a tick list, trying to get coverage rather than depth. It [the revised curriculum] allows the teachers to really think let's focus on learning areas and how we're going to deliver them. We're not having to worry about trying to cover everything, so it's freed them up to teach the way that meets the needs of the students rather than meeting the needs of the tick box, the prescription (Paul, Whio School Principal).

Concerns with these changes were, however, raised. Two principals and two teachers spoke of the lack of direction and teacher support, particularly for beginning teachers, in the revised curriculum compared to the previous one, with its single book rather than a support guide for each learning area;

I think the old curriculum, which was much more in-depth and had a lot more in it, I even use that still, some of the ideas of old curriculum are much better

and far more succinct than the new curriculum (Jane, Kakariki School Principal).

As one principal and two teachers added, this could potentially require more planning and better learning area knowledge that was required previously.

The key findings from this first research aim are that the majority of teachers, principals and advisors supported the NZC’s philosophy and believed that it was built on new and more positive educational beliefs compared to the previous NZCF. The aspects most positively emphasised were its flexibility for meeting the local needs of students, its emphasis on the development of more holistic life, learning and social skills, and its emphasis on a collective responsibility for design and implementation. Principals and advisors consistently suggested it provided a catalyst for changing current practices. Concern was however expressed by four participants over its broadness and lack of specified direction for schools. These key findings will be explored in further detail in chapter five. As a further guide to the overall findings regarding participant’s perceptions of the NZC, table two below provides a summary key findings from this study presented above, as reported by a majority of principals, teachers and advisors. The number in brackets indicates the number of participants who supported these findings. This same summary style will also be provided for the findings of each subsequent research aim below.

Table two: Findings regarding the perceptions of the revised New Zealand Curriculum

Principals (7 participants)	Teachers (7 participants)	Advisors (2 participants)
Provides a catalyst for change (5)	Flexibility for school curriculum design (4)	Provides a catalyst for change (2)
Flexibility for school curriculum design (5)	Student-centred curriculum (4)	Flexibility for school curriculum design (2)
Student-centred curriculum (5)	Broader/holistic view of learning (6)	Student-centred curriculum (2)
Broader/holistic view of learning (6)	Student knowledge of learning (4)	Broader/holistic view of learning (2)
Inquiry-based curriculum design (5)	Considerable changes from previous curriculum (4)	Student knowledge of learning (2)
Student knowledge of learning (4)		Collaborative approach to curriculum design (2)
Collaborative approach to		Built upon new educational

curriculum design (5) Considerable shift from current beliefs and practices (5) Considerable changes from previous curriculum (5)		beliefs (2) Considerable changes from previous curriculum (2)
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The contextual conditions of small rural schools

The schools in this study varied in size from 39 to 110 students and from two to six teachers (as well as the principal). All fit into the classification of a teaching principal school. Principal participants had been employed as principals for between six months and eight years, while teacher’s experience ranged from six months to over thirty years. They were all located in rural areas or villages within the same New Zealand county and all were within 30 minutes of a provincial town or city. Although individual contextual factors varied between schools to create differing contextual conditions, interview responses revealed a number of common contextual conditions which fell into one of three categories, the small rural school context, the role of the small rural principal, and the role of the small rural teacher. These findings serve to achieve the aim of this study to gain an understanding of the contextual factors of these small rural schools, and are reported below.

The small rural school context

This first set of findings regarding common contextual conditions were participant’s comments regarding the general school context, including the local community, school culture, learning opportunities and location. It was their school’s caring culture, central position in the community, learning environments and their position as a school of choice that were most often described.

Caring culture

There was considerable agreement between participants regarding the caring culture evident in their schools. This was considered evident among staff (four teachers, four principals), students (five teachers, four principals), and the wider community (four teachers, five principals). These schools spoke of a culture where these groups care for and support each other, as this comment regarding students explains;

I haven't been to a school to the extent that kids are looking after each other as here, you look out of the window and they are looking after each other, it blows me away (Rapata, Kea School Teacher).

This was credited to a number of factors, including the small school size, the fact that children, staff and community members knew each other so well and develop relationships over many years and to the open, family environment. School communities were reported as also supporting the schools in many other ways from gardening and maintenance to classroom support;

We have grandparents come and help in the school as well, a lady in on Friday, her own grandchildren don't actually live here now but she comes down and just loves coming to school, she helps with different arts activities that you couldn't do with just one person in the classroom (Kahu, Takahe School Teacher).

Centre of the community

Just over half of principal and teacher participants suggested their schools, being located both within small villages and in rural areas, serve a central role for more than just children's education. The sites are also used as the main recreation area, as community meeting areas and as places for community education;

it is truly the centre of the community, and is used as a facility not just as a school outside of hours. The kids just wander up and use the stuff, like their backyard. It's got a real, genuine family atmosphere to it (John, Hihi School Principal).

However, four principals and one teacher felt that close relationships and central position in the community led to over-familiarity and increased expectations, with principals expected to meet a whole range of demands outside of their official role. These participants spoke of the expectations of having to be available at all times, of personally dealing with every issue, of being contacted at home, of upholding school traditions and events and of being present and active within the community. Two principals and one teacher said this also impacted on their private and family life;

The flipside of living here is that you are always public property really I suppose, you are always viewed as that teacher so your private life is quite hard to maintain private (Lisa, Kakariki School Teacher).

Learning environments

The proximity of participant schools to nearby provincial towns or cities allowed schools to access many opportunities on a par with schools in urban areas as well as enjoying rural education contexts. These contexts, as reported by five principals and two teachers, promoted rural values, rural education opportunities and flexibility of learning, and all but one of these same participants spoke of the draw that the rural values, learning opportunities or flexibility these schools were able to offer had to families from nearby urban centres;

It has become a school of choice for a lot of parents. It attracts a lot of people because of the small rural atmosphere, high application from the teachers and high application from the students as well. All learners are valued as individuals, it's a family atmosphere (Kelly, Whio School Principal).

As such, most schools in this study had children travelling to the school from beyond the school's area. Whether such preference was always for the right reasons, however, was questioned by four principals and one teacher;

If they come because they don't want to go to a school that is perceived to be too Maori that is wrong, if they come here because of another school that is wrong (Paul, Whio School Principal).

As roll sizes grew, the principal and teacher from one school also suggested that this actually impacted on the rural values that parents were seeking.

The role of the small rural school principal

Principals in these small schools all spoke of their very varied role, including their need to not only meet the demands of both school educational leadership and management and, from five principals, the responsibilities of teaching. Four principals also spoke of a variety of other roles they had to manage, including providing support for local families,

managing community resources, attending and being a part of community functions, and completing maintenance and caretaking tasks.

Teaching responsibilities

Five principals had a timetabled teaching component as part of their role while the other two provided release or additional support for their teachers on an informal basis. The five teaching principals all spoke of their enjoyment of working in the classroom. They believed that this time allowed them to remain working directly with children, developing positive relationships with students and to have a bigger impact on students' learning in that role. A number of educational leadership benefits were also suggested, including being able to continually develop and apply their pedagogical knowledge, to model new practices to other staff, and to gain a clear understanding of students' strengths and needs.

Leadership and management responsibilities

Principals made little mention of the challenges of meeting their leadership and management responsibilities, with only one principal commenting on the "administrivia" (Pio, Tieke School) involved in their role. All but one principal and both advisors, however, spoke of the challenges of managing the multiple responsibilities the role demands;

I think the demands are even greater in a rural school, in terms of the workload, the amount you have got to do. You still have to do the same as the big school but there are not many of you to get around to doing it. I think it's a big ask for small schools (Rose, Advisor).

These participants commonly suggested that the multiple responsibilities create multiple challenges, and four principals suggested that the bulk of time and focus needs to be on the management and leadership of the school rather than teaching;

That's what I enjoy, getting into the classroom. Ultimately though the responsibility is at this end, there is so much happening that sometimes it just takes over (Paul, Whio School Principal).

Even allowing for this need, teaching, and especially preparation time, was often further interrupted by events requiring an immediate principal response in four schools with teaching principals. Two principals suggested at times there was too much to manage;

The demands on me are huge, my door is normally open and people are coming in all the time. By week 10 I'm a wreck, it takes me most of the first week [of the holidays] to recover (Jane, Kakariki School Principal).

Often, these demands were met through taking work home to complete, and the use of holidays to catch-up. Two principals suggested the role impacted on their home and family life, and two on their health. Overall though there was a sense that this pressure is what comes with the territory, and despite these pressures, five principals spoke of their enjoyment of the role.

One approach expressed in the two largest schools for managing the role was principal release time. With schools able to staff classrooms how they see fit, these principals, supported by their school boards, have used this freedom to vary from their official release time allocations and neither principal had specific classroom teaching responsibility, with the school board was funding the additional staffing to allow this to happen. This flexible release, they believed, allowed principals to focus sufficient time on the educational leadership side of their role. Both principals still maintained a close connection with classrooms through small group teaching and through releasing teachers to complete other tasks, as illustrated by this participant;

I don't have a class that I am responsible for, and that is the best situation because it means I can move around the classes, I spend more time in the junior classes and the middle, and I will do relieving roles. It means I can get around and work with my staff (John, Hihi School Principal).

Three other principals also spoke of varying their release time and using the time and other staffing allocations in ways they considered most conducive to the school, as explained in this example;

I do a bit more teaching than I should, that way I can use the .1 to provide other staff, so I have combined a whole lot of other little parts at the moment to set up a reception class, because our year one class was up to 24. Or I've used it to hire a music teacher, to have a piano teacher, to fund reading recovery (Hiri, Kea School Principal).

The role of the small rural school teacher

The small rural school teachers all considered their role both rewarding and challenging. Five of seven teachers reported developing very close relationships with both students and families and, through teaching the same children for up to four years, believed they developed good knowledge of both the needs and how to extend each child. They also commonly reported positive relationships with other children throughout the school. However, although four teachers spoke of the close collaborative relationships they had with other teachers, five felt isolated to a degree, both in terms of being the only one responsible for planning, teaching and leading a particular level and of their isolation from the wider educational world;

With me being the only teacher that teaches in my year level, it is quite hard because I have to do everything. I have to work it out on my own, and do all my own planning and stuff, whereas in other schools you can share (Miriamia, Hihi School Teacher).

All seven participant teachers spoke of the multiple responsibilities they faced as small school teachers and considered these greater than in other schools. Almost half suggested that the need to meet a greater range of responsibilities had an impact on their professional focus on teaching and, for two teachers, their personal lives;

There are less people to delegate work or responsibilities to, so we just actually all have to do it, from cleaning the toilets, vacuuming and cleaning floors to picking up the curriculum responsibilities and assessment work, board representatives, everything (Lisa, Kakariki School Teacher).

The key findings for this aim of understanding the contextual factors that affect these small rural schools revolved around two key ideas, the contextual conditions of these schools in general and the role conditions of their principals and teachers and the findings are summarised in table three. Regarding general conditions, the majority of participants consistently spoke of a caring culture among students, teachers and the community, the school's rural and community focused values, and the considerable support from parents and community. Five schools also recognised the desire of parents to send children to their schools because of these strengths. All small school principals, although recognising the challenges of their multiple responsibilities considered their role enjoyable. Teachers also found their role rewarding but felt they faced responsibilities not experienced by teachers in larger schools and described feelings of isolation from others at the same level.

Table three: The contextual conditions of small rural schools

Principals (7 participants)	Teachers (7 participants)
Caring culture among students, staff and community (5, 5, 4)	Caring culture among students, staff and community (5, 4, 5)
Central role in community (4)	Central role in community (4)
Increased expectations (4)	
Rural values and opportunities (5)	
School of choice (5)	
The role of the small rural principal	The role of the small rural teacher
Working directly with children (5)	Close relationships with students and families (5)
Multiple responsibilities (6)	Close collaborative relationships with staff (4)
Leadership priority (4)	Sense of isolation from others at same level (5)
Enjoyable role (5)	Multiple responsibilities (7)

The processes of curriculum implementation and change

A number of key themes emerged from the findings regarding the processes utilised for implementing the NZC and the successes and challenges of each. These are explained below.

Establishing a need and direction for change

As explained previously, most schools spoke of revised New Zealand Curriculum change as being centred on providing improved, more relevant learning opportunities for students, academically, socially and societally. Discussed by all principals and advisors, establishing a vision for change was the point where most participant schools began their curriculum implementation journey and, in fact, two schools with new principals were still involved in the process. Four principals stressed the importance of ensuring a real understanding of both school and community values, and five principals and two teachers considered it important to recognise and focus on meeting current and future needs of their students;

For me it has also been a greater awareness of the needs of, what children need for the 21st-century in society. I am having to investigate myself and some of the theories that influence my teaching (Stephanie, Hoiho School Teacher).

Most principals and more than half of teachers also recognised the importance of having a clear understanding of what schools were being expected or encouraged to do through the revised curriculum. Interestingly, despite this priority by principals and advisors, only two teachers spoke of the importance of being involved in this vision-creating process. In fact, four teachers considered that this process was accompanied by a feeling of a lack of progress and going around in circles over some considerable time, and three of these stressed frustration in having been through this process more than once as a result of principals leaving. Although recognising these same frustrations, all but one principal highlighted the worth of this initially unclear process in both developing shared understanding and aims and in providing the beginnings of a path for how to get there. Five principals and three teachers believed the process could have been aided through a clear model that could have provided a framework for working through this initial process and providing a starting point for reflection and to consider how their contexts would be similar or different to others;

What I would love to have seen, or the government or someone to do, would be to provide a draft, this is the general package, and then your school takes

what you need and does what is right to your school... so we could say well that's the Whio way, that's what's different about our way, to make it ours (Kelly, Whio School Teacher).

Both advisors reported that models and support for leading curriculum implementation were something they were often asked for.

Capacity building

The building of capacity through developing professional knowledge and beliefs was considered the primary focus for curriculum change by six of seven principals, three teachers and both advisors. It was viewed as the need to focus the bigger picture of school curriculum by investigating and changing the attitudes, beliefs and practices of the school, staff and community members to better meet student needs. It's perceived importance is captured in the following participant comment;

Until you get those big underpinning things sorted, the rest isn't going to change. We can go on living with curriculum plans and implementation plans that exist, but until we get those things like the values and the key competencies living then the actual change that I think the new curriculum promotes will never happen. The big overall picture is moving and creating a change in teacher philosophy and that takes courage, you're changing traditions, you are changing the ways that people believe and think things should be done (Sally, Hoiho School Principal).

Capacity building in these small rural schools focused on three main areas, developing a collaborative community, developing shared values and beliefs, and developing reflective practices.

Developing a collaborative community for curriculum change

This was viewed by five principals, four teachers and both advisors as a focus on empowering others to work as a collective unit for change, and these schools spoke of their attempts to actively increase collaboration in curriculum implementation with both staff and wider communities;

It's not a curriculum to do to people but a curriculum to do with people... It's about the sharing of power, it is polishing the jewels of the people that you've got, to bring them all to sparkle so that you have got one big unity, a huge crown of jewels that sparkle, that's how I see it (Rose, Advisor).

These principals and teachers viewed themselves as active partners in children's education and reported working at facilitating a collaborative culture where the principal, teachers and members of the community were increasingly involved in curriculum decision making. Leading curriculum change was viewed more as a collaborative rather than hierarchical activity and, as one principal and advisor also commented, for some principals this may require a change in leadership, from leading from the top to working alongside;

No longer can the principal sit in his office and write a great copious quantities of notes and hand them out and say, this is what we will do (Rose, Advisor).

Shared values and beliefs

Three principals and teachers placed high emphasis on having a shared and consistent approach to learning throughout the school, not just in aspects such as planning and teaching, but in broader principles and values. There was a focus on identifying, specifying and enculturating particular school beliefs or ways of doing things;

With my staff we negotiated what teaching meant to us, we had written job description that are linked into our beliefs about teaching, and what we should be seeing in the classrooms, and we consulted with the community, and the board and we brought in all those things, those visions and values and started pulling in all the little bits and pieces, all the tools that we wanted (Hiri, Kea School Principal).

Developing reflective practices

There was an evident desire to develop a culture where both personal and alternative practices could be evaluated, questioned and discussed openly and critically through

reflective practices. Six schools had embraced the development or refinement of an inquiry process for curriculum development. This involved schools utilising reflective, evidence based processes of inquiry to identify areas for improvement;

I think there is that level of trust and culture in the school now that, hey it's not threatening, we are just reading things and reflecting on them and seeing what is best for children rather than just saying well this is how I teach in isolation (Paul, Whio School Principal).

For these six participant schools, the revised curriculum implementation provided a way to critically reflect on student achievement and to consider practices that could improve it;

The curriculum has been at the centre, the curriculum has driven everything else. Every procedure, everything was designed around action research, and this is what I used with the staff, here's the evidence showing that we need to do something, what do we want it to look like, how are we going to get there? (Pio, Tieke School Principal).

However, making this change was recognised as a considerable challenge by four principals and both advisors, requiring the challenging of current beliefs and practices;

A lot of people still haven't got that in their heads about teaching as inquiry, and that is a big big shift (Rose, Advisor).

Principals and teachers spoke of a number of challenges, including the need to collect and interpret valid and reliable evidence of learning, to develop both teacher's and their own ability to reflect critically and openly on practices, and to evaluate whether other pedagogical practices or beliefs may better meet students needs. There was growing confidence amongst these six principals and three teachers, however, that the process was becoming more embedded, helping to better shape school curriculum design to better meet student needs;

Being a teacher, when you're deciding what to teach you have to back it up, why am I doing this, why am I teaching this? (Emiri, Tieke School Teacher).

The alignment of systems

Three themes emerged regarding changing school systems as part of curriculum implementation and all were concerned with the alignment of different aspects of school leadership and management responsibilities. These were the alignment of management and leadership tasks, the integration of school strategic planning, and the integration of the appraisal process.

The alignment of management and leadership tasks

Four principals described their attempts to reduce unnecessary leadership and management tasks, through a primary focus on curriculum implementation, by linking those other tasks to the bigger picture of improving student outcomes. In this way, these principals suggested their role could be prioritised more effectively to what was most important for students;

I think the other part of it is that there are so many other bits that you've got to do, it's continually thinking about how you can tie it in, and tie it back to what you're doing, to what's important (Sally, Hoiho School Principal).

Integration of school strategic planning

Three principals spoke of how, following the introduction of the revised curriculum, mandated school strategic planning (the school charter) had become a more meaningful and relevant process that was impacting on learning as it was now able to be fully integrated with the curriculum;

I wanted the vision and values to absolutely mean something, I didn't want them to be a piece of paper that goes on the wall, something that just gets handed in to the ministry. I wanted our vision and values for our charter to represent what was going to go into our curriculum, not as two separate entities but one (Rongo, Takahe School Principal).

One principal, discussing their current approach to strategic planning, described their process as such;

Our school charter drives our learning philosophy, and we did it backwards, we didn't do and charter first, we've gone for what was happening in classrooms for our kids first and then we moved our way up to the charter. To make the charter fit our learning philosophy (Jane, Kakariki School Principal).

In this way, by starting firstly with the focus on the student, Kakariki School developed a charter built on their particular student needs to be achieved through their curriculum.

Integration of the appraisal process

There was also increasing alignment of the appraisal process in three participant schools. How it is being integrated is perhaps best explained by Whio School's principal;

In appraisals, we're starting to comment on students and where they are in their learning, what learning is taking place rather than observing lessons or what the teachers are doing. It's about understanding how their practice influences learning, all the connections between it (Paul, Whio School Principal).

Appraisal, particularly among the most experienced principals, was increasingly being used as a formal way of developing inquiry-based practices and for linking teacher's professional learning with its impact on student outcomes. There was also the suggestion that it is becoming an increasingly collaborative and open process through strategies such as peer and student reviewing.

Resistance to change

One aspect reported as a barrier to the curriculum change process by three of the seven principals and by three teachers, was a resistance to change from individual staff members. Such resistance commonly created a sense of frustration. Suggested reasons for resistance were questioning of the need for change, staff wishing to continue with their same practices and staff being defensive of their practices. From two teachers, there was some justification for this questioning due to the perceived constant nature of change, the demands it placed and whether such change was valid or necessary;

I think change has been so rapid... Just as you think we've done that right and we've done that and it was successful and let's do it again, but it's not, we just have to go, keep going onto the next thing and the next thing and the next thing. You don't ever stop (Kelly, Whio School Teacher).

Overcoming resistance was tackled by principals primarily through working together as a staff to recognise and overcome problems, as well as utilising inquiry-based strategies such as the use of evidence from student achievement to highlight weaknesses in current school-wide practices, the use of regular professional reading to broaden understanding of other approaches, supporting staff through challenges and the use of tools to understand and address the reasons for resistance. Teachers too were keen to overcome these barriers, considering the best response to be working collaboratively to overcome them;

We are small enough that if someone is caught up on something, who doesn't quite know or think why do I need to do this or change that, you can just say well ... and explain it away and then we are away again (Rapata, Kea School Teacher).

Changing pedagogical practice

We've got the philosophy in place, we've got the knowledge of the curriculum, we've got the language and now we are starting on the nuts and bolts of it (Hiri, Kea School Principal).

As this quote illustrates, principals in six schools suggested that school capacity needed to be developed before changes in curriculum practice could happen. However, they also recognised, as supported by almost all teachers, that teachers want to know what and how they need to teach. The overriding finding was the emphasis principals and teachers placed on professional learning. Professional learning (the term largely used by principals) was considered to involve using a combination of professional development (considered the practical) and professional reading and discussion (the theoretical) to develop the professional practice of the school as a whole;

I've been trying to underpin everything on good practice, identifying what the needs are and then trying to make sure that you've got that theoretical or pedagogical knowledge to put into it, sometimes it's about building the theoretical knowledge and sometimes it's about looking at how to practically apply it (Paul, Whio School Principal).

Professional development

Two key types of professional development were evident in schools, those being led from within by the principal or other staff members (in four schools), and those being led by external facilitators (six schools), and it was this second type that almost all discussion from teachers and principals revolved around. Six schools were involved in Ministry funded professional development contracts, including in literacy, ICT, formative assessment and numeracy. Both principals and teachers alike considered that these contracts provided an ideal platform from which to evaluate and improve current practice. The key benefits were considered to be modelling of good practice that aligned with that of the curriculum, the reflective nature of the programmes, the use of underpinning professional reading, their practical application, focus on the specific school context, and the one-to-one support provided by their facilitators;

It [The ICT contract] is inclusive and it excites my teachers to want to use it and to do something exciting with it. I think it was the best lead into the curriculum of anything, it couldn't have happened at a better time (Hiri, Kea School Principal).

Although focused on specific aspects of pedagogy or learning areas, four of the six schools involved in contracts felt that the practices developed could easily be transferred into other curriculum areas, thereby helping with broader curriculum implementation. Four teachers and one principal also believed that the external facilitators brought a more fresh, experienced and impartial view, which could help with their acceptance. One advisor, however, expressed caution in overreliance in external facilitators at the expense of school-led development due to their more generic rather than school-specific focus. There was a suggestion from teachers though, as this participant illustrates, that for some contracts, facilitators were able to offer both whole-school and personalised support;

Every staff member is on their own little quest in assess to learn, we're just pulling it all together at the moment which is quite good (Lisa, Kakariki School Teacher)

There was, however, a perceived fine line, expressed by two teachers and one principal, between development and overstretching staff, requiring principals to carefully gauge the pace and scale of change in other areas and modify it accordingly.

Professional reading and discussion

Although the balance of the practical and theoretical varied between schools, there was increasing use of professional reading and discussion in four schools. Its common use and application was to address knowledge gaps or needs both at a school and an individual level;

I spend a lot of time thinking about professional learning, a lot of time on all the articles that we read... Everything has got a reason, everything has come from either something I've seen or something a teacher has said or a parent has said (Jane, Kakariki School Principal).

It was used to help ensure that changes in practice were based on good learning theory rather than just gut feeling and was considered most powerful when it was used as a basis for discussion to underpin, justify and reinforce changes in practice.

Other professional learning practices

Three principals in the smaller schools emphasised the importance of modelling and trialling practices alongside teachers to show the impact alternative practices could have. Two schools, in addition to this whole staff approach to professional learning, also led a one-to-one personalised approach to upskill teachers according to their needs;

In terms of professional learning, on top of that, each staff member I'm doing something different, something special with (Lisa, Kakariki School Principal).

Principal professional learning

All but one principal had completed the First Time Principals Programme. The programme provides both residential conferences focused on issues in educational leadership, and support groups and mentors. Advisors and principals currently enrolled were particularly supportive of the learning and support opportunities it provided;

If they had gone to the first time principal course they were onto it, and I think that did make one hang of a difference, they've still got to deal with the day-to-day running of the school and the relationships and all that, but they were certainly well informed, knew the pedagogy and knew where they were going and that's a great start (Rose, Advisor).

The three principals that had already completed the programme, however, considered it too big and too generic to meet their current needs. The programme's more personal and localised support offered through professional learning groups and the assignment of mentors to new principals was considered valuable by five principals and there was considerable praise for new principal professional learning days provided by the local Ministry of Education office.

One principal had completed their Master of Educational Leadership degree and two were currently working towards it. All suggested that the strong theoretical understanding of educational leadership that this study provided was of great benefit. They also emphasised how this knowledge had a practical use, particularly when faced with challenges;

I feel like the postgraduate studies have kept me one step ahead of the baying hounds, because the study in organisational learning has given me dialogue and discussion and the knowledge base to identify and have a plan to work through conflicts and dilemmas within the organisation. So it has given me a lot of the skills and the theory to support where I'm going (Pio, Tieke School Principal).

Community involvement

All schools in this study stated they enjoyed close relationships with parents and the wider community, who were happy to support schools in a number of ways including fundraising, maintenance or environmental improvement, and helping in the office or classrooms. As part of curriculum implementation, all principals and advisors recognised the need for gaining an understanding of the educational beliefs and wants of parents for their children's education. It was considered important to help develop shared vision and values, to develop closer educational partnerships between school and home, to help shape curriculum design, and to gain buy in to educational initiatives;

I think it's probably just made parents more supportive of the school because they agree wholeheartedly with what it is we are trying to do and they are in favour, you know how sometimes you can bring in something new and you hit a brick wall because people think are no we don't want that, it hasn't been like that at all (Kahu, Takahe School Teacher).

However, principals reported a number of common challenges to achieving this. Three principals suggested few parents were keen to be involved in consultation for curriculum development, three principals reported parents viewing the school as the educational experts who should be making curriculum decisions, two principals spoke of only particular social or cultural groups wanting to be involved, and two principals spoke of parents emphasising traditional ideas of education based on their experiences rather than current practices. To address these, five participant schools recognised the need to upskill and educate the community, many of whom may have little understanding of what one principal refers to as "teacher guff" (Rongo, Takahe School Principal). The benefits of upskilling were considered to make curriculum understanding and consultation more successful;

The more information that you give the community, the more they understand why you make the decisions that you do, and now it's just open table all the time so we don't often have disagreements because I think there's quite a nice harmony now (Lisa, Kakariki School Teacher).

To achieve this, schools included information and readings in newsletters, held information evenings, held different meetings for different community groups, and combined consultation with student events.

National standards

One consistently discussed further issue amongst principals was New Zealand's impending introduction of national standards in numeracy and literacy in 2010. There was a sense of the unknown among all participant groups regarding the impact their introduction will have on curriculum implementation. Three principals and two teachers saw it as an opportunity for clearer focus on essential learning areas, especially following misgivings over the revised curriculum's broadness;

When I taught in the UK I knew what the expectation was for the kids in my class, and I think it was so good for my teaching. I could focus my teaching, and we could do all the other interesting things as well, but I knew that this was important (Hiri, Kea School Principal).

Three others principals and two teachers as well as both advisors, however, spoke of the backwards steps they could take schools down;

The national standards have just thrown everything up in the air, they could change all that is required, who knows what they will change, but they could do. I mean are we going to go back and revert on all this stuff and go back to teaching to a test. That's a bit of a worry isn't it? (Kelly, Whio School Teacher).

Almost half of principal participants and one advisor also believed National Standards had the potential to devalue the key emphases of the revised NZC;

If they bring in standards that are so narrow and they publish them as league tables, my great fear is that this document [the revised NZC] will be forgotten (Rose, Advisor).

Regardless of opinion on their worth, what all but one principal believed it had done was take schools' focus away from curriculum change before implementation is complete.

These findings provide a comprehensive understanding of the processes these schools utilised in curriculum implementation and change, as summarised in table four below. The key findings that will be explored in the next chapter are that schools worked collaboratively with their communities to create a shared vision for their school curriculum that reflected local wants and needs and then focused on a collaborative commitment to its implementation. Most schools were focused on developing principal and staff capacity for reflective inquiry and all schools were utilising whole-school professional learning as the primary way to change pedagogical practices. However, there was widespread concern over the potential impact of the change in focus from curriculum implementation to national standards.

Table four: The processes of curriculum implementation and change

Principals (7 participants)	Teachers (7 participants)	Advisors (2 participants)
Establishing a need and direction for change		
A shared vision for change (6) Understanding community values(4) Meet current and future needs (5) Deep revised NZC understanding (5)	Deep revised NZC understanding (4) Perceived lack of progress / going round in circles (4)	A shared vision for change (2)
Capacity building		
Developing professional knowledge and beliefs (6) Developing a collaborative approach to curriculum change (5) Development of an inquiry process for curriculum development (6) Challenging existing beliefs (4)	Developing a collaborative approach to curriculum change (4) Development of an inquiry process for curriculum development (3)	Developing professional knowledge and beliefs (2) Developing a collaborative approach to curriculum change (2) Development of an inquiry process for curriculum development (2) Challenging existing beliefs (2)
System alignment		
Aligning management and leadership tasks (4) Aligning appraisal with inquiry (3)		
Changing pedagogical practice		
Focus on professional learning	Focus on professional learning	Focus on professional learning

to improve classroom practices (6) Use of externally-led professional development (6) Use of internally-led professional development (4) Transfer of knowledge to other learning areas (4) Use of professional reading (4) Principal modelling (3)	to improve classroom practices (6) Use of externally-led professional development (5) External facilitators valued for their experience and approach (4) Use of professional reading (4)	to improve classroom practices (2)
Community involvement		
Close community support (7) Need to gain an understanding of parents' beliefs and wants (5) Need to educate parents (5)	Close community support (5) Need to educate parents (4)	Need to gain an understanding of parents' beliefs and wants (2)
Impact of National Standards		
Taken schools' focus away from curriculum implementation (6)		Taken schools' focus away from curriculum implementation (2)

How contextual conditions have impacted on curriculum implementation and change

The primary aim of this study was to determine how the contextual factors of small rural schools have impacted on the implementation of the NZC and the main impacts as recognised by the participants are explored below.

Being the centre of the community

The close relationships with the community and the school's central position were both felt to help provide more real learning opportunities, and four schools had already developed programmes that utilised both the local environment and the people within it. Teachers and principals in these schools both believed that children could learn better from these contexts and people that students could relate to;

Teachers can put it into a more valid context so the kids are going to learn better than they would if teachers were just having to, being prescribed what to teach (Miriam, Hihi School Teacher).

The close relationships emphasised by five principals and four teachers was also used as a learning resource in three schools, providing additional in-class learning support to provide learning opportunities that wouldn't otherwise be possible;

That relationship we have with those parents, grandparents definitely, it's a resource I'd like to say, it's something you can just call on all the time. They are so supportive you know, it's probably the specialest thing for me (Rongo, Takahe School Principal).

School traditions were the only area of concern raised by two schools where community relationships potentially limited curriculum design. These communities were keen to maintain particular curriculum practices such as cross-country, handwriting and speeches. Principals in these schools believed, nevertheless, that the close community relationships enabled effective negotiation and communication so that these valued traditions could still be embraced by adapting them to better meet students' current and future needs.

Impact of the small staff team

Having a small staff team was considered advantageous in some ways by almost all principals, teachers and advisors, as the following advisor comment reveals;

If you've got a four teacher school and a switched on principal, and teachers who are doing the job well, I think you can fly because you're all on the same wavelength and you can get cracking (Rose, Advisor).

These benefits (along with the numbers of participants who commented positively on it) included a collaborative approach to curriculum development (four teachers, five principals, two advisors), shared core beliefs (three principals, three teachers, one advisor), having many informal moments for dialogue regarding students and their learning (two principals, four teachers), everyone having the opportunity to have a say (three teachers, three teachers, one advisor), working directly as a whole staff (five teachers, four principals) and of allowing decisions to be made and change enacted

relatively quickly and easily (two principals, two teachers, two advisors). These were expressed as advantages both in their own right and when compared to larger schools;

We're small, so it's easy to get consensus. A lot of teachers come from big schools, most of them say you just don't talk, because you don't want to still be there at six o'clock at night, whereas here, everyone talks, and everyone put it on the table. If we don't agree, we have these beautiful debates (Jane, Kakariki School Principal).

The small staff team was also viewed as presenting a number of challenges. Five teachers and three principals (all from the smallest schools) suggested it reduced the amount of support and ideas available at particular school levels as one or, in one case, two curriculum levels could be taught by just one teacher. Three principals and both advisors also believed it created a more limited pool for whole-school ideas and innovations. These two challenges are clearly explained by the Hoiho School Principal;

Just having numbers to talk and get different ideas for professional development and getting the professional conversations, they don't happen the same when you've only got one or two opinions, and when those opinions are at three different levels of the school, you haven't got that same ability to knock things around in quite the same way (Sally, Hoiho School Principal).

There was also the suggestion from two principals, one teacher and both advisors that small schools can suffer greatly when individual working relationships are negative. While a cohesive team was considered of great advantage, it was suggested that the impact of one negative person in a small staff could be considerable. Except for the principal of one school, these participants did acknowledge that these suggestions recognised potential problems rather than actual relationship problems present in their schools.

Impact of the principal's role

Small school principals recognised that working directly with a small staff team and with students aided their role in leading curriculum change. Working directly with a small team was considered by five principals to allow a shared, collaborative approach to

decision-making, which helped achieve a shared purpose and commitment to change and supported the development of a shared vision for curriculum change;

Everything we do as a team at this school, I actually don't make any decisions by myself, I either make them with my teaching team or board's team or parent team. All decisions are done collaboratively (Jane, Kakariki School Principal).

It also allowed principals to work closely with all staff both in professional learning and in classrooms. Four principals also spoke of working with individuals according to their needs to help support the adoption of new practices and beliefs.

Six of seven principals felt their direct or close classroom link provided an in-depth knowledge of the students and their needs. Four principals in the smaller schools also recognised their ability to trial new practices and see their impacts themselves, and four also believed their role provided an opportunity to model practices to staff and show how alternative practices could be implemented, helping develop a sense of 'we're all in this together'. The small school principal's considerable influence was highlighted by both advisors and two teachers, acknowledging the importance of good leadership, the benefits of a close working relationship, and their central role and responsibility;

In a small school leader is very influential, you know, they drive so much of what we do and it can go either way depending on who your leader is (Lisa, Kakariki School Teacher).

Limiting this positive impact was primarily the busyness that principals experienced, with two principals suggesting it limited their ability to model to the extent they wanted, four highlighting the reduced time they are able to give to their own leadership and pedagogical learning, and two principals believing their workload limited the time available for focusing on curriculum implementation;

There's quite a conflict there for me internally, just knowing how much I can be a role model, knowing how much I can't, and accepting what I can do and what I can't do (Sally, Hoiho School Principal).

Impact of the teacher's role

Small school teachers consistently believed their role created unique opportunities for curriculum change. Teaching in multi-level contexts provided opportunities for different-aged children to work together and learn from each other, which was particularly recognised as a strength in developing key competencies and values by five teachers (and two principals);

I think the atmosphere we have got in our school means we can do a lot more, I mean juniors can get a lot more involved in big stuff that they wouldn't otherwise. They will get a better grip on it and be exposed to more things and life skills than they would have if they were just doing it as a group of five-year-olds (Rapata, Kea School Teacher).

Four teachers also felt greater flexibility and freedom to create their own programmes to better meet individual needs, a view reflected by equal numbers of principals and one advisor;

What is special about the school is probably the way we approach learning, there's a lot of flexibility around learning for students and how we do it. Our terms are quite loose and we do try to cater for everybody (Paul, Whio School Principal).

Their isolation from other teachers at their level, however, was considered by six of seven teachers to being a barrier to being exposed to new practices or ideas for improving practice and opportunities to work with teachers from other schools were rare;

I'd love to sit alongside someone of my own level and say well how do I plan this, with this new level, and it would help me to get my head around curriculum and things like that. But you're very much left to your own devices in a small school – (Kelly, Whio School Teacher).

Impact of principal and staff turnover

Of the seven principals in this study, only two had been at the school when the revised NZC was released in late 2007. Teacher turnover was reported to be almost as high, with one school having a completely new staff team in this time and one school losing two sets of teachers (only the principal and teaching deputy principal remained). Both advisors suggested this was a typical scenario for small schools they were working with. Five principals, five teachers and both advisors recognised this turnover as a significant problem for curriculum implementation in small schools;

If you have a change of staff member, that's a third of your school that has changed. It makes a huge impact (Sally, Hoiho School Principal).

When teachers left, these participants suggested beliefs and practices developed over a period of time that supported the school's curriculum philosophy and direction were lost. They also considered that continuity was affected and suggested that inducting and developing new staff into the school's philosophy took time and focus from the ongoing process. The only positives expressed were a sense of unity of purpose for the remaining staff members in one school;

It's made Jane and I really make sure that we have a common understanding of what we hold strong because if we didn't think we would lose it and so we've always had to think, what will we do to educate our teachers about our philosophy (Lisa, Kakariki School Teacher).

In considering principal turnover, without exception, the five principals who had been appointed since the release of the revised curriculum reported schools where either nothing had been done with regards to curriculum implementation or where the curriculum philosophy had left with the principal;

It's a problem in schools this size that principals do leave and go to a larger school, and it can't stand on its own without you (Pio, Tieke School Principal).

This appeared an issue of great frustration for three of five teachers who had experienced it in terms of the changing views and philosophies that new principals

brought with them and the start-stop-restart nature of the change process. Both advisors also reported schools getting well along the path through principals driving everything, only for them to leave and find the school with nothing changed. These issues appeared particularly frustrating for the two schools who not only had new principals, but relieving principals in the interim periods;

In the last two years, we've had four principals. We've been looking for leadership, and without knocking anybody, things haven't happened, we've had relieving principals, new ones that have had to settle in, old ones that need to go, so for us it feels like we've been marching time, we've been waiting and waiting while things have kept being shuffled to the side (Kelly, Whio School Teacher).

Impact of the small school budget

All schools in this study were operating on tight financial and staffing budgets. Five principals and three teachers suggested this impacted negatively on curriculum implementation primarily by limiting professional learning opportunities, including being unable to attend conferences, employ specific educational advisors, or release staff to visit and work with other schools. As this participant explains, this was believed to impact on teachers' ability to be exposed to and adopt new practices;

People don't learn new stuff unless they are exposed to it, you don't get exposed to it unless you can see it in action. In a small school, you cannot generate decent PD budgets out of the operating grant, because PD is expensive (John, Hihī School Principal).

What six of seven small rural teachers desired most in overcoming the limitation of small school teaching was the opportunity to work with teachers from others schools;

If we could fund our teachers to go out around the place and see what other schools are doing, and being a part of those networking meetings and hear those sort of things, I think that would be really powerful (Lisa, Kakariki School Teacher).

However, the consistent response was the cost of this made it prohibitive.

In summarising these findings regarding the perceived impact of contextual conditions on NZC implementation, participants suggested that the local community provided relevant and supportive opportunities for curriculum development and learning, and the small staff teams offered an effective way for working collaboratively to both develop and implement the curriculum. Principals, through their direct involvement with students and their closeness to their staff team, were able to have a significant impact on NZC implementation. Both teachers and principals did however suggest that their small staff team limited exposure to a wide range of new practices and ideas, and that the negative impact of teacher and especially principal turnover on NZC implementation was considerable. These issues will be explored in the next chapter and table five provides a summary of the key findings for this research aim.

Table five: How contextual conditions have impacted on curriculum implementation and change

Principals (7 participants)	Teachers (7 participants)	Advisors (2 participants)
Centre of the community		
Local relevant learning contexts (4)	Local relevant learning contexts (4)	
Community support for learning (3)		
Impact of a small staff team		
Collaborative approach to curriculum design (5)	Collaborative approach to curriculum design (4)	Collaborative approach to curriculum design (2)
Working together as a whole staff (5)	Informal moments for dialogue (4)	Quick enaction of change (2)
Reduced ideas and support (3)	Working together as a whole staff (5)	More limited pool of ideas (2)
More limited pool of ideas (3)	Reduced ideas and support (5)	Potential problems of negative relationships (2)
Impact of the principal's role		Impact of the teacher's role
Principals (7 participants)		Teachers (7 participants)
Shared, collaborative approach to decision-making (5)		Holistic, supportive learning environment (5)
Ability to work with individuals (4)		Flexibility and freedom for own programmes (4)
In-depth knowledge of student needs (6)		Limited exposure to new practices from other teachers (6)
Ability to model practices (4)		

Reduced time for own learning (4)		
Impact of principal and staff turnover		
Principals (7 participants)	Teachers (7 participants)	Advisors (2 participants)
Principal and teacher turnover a significant problem (5) Loss of philosophy or continuity (5)	Principal and teacher turnover a significant problem (5) Creates sense of frustration (3 of 5)	Principal and teacher turnover a significant problem (2) Loss of philosophy or continuity (2) Implementation progress lost (2)
Impact of the small school budget		
Lack of funds limited professional learning opportunities (5)	Lack of funds limited professional learning opportunities (3) Limited opportunities to work with other teachers (6)	

Curriculum implementation support

The final aim of this study was to identify the support available to schools for NZC implementation. Participants in this study made use of a range of sources of support to aid with implementation of the NZC. These were school cluster groups, informal school support, Ministry of Education principal support days, leadership and management advisors, and the Education Review Office. The perceived benefits they offered to participants in this study are outlined below.

School cluster groups

All participant schools were members of wider school clusters, based on school location or shared professional development contracts. Both the amount of contact between schools and the value principals placed on it varied greatly. Four principals placed great value on these clusters in helping reflect on and develop school curriculum while two others suggested that benefits were limited. All but one teacher reported on their benefits and potential;

That collegial support, outside our little group of three, is amazing, you get so many ideas, it confirms lots of things you are doing but it also gives you lots of ideas for new ways to carry on (Stephanie, Hoiho School Teacher).

Three schools had run teacher only days in collaboration with other schools, and, primarily through professional development contracts, teachers were using opportunities to share and discuss their curriculum development and pedagogical practices. The overall benefits of these wider partnerships were viewed as the sharing of ideas, reflecting on others' successes and their potential application, and the ability to get more teachers at the same level together to discuss common issues and potential solutions. Teachers almost universally desired further opportunities to work with other schools;

It just shows you what is happening outside of our own isolated little box, I think it's really important, I think that's been really powerful because whether you, whether I personally agree on what they're doing or not it gives another perspective and I found that really useful (Lisa, Kakariki School Teacher).

Both advisors had been actively involved in facilitating principal cluster groups and teacher only days and cluster groups were considered their most effective tool for supporting change in small schools, due to active partnerships between principals;

There was a kind of trust and openness, and I don't know if that happens in every team, but it certainly worked with one rural team where they were used to working together, used to sharing and I think because of the openness I think the cluster probably moved the furthest along because there was some stunning work. In fact I have to say that probably more advanced than I saw in some of the big schools that I was working with (Rose, Advisor).

Informal school support

Five principals made use of close relationships with other principals and considered them as providing a beneficial informal support opportunity. The support identified included being able to bounce ideas off each other, to discuss and consider options for managing challenging situations, to provide moral support as someone who "knew what it was like", and considering the journeys, experiences, and successes of other schools as a source for potential ideas;

We always chat about different things, getting ideas and supporting each other. It is quite good, I can ring Jim up and say this is my thoughts, what do you think about this, he will flick me something or we'll discuss ideas (Paul, Whio School Principal).

Ministry of Education principal support days

The Ministry of Education organised part-day introduction courses to the revised curriculum and four principals and two teachers had attended them. Their benefit, however, was questioned by all four principals and both teachers who attended due to their broadness in attempting to cater to all schools, and in the lateness of their provision;

Professional development was behind the times, you know, I think they were too slow off the mark. And when they did what they said was a year old (Jane, Kakariki School Principal).

Although not the official intention, two principals and both teachers gained affirmation of the progress they were making;

I went in there and I found it really boring because suddenly, they were just starting these principals, and we were way ahead of that and I think that was my first indication, that the work we'd been doing in school was way ahead of what was happening in Hamilton (Stephanie, Hoiho School Teacher).

Leadership and management advisors

Ministry funded leadership and management advisors were utilised by four schools in some capacity, primarily in the early days of curriculum implementation, both through cluster group facilitation and for one-to-one support. What was considered of most benefit to principals was their considerable experience as principals and in providing ideas, guidelines and models for how to go about beginning curriculum implementation. Advisors also spoke of their key role in supporting understanding of the theoretical underpinnings of the curriculum and its leadership needs and the practical support of facilitating and empowering principals to lead the process for themselves;

I did a lot of work on the leadership, working together. It's really understanding the role of leadership, and the fact that everybody is a leader in the school, and empowering team leaders and other people, looking at curriculum leadership and what does that mean (Rose, Advisor).

The Education Review Office

Three schools had educational reviews from New Zealand's Education Review Office (ERO) early in their curriculum implementation journeys. All principals found the reviewers highly supportive, providing constructive feedback on the steps taken thus far, explaining the official view of developing a school curriculum, and on offering advice for possible next steps;

We had a couple of proactive reviewers who were helpful in suggestions on how to move forward, this is what should be driving everything, and once you understand what should be driving everything, then it did make things a lot clearer (John, Hihi School Principal).

In summarising these findings, while principals and teachers generally believed the ability to share and discuss ideas with cluster groups, professional development groups, other teachers and principals and advisors was beneficial to NZC implementation, the support provided by the Ministry through support days and documentation was considered ineffective. There was also a consistent desire for teachers to have further opportunities to work with other schools. These findings are summarised in table six below.

Table six: Curriculum implementation support

Principals (7 participants)	Teachers (7 participants)	Advisors (2 participants)
Support utilised (and perceived effectiveness as yes or no)		
Principal cluster groups (4 yes, 2 no)	School / professional development cluster groups (6 yes, 1 no)	First Time Principal programme and mentoring (2 yes)
First Time Principal programme (3 yes, 2 no) and mentoring (5 yes)	Ministry support days (2 no)	Use of advisors (2 yes)
Informal school support (5 yes)		
Ministry support days (4 no)		
Leadership advisors (4 yes)		

Education Review Office (3 yes)		
Further support considered beneficial		
Required a clearer implementation model (5)	Further opportunities to work with other schools (6)	
Additional implementation time (5)		

As can be seen from these findings, the qualitative interviews utilised for this study have provided detailed and comprehensive information for achieving each of its aims. From these findings, a number of key themes have emerged and the next chapter considers these themes in detail to determine their significance.

5. Discussion

As the findings in this study of the impact of small rural school contextual factors on the implementation of the revised New Zealand Curriculum (NZC) reveal, although the issue is complex and varies between the principal and teacher participants in seven small rural schools, there are a large number of common perceptions and beliefs. This chapter considers these key findings in comparison to the relevant literature explored in chapter two (literature review) to provide a more comprehensive understanding of the issue. This discussion begins by considering the secondary research questions focused on understanding participant's perceptions of the NZC and their small rural school contexts. It then combines the findings and literature from all secondary research questions to consider the primary research question, how have small, rural school contextual factors impacted on the implementation of the NZC?

Curriculum perceptions

This focus on curriculum perceptions compares the opinions of the principal, teacher and advisor participants in this study with current understandings of curriculum design to consider the theoretical and practical underpinnings of participant perceptions on the emphases of the NZC.

The opinions of the majority of principal, teacher and advisor participants regarding the previous New Zealand Curriculum Framework (NZCF) considered it as encouraging coverage rather than a curriculum focused on students' specific needs. These comments not only reflected common perceptions in research (Irwin, 1999; McGee, 1997; O'Neill, 2005a) but highlighted principles that most closely relate it to a standardised management paradigm of curriculum design (Henderson & Hawthorne, 2000). These findings reflect those of McGee (1997) who suggested the NZCF encouraged a focus on coverage teaching rather than what students needed to learn, and, Harold et al. (1999) who reported of decreased professional autonomy and increased pressure.

Conversely, the NZC was considered quite differently and almost all participants in this study supported its educational philosophy and its emphases (Ministry, 2007a; Ministry,

2007b), replicating Cowie et al.'s (2009) findings from a range of New Zealand schools. The aspects most emphasised by participants were its flexibility for meeting the local needs of students, its emphasis on the development of more holistic life, learning and social skills, and its emphasis on a collective responsibility for design and implementation. As emphasised by this teacher participant, of most importance it provided a curriculum appropriate to local needs;

it meets the needs of the community in the school, it is relevant to the school's learning and environment, it is flexible to different schools based on their backgrounds and needs (Kelly, Whio School Teacher).

Principals and advisors consistently viewed it as providing a catalyst for changing current practices, and the majority of teachers, principals and advisors believed that the NZC was built on new educational beliefs compared to the previous NZCF, beliefs that may require some considerable changes from current practices. These participant perceptions closely reflect the student-centred curriculum priorities proposed by Preedy (2002) and Henderson and Gornik (2007). Henderson and Gornik (2007) suggest these factors promote the development of students' personal, academic, social and societal knowledge according to their needs, providing an education that may better serve students in both their current and future lives, a benefit mentioned by almost every participant. These perceived benefits also offer the potential to overcome the negative impacts of the previous NZCF highlighted above as participants' use of descriptors such as ownership, relevance, flexibility, meeting needs, student-centred, authentic, relationships, engaged, process and excitement reveal.

Although this curriculum still represents a top-down approach to curriculum change in the respect that it is a Government mandated change reform (Hopkins, 2007), and it still maintains some aspects of a standardised management paradigm such as its separate learning areas and the division of learning into specific general achievement objectives and levels (Cowie et al., 2009; Irwin, 1999), almost all principals and advisors supported Fullan's (2003) suggestion that such a mandated reform helps to provide a framework to set schools on a path of reform, providing both a catalyst for schools to examine their curriculum and to consider alternative beliefs and practices for how they may better

meet student needs. Thrupp's (2005) concerns over tight government curriculum control in England and elsewhere and Bell's (2004) beliefs that externally directed change can lead to narrowly focused change appear unwarranted for the NZC as, in the opinions of this study's participants, New Zealand school stakeholders appear to have been empowered to design their own curriculum most appropriate to local wants and needs, a freedom that may help ensure curriculum change is wanted, designed, supported and enacted by schools (Dimmock & Walker, 2004; Fullan, 2001; Kotter, 1995) and that effort and commitment is more likely to be sustained (Hargreaves & Fink, 2006).

Although most participants embraced this flexibility, four participants questioned whether the revised NZC framework had become too broad, potentially failing to provide sufficient depth and clarity to aid implementation at the classroom level. There was also concern over allowing schools to develop curriculum that may give over-emphasis to particular learning areas or philosophies. These same concerns were reported in other New Zealand schools by Cowie et al. (2009). Henderson and Hawthorne (2000) suggest that student-centred curriculum places considerable demands on those involved in curriculum implementation to both accept new challenges and responsibilities and to accept the moral responsibility for thinking and acting in ways that best serve students' interests. Increased freedom therefore may come with increased responsibility for creating local-level solutions and requiring teachers and principals to learn to work in ways they may be unaccustomed to doing, a view captured eloquently by this one principal in this study;

Within the classrooms it could be more work in the respect that things aren't so prescribed, and requires more thinking laterally, for them to come up with more creative ideas, but may be too they might just move away from the textbook teaching (John, Hihi School Principal)

This discussion on small rural school principals' and teachers' and leadership advisors' perceptions has suggested that the revised New Zealand Curriculum represents a new curriculum philosophy for New Zealand schools and one that these participants are positive about. It has also provided support for the suggestion that the NZC represents a student-centred curriculum that is focused primarily on students and how schools can

meet their needs in the ways most appropriate to their context. The findings related to the small rural school context are therefore discussed next.

Rural school contexts

This study was based upon interviews with seven principals and teachers in small rural schools in one New Zealand county, and two Ministry funded leadership advisors. The aim of investigating their context was to understand the contextual factors that have an impact on these schools and the staff working within them. Current literature on small rural schools suggests these schools present both unique opportunities and challenges. The reported challenges include managing the dual-role of teaching and leading (Clarke & Stevens, 2006; Dunning, 1993), the broad range of responsibilities principals face (Barley & Beesley, 2007; Livingstone, 1999), the limited leadership experience of principals (Barter, 2008; Clarke & Stevens, 2003), the multiple teaching levels (Southworth, 2004) and limited capacity of small staff teams (Wilson & McPake, 2000). Reported opportunities meanwhile resulted from principals' closeness to and knowledge of both staff and students (Richards, 2008; Southworth, 2002), their up-to-date knowledge of curriculum and pedagogy (Wilson & McPake), their potentially greater influence on student outcomes (Southworth, 2002; Wilson & McPake, 2000), and the close relationships between principals, staff and their wider communities ((Barter, 2008; Clarke & Wildy, 2004). Two key issues emerged from the findings of this study which were discussions on the contextual conditions of these schools in general, and the roles of these small school principals and teachers. These themes are discussed below.

Contextual conditions of small rural schools

When discussing the contextual conditions within their schools, the majority of participants consistently spoke of a caring culture among students, teachers and the community, the school's rural and community focused values, and the considerable support from parents and community. These reflect findings from studies elsewhere (Barley & Beesley, 2007; Barter, 2008; Clarke & Wildy, 2004; Richards, 2008) which suggests these are a number of universal characteristics of small schools and their communities rather than factors unique to New Zealand.

Most principals and teachers also considered the school as central to the community, and suggested that this led to raised expectations of them as both staff and community members, supporting findings by Clarke and Stevens (2006) and Gilbert et al. (2008). While not finding the need for principals to fit the cultural norms of their communities as Clarke and Stevens (2006) found, many principals and teachers did emphasise their feeling of needing to be ever-present to deal with issues and community expectations, both large and small. Being central to a community therefore appears to provide increased benefits through values in terms of partnerships focused on student learning and increased personal and school expectations.

One aspect of the contexts of five small rural schools in this study that appears not to have been reported elsewhere is the desire for parents to send their children to these small rural schools rather than urban schools that may be nearer. With the majority of participant schools being within 15 minutes of a local provincial town or larger city, these schools spoke of the draw card that their small school contexts offered, including rural values, the sense of family, learning opportunities, small class sizes, personalised learning, high application from teachers and a flexible approach to learning. As one principal in this study states;

Those who choose to come out of town, they have made a choice to come to a smaller school because they want those rural values, what they perceive as being rural education. It's not just a matter of we are in this area, it's a matter of choice. And that makes a difference (Sally, Hoiho School Principal).

This lends some support to Schmidt et al.'s (2007) suggestion of education and society increasingly embracing small school values. There does, however, appear a justified concern of the impact of growth from being considered the school of choice on these very characteristics, particularly as school and class sizes grow. Maintaining these small school values, Wright (2003) believes, requires schools to build their curriculum around rural values and the implementation of the NZC potentially offers schools the opportunity to evaluate and align their values and programmes with the needs of students and wishes of the community.

The small rural principal's role

All principals spoke of the challenges of managing their considerable and varied workload, supporting findings of other small school leadership studies (Barley & Beesley, 2007; Murdoch & Schiller, 2002). However, this study varied from earlier New Zealand studies (Hogden & Wylie, 2005; Livingstone, 1999; Wylie, 1997) in the relatively low concerns of these principals regarding the requirements placed on them by Ministry directed administrative tasks. Although all principals in this study still spoke of a high workload, it was not generally attributed to Ministry requirements but rather to their multiple responsibilities, their role as the leading learner, dealing with crises or unexpected issues, or to context-specific challenges of improving schools with significant needs. One possible reason for this, suggested by one of the advisors in this study, is the relative stability in the New Zealand education system in the current decade. With the requirements of school self-management now established, principals may have increased opportunities to focus more on student-focused leadership rather than developing and managing systems. Four of five teaching principals did however consider their role required a predominate focus on leadership and management rather than on teaching. This suggests that rather than a dual-role for teaching principals (Dunning, 1993; Murdoch & Schiller, 2002), these principals serve primarily as a principal, with a secondary, and often interrupted, role of classroom teacher. This situation has the potential to create both a conflict of duty among principals and a conflict of responsibility between school and community (Ewington et al., 2008; Starr & White, 2008), a conflict expressed clearly by this principal participant;

That conflict between knowing that this is really important to get going and to have done and to have it activated and working in the school, but knowing that you've also got to do the classroom stuff really well to, because that is what you will be first noticed on, that's what the parents see (Sally, Hoiho School Principal).

Overall, though, principals in this study believed the role was challenging but on the whole satisfying, reflecting a positive change in principal's perceptions from Livingstone's (1999) earlier New Zealand study where small school principals overwhelmingly felt

stressed with almost half unlikely to remain in the position. Unlike Murdoch and Schiller (2002), this current study suggests small school principalship, although challenging, is realistic, achievable and sustainable.

The small rural teacher's role

The small rural school teachers in this study all considered their role rewarding, reporting positive relationships with students, staff and the school community, and a good knowledge of the needs of all children. Just over half also spoke of the flexibility they enjoy in their school and their autonomy to plan and teach in ways they considered most appropriate. These findings support previous findings by Richards (1998, cited in Richards, 2008) and OFSTED (1999) that suggest the conditions in which small rural teachers work provides positive conditions for meeting students' needs. Additionally, while Southworth (2004) suggested teaching mixed-age classes created additional challenges, there was little suggestion of this from these small rural school teachers. In fact, as this participant suggests, it was frequently seen as an additional opportunity for learning;

We cross group everyone so we all change classes, kids ranging from 5 to 12 all working in the same groups, the five-year-old are not learning the same things, but they will get a better grip on it and be exposed to more things, life skills and help than if they were just doing it as a group of five-year-olds (Rapata, Kea School Teacher).

Like small school principals, however, all small rural teacher participants considered they faced multiple responsibilities that were greater than in larger schools. Five of these teachers also felt additional pressure from being the only one at a particular teaching level resulting in increased planning. Such additional demands, as Barter (2008) reports, may result in a reduced focus on their primary role as teachers.

These discussions regarding the contextual conditions of these small rural schools have both supported a number of themes previously reported and have highlighted issues that differ from existing research. These lend support to the suggestion that the small, rural context in this study, as elsewhere, is unique in a number of ways. Of most importance

for this study, however, is not the conditions themselves, but rather their impact on NZC implementation, and this impact is discussed below.

Curriculum implementation and change

A number of common themes emerged from the findings regarding these small rural schools' approaches to NZC implementation. What also became apparent through this study is that the small rural school context shaped and influenced all of these in some way and attempting to divide the two created a sense of artificiality. This discussion therefore, aims to both examine the change processes used for NZC implementation and to consider how they were shaped by the small rural school context.

The need, direction and scale of change

Creating a vision to focus NZC implementation was the point where all but one school began curriculum implementation. This process of developing a vision was considered by these schools to require considering current school strengths, the needs of their students, the wishes of the community and the emphases and opportunities of the NZC. In two schools, there was also a focus upon particular educational philosophies. This represents a quite comprehensive analysis from these small rural schools (Fidler, 2002; Foskett, 2003) that involved teachers, principals and the community, but was one that principals and advisors in particular supported in helping ensuring the vision reflected the local context. A vision developed this way, Dimmock and Walker (2004) believe, may help ensure that it is a direction that all those involved believe in and confirmed Fullan's (2008) proposition of a meaningful vision being a reflection of a quality collaborative process. With school's own visions being created for the purpose of directing NZC implementation, schools appeared to avoid Lumby's (2002) suggestion of co-created visions become too broad to be meaningful. There also appeared little concern from these schools needing to focus on aligning their school vision with that of the Ministry as Bell (2004) suggests mandated change often requires. This may be as a result of principals, teachers and advisors overwhelming supporting the emphases of the NZC and embracing its flexibility for local curriculum design. In this way, there may not have been the conflict in views or interests that Bell (2004) reports elsewhere.

Although these six schools had spent considerable time developing their vision, and in fact two schools with principals new in 2009 were still in the process, the processes that schools had then adopted to help achieve this appeared less well defined. Four teachers, in fact, spoke of subsequent NZC implementation being accompanied at times by feelings of going round in circles. This raises concerns considering Davies (2007) assertions that a vision that cannot be translated into action is unlikely to have a significant impact. The majority of schools appeared to be utilising an approach similar to Davies's (2004) approach for planning based on strategic intent, using the goals of the vision as a way to direct aspects of future professional learning and capacity building and to shape current professional development.

Three schools, two with experienced principals who had been in their schools for the whole NZC implementation period and one who had previously been a non-teaching deputy principal for six years with responsibility for curriculum development, had developed more comprehensive frameworks for more proactively leading this evolving curriculum implementation, one of whom had adopted Dimmock and Walker's (2004) backward-mapping model by considering first and foremost the needs of the students. With five principals and two teachers believing a more comprehensive implementation model would have supported NZC implementation and both advisors reporting being frequently asked for support in this area, these findings suggest that less experienced principals in this study may have found the flexibility for implementing a school curriculum a considerable challenge. Fullan (2001) suggests that when change initiatives are unclear, teachers are likely to respond negatively and Hargreaves and Fink (2007) believe that poorly supported policy changes are likely to end in failure. For less experienced principals leading complex NZC implementation, therefore, it appears that comprehensive initial support is essential. It may also, however, reflect a general challenge faced in schools of different sizes in New Zealand reported by Cowie et al. (2009) of "exploring the linkages between the front and back end of the curriculum" (p.13), that is exploring the links between a school's vision and values and what they may mean for practice for improving learning areas and the key competencies.

With consideration to the scale of change, five schools appeared to be, using Mayeski et al.'s (2000) definition, engaged in a fundamental process of change. Conversely, the two

schools with more experienced, longer serving principals appeared to take a more incremental approach of building upon recent school and teacher development. These findings reflected those of Cowie et al. (2009) between early-adopter and late-adopter schools. As they explain, “where schools recognised alignment between the intent of the NZC and their previous work on their school vision, together with the focus on any professional development contracts in which they had been engaged, they were able to leverage the knowledge gained to support their work with curriculum implementation” (p.45). Conversely, schools with newer principals, and particularly those that had been through particular challenging situations, although at different stages of NZC implementation were focused on changing multiple aspects of their school system, of building capacity at different levels, of exploring and developing new pedagogical understandings and practices and of challenging and changing the beliefs and values of those within it. These schools were focused on changing not just materials, behaviour or practices, but to alter both school and community member’s beliefs of how the needs of students may best be met through their school curriculum. Such a deep approach to change, Fullan (2008) believes, is more likely to be both lasting and effective. However, and as discussed above, its complexity makes it significantly more challenging (Fullan, 2001), requiring, Waters et al., (2003) believe, principals to have a clear understanding of the scale of change required and how this change can be led appropriately. The newer principals in this study attempting fundamental change therefore may face considerable challenges and require comprehensive support in its management, a view confirmed by Cowie et al. (2009).

Collaboration and partnership

Curriculum development in all seven small rural schools appeared to be a collaborative activity, involving principals, teachers, parents, and in some schools, the wider community, represented by a sense of togetherness for NZC implementation in these small rural schools. There was evidence of a focused effort to understand and incorporate the differing views and beliefs of these stakeholders into a shared vision for school curriculum, a process that Foskett (2003) believes is critical to successful change. This approach is vividly illustrated in this principal’s comments;

With my staff we negotiated what teaching meant to us, we had written job description that are linked into our beliefs about teaching, and what we should be seeing in the classrooms, and we consulted with the community, and the board and we brought in all those things, those visions and values and started pulling in all the little bits and pieces, all the tools that we wanted (Hiri, Kea School Principal).

Schools reflected Fullan's (2003) belief that professional communities are critical for implementing large-scale reforms, and in five of these schools parents were also considered a part of this community. Lambert (2003) suggests that professional communities can be enhanced through active involvement of all with an interest in improving student outcomes. These findings therefore suggest that these small rural schools had created conditions conducive to change. Lambert (2003) also suggests schools need to actively focus on building such communities. Schools in this study, however, reported that collaborative working practices were often already well developed and utilised amongst their staff, which may reflect the contextual working conditions of small schools (Southworth, 2004; Wilson & McPake, 2000), as this participant elaborates;

In terms of the context of a small school, the great thing is the communication, we talk a lot. We have a really good collegial system in the school (Stephanie, Hoiho School Teacher).

Five schools recognised the need to develop more curriculum-focused partnerships with their communities and to develop the wider community's knowledge of current educational practices and ideas so they may be more effectively involved. This wider capacity building, Gurr et al. (2006) believe, may serve to generate further positive conditions for working together to improve student learning and, although many schools were still in the process of wider capacity-building, a number spoke of the increasing involvement of parents and wider community members in aspects of curriculum implementation. The majority of principals also spoke of being equally involved in this collaboration, working alongside their teachers as part of this professional collaborative community, as this principal highlights;

Everything we do as a team at this school, I actually don't make any decisions by myself, I either make them with my teaching team or board team or parent team. All decisions are done collaboratively (Jane, Kakariki School Principal).

These findings support those of Wilson and McPake (2000) who found that principals in small Scottish schools led complex change in the same manner. James et al. (2007) found, in a study of 18 high achieving Welsh primary schools that such collaborative practice contributed substantively to their success. With all schools in this study utilising a collaborative approach to curriculum development, James et al.'s (2007) findings would suggest that that such success may also be achieved in these small rural schools. Another critical aspect of successful collaborative practice that James et al. (2007) recognise is reflective practice and, as its use represents another key finding of this current study, it is this that is focused upon next.

Developing and utilising reflective inquiry

Developing the school-wide capacity to inquire into both student's strengths and needs and teacher's practices was a priority for six of the small rural principals in this study and was recognised as important by over half of teachers. It was considered to provide knowledge on student learning and teacher practices that could be utilised alongside the shared vision as a basis for curriculum design, rather than just adopting and implementing alternative practices. In four schools, principals suggested staff were still developing the skills to be able to be reflective and use evidence. This, however, was considered an important process to go through, as highlighted here;

If you want your teachers to practice reflection in action then you need to develop the skills within them (Pio, Tieke School Principal).

Timperley et al. (2007) found that such inquiry approaches are more likely to have a positive impact on student learning as they are most likely to develop appropriate professional knowledge. These schools, therefore appear to be developing and utilising a powerful tool for both identifying whole-school needs to be addressed and for directing teacher professional learning accordingly (Earl & Timperley, 2008; James et al., 2007; Kruse & Louis, 2009). Inquiry though, did appear primarily focused on the most

summatively assessable learning areas of literacy and numeracy. There was less evidence of its use for other learning areas or for values and key competencies that relied on more formative evidence. Claxton (2002) suggests that this may be because this learning is harder to recognise and evaluate. However, considering most schools are still developing the capacity to be reflective, it may also be that schools have begun in a learning area that it is easier to reflect upon.

One limiting factor of the effectiveness of reflective inquiry identified by five participant schools was the small number of staff involved which was considered to limit the range of ideas and experiences to draw upon. In this respect it supports previous findings on system-wide curriculum change by Wilson and McPake (2000). In particular, the lack of colleagues at a particular teaching level was considered a consistently negative aspect of teaching in small schools by six of seven teachers, preventing the discussing, developing and evaluating of classroom practices and solutions appropriate to a specific age group. Overcoming this, Starr and White (2008) believe, requires a more collaborative approach to capacity building between small schools, an approach endorsed by Robertson (2005) who considers it a highly effective way of solving local and common problems. Teachers in this study, however, did not always have regular opportunities for this, and in fact was an aspect of support requested by six of seven teachers in this study.

Establishing practices of inquiry was recognised as a considerable challenge by both principals and teachers in four schools due to teachers needing to adopt practices they were unaccustomed to, as highlighted by this principal;

There was a huge impact on implementing the curriculum when people had never questioned what they were delivering or assessing it (Pio, Tieke School Principal).

As MacBeath (2009) notes, reflective inquiry is not something natural or comfortable for many teachers and principals, and this was supported in many schools. Where teachers were unaccustomed to doing this, principals commonly reported initial resistance to the process and a defensiveness of current practices. This reaction is widely reported in current change literature (Argyris, 2002; Heifitz & Linsky, 2002), and as Heifitz and Linsky

(2002) believe, is a natural reaction to a process that asks individuals to question aspects of their beliefs and even, perhaps, their identity as teachers. However, reflective inquiry in these schools was also seen by over half of principals and two teachers as a way to overcome this resistance, as this teacher clearly describes;

Change is good, you always need to look at new ways to do things, and I think it's part of life and education... Sometimes especially to begin with, people get frightened, and say I'm not going to do that, why should we have to do that, it's always worked well. But when you start looking closely at things that's when you can see different ways to do things and once you start trying then you can see the next step and what else you can do (Emiri, Tieke School Teacher).

In almost half of schools, teachers and principals also reported that such concerns could be overcome through the collaboration and support of other staff. These small rural schools, in fact, reported a number of factors synonymous with being a professional community and using this community to support and learn, and this is discussed below.

Professional community

A collaborative, trusting and caring culture was reported by principals and teachers in all but one of these small rural schools as helping to overcome resistance and concerns such as those identified above, in generating new ideas from within, and in learning together through informal support, honest dialogue and professional learning. Four principals also spoke of the use of evidence and reflective inquiry to help recognise problems and needs and to consider appropriate solutions. These features, Kruse and Louis (2009) note, are all important factors of professional communities. Perhaps unique to small schools, having teaching principals collectively evaluating and reflecting on their own professional practice and its impact on students was also considered make other staff more receptive to changing their own practices, through modelling, honesty and openness. Considering the support and value of each, when staff trust each other, Park et al. (2005) believe they are likely to be more honest and reflective, more receptive to change, and Tschannen-Moran et al. (2000) add, more likely to trial new practices. Collaboration is also likely to increase in its effectiveness as a result (James et al., 2007; Tschannen-Moran, 2001).

Dialogue may then allow ideas, practices and strategies to be developed (Robinson & Lai, 2006) and reflective practice may ensure that these ideas are most appropriate and continually improved through cycles of reflection (Cardno, 2003; Timperley et al., 2007). Although some of these processes, most notably inquiry learning, were the focus for capacity building in these schools, collaboration, trust, care and support and open dialogue were commonly already considered present. This suggests that these small rural schools may already have in place many processes associated with professional communities. As such, they may enjoy an environment that Kruse and Louis (2009) believe can have a positive impact on student, teacher and organisational learning. This may therefore help lead to more effective and successful NZC implementation and change.

Teacher and organisational learning

All schools in this study utilised whole-school professional learning to change pedagogical practices and the majority was through externally-led contracts. Although Fullan (2003) cautions against an over-reliance on externally-led development, both teachers and principals were supportive of them and considered that they provided an ideal platform from which to evaluate and improve current practice as this principal suggests;

It [The ICT contract] is inclusive and it excites my teachers to want to use it and to do something exciting with it. I think it was the best lead into the curriculum of anything, it couldn't have happened at a better time (Hiri, Kea School Principal).

The majority of those involved with contracts also suggested that they were able to be both shaped by schools to meet their particular needs and that alternative practices were often generic in nature and could be applied to other curriculum areas. These findings may reflect the quality of the professional learning contracts that schools were involved with. They utilised many learning strategies viewed as effective by MacBeath (2009), including peer observation, inquiry, discussion and dialogue, professional reading and reflection on practice. They also appear to offer development of both pedagogical practices and broader teacher and professional community capacity (Kruse & Louis, 2009; King & Newmann, 2001; Robinson, 2006).

In-school led professional development was used in four schools and professional reading, outside of external contracts, was a regular practice in two schools. However, little reference was made to the exploration of more fundamental education questions as proposed by Atkin (2008) such as what do students need to learn and how do they learn best. Hipkins (2007) believes that for fundamental curriculum change that challenges and improves upon current perceptions of teaching, learning and knowledge, teachers need the opportunity to address and consider these bigger questions through focused professional reading and dialogue, and through experimentation. As Robinson and Lai (2006) suggest, open and honest dialogue on theory and practice provides the means for describing, explaining and evaluating different ideas and beliefs, and for using this information to recommend agreed improvements. It may also help schools move from envisioning to action, a concern previously discussed, as Atkin (2008) believes considering fundamental questions provides clarity in where to focus change. Many of these schools, therefore, may be missing the opportunity to revisit and review teachers' fundamental understandings about teaching and learning, the result of which may be a curriculum that continues to support established practices rather than consider how student needs may be better met. Perhaps, however, with many schools still involved in creating school vision and values, developing capacity such as skills of reflective inquiry and investigating new NZC aspects such as the key competencies, schools are currently focused on other priorities.

Putting learning in context

Bauch (2001) believes that rural school change should be focused upon the joining together of schools and their local communities in the creation of something that has meaning and relevance for students. This suggestion is a key emphasis of the NZC for all schools (Ministry, 2007b). There is evidence from this study that these small rural schools were focused on achieving this through two different paths, contextual learning and learning support.

Small rural communities, Bauch (2001) suggests, are well positioned to serve as effective learning environments with regards to community, environment and history. It is evident that most small rural schools in this study are increasingly using their communities as a

basis for some meaningful learning opportunities as part of their school curriculum, as this participant highlights;

Our children are now learning about authentic things where they live, their place in the community, our history around here (Pio, Tieke School Principal)

Claxton (2002) considers such contextual learning may result in greater student engagement and broader, more holistic learning opportunities. Hipkins (2006) also believes that, through authentic learning opportunities, students may better recognise the relevance and need for learning.

The close, supportive community among and between students, teachers and the wider community within small schools was considered by five schools as providing additional opportunities for the development of key competencies, values and life skills. The mixing and cross-grouping of children and working with different teachers, support staff and parents was a common approach that provided increased opportunities for holistic learning, a finding that presents a quite different view from Southworth (2004) who suggested that multiple level teaching creates challenges for teaching and learning. Although, as Hipkins (2006) cautions, there is the danger of assuming that holistic learning is occurring merely by facilitating such strategies, schools believed that they provided an effective way of developing aspects of the key competencies and of promoting the school's values.

Leadership - A direct and indirect connection to NZC implementation

All seven principals in this study made reference to both their direct and indirect influence on NZC implementation. Their actions were congruent with the Ministry's (2008) definition of instructional leadership, through their focus on establishing a shared vision for curriculum change, developing and utilising collaborative partnerships, improving teacher, organisation, system and community capacity, and reflecting and focusing on improving teaching to develop and implement a school curriculum focused on improving student learning. Southworth (2002) and Wilson and McPake (2000) found that effective small-school leaders utilised instructional leadership strategies for large-scale change. This suggests that the principals in this study are using leadership practices

that not only reflect practices considered appropriate for leadership in New Zealand schools, but also leadership well suited to fundamental curriculum change.

Both advisors and two teachers believed that small school principals have a considerable influence on NZC implementation and learning in their schools. As this advisor states;

Context does make a difference, however, when I really think about it overall the thing that makes the difference is the leadership... If you've got a four teacher school and a switched on principal, and teachers who are doing the job well, I think you can fly (Rose, Advisor).

In supporting this, Cowie et al. (2009) found that the importance of a principal's strategic leadership of learning was the strongest theme to emerge from NZC implementation in their study of 20 New Zealand schools. With consideration of the findings, small rural school principals appeared to have an influence on improving learning through each of MacBeath's (2009) four levels of learning.

For student learning, the five teaching principals in particular believed they had a direct influence through their knowledge of the children and classroom teaching. Using this knowledge, principals believed, allowed them a better understanding of students' needs and possible practices that may meet them, knowledge that Davies and Ellison (2003) believe is critical for ensuring large-scale change is focused appropriately. Some principals also recognised this direct link as providing an opportunity to trial new practices for themselves, allowing not only the evaluation of alternative pedagogical practices but to see first-hand their impact on students. However, the pressures of multiple responsibilities did impact on many principals time in the classroom which may limit such benefits.

All principals spoke of influencing teacher learning in ways that included providing professional learning opportunities, sharing and reflecting on their own pedagogical knowledge, trialling and evaluating alternative practices for themselves, modelling practices to staff, providing opportunities for observation and discussion with others, and through aligning the appraisal system with goals for improving student learning. These all appear to align with MacBeath's (2009) practices for enabling teacher learning. It was

these practices in combination, as explained by this participant, that principals considered made their influence particularly effective;

It comes from a combination of professional development, reading discussion, but it also comes from getting in and doing those little things, so you get those “ker-ching” moments that marry up with that professional reading (Sally, Hoiho School Principal)

Most principals reported influencing organisational learning through working alongside teachers in collaborative processes for curriculum design and implementation, by building the collective capacity for reflective inquiry, and through facilitating professional communities based on trust, collaboration and honest dialogue. Kruse and Louis (2009) recognise that organisational learning, professional community and trust are three features of school culture tied to improved student learning in numerous studies.

In influencing system learning, five principals developed partnerships with parents to gain a greater understanding of the needs and wants of the community and offered community learning to improve parents’ knowledge of curriculum and learning. Six schools utilised cluster groups with other schools to consider and examine alternative curriculum design and pedagogy. Such practices, MacBeath (2009) believes, may provide multiple perspectives of issues and possible solutions, which may enable the most appropriate strategies for improving student learning to be selected.

These small rural school principals therefore appears to be able to significantly influence student learning both directly and indirectly, a view supported in other contexts by Southworth (2004) and OFSTED (1999). As such, they may have a considerable impact on the success of curriculum change. Although Hallinger and Heck (1998) found little evidence for direct leadership effects influencing outcomes and, in larger schools at least, direct leadership is considered to actually reduce principal effectiveness (Cardno & Collett, 2004), in these small rural schools most principals considered direct instructional leadership a powerful tool for curriculum implementation to improve student outcomes, and it may be their direct contact with students that makes it so. Murphy et al. (2007) believe that a key factor of effectiveness for instructional leadership is a principal’s ability

to stay focused on teaching and learning. Despite the high workload that all small rural school principals reported, their direct link with students and their learning offers the potential to allow this focus. In considering the indirect impacts of principals' actions, Robinson et al. (2008) found that leadership that focused on establishing goals and expectations, planning co-ordinating and evaluating teaching and the curriculum, and promoting and participating in teacher learning and development had the biggest impact on student learning. With principals, teachers and advisors recognising small school principals actively and consistently focus on these same three factors, it would appear that their impact on student outcomes through leading curriculum design and implementation could be significant.

Curriculum sustainability

Although too early to comment on whether changes enacted by these schools in the process of revised NZC implementation are sustained, three issues that schools considered could restrict sustainability became apparent, staff and principal turnover, the potential impact of National Standards and the time available for NZC implementation.

One area of sustainability discussed by five principals and teachers was the impact of principals and teachers leaving schools, an issue identified by Cowie et al. (2009) as being particularly significant for small schools implementing the NZC. Fullan (2001) describes the gradual loss of capacity and knowledge through time as staff leave and are replaced. However, in these small rural schools one staff member represented 20% to 50% of the teaching staff, and therefore this loss of capacity and knowledge may be significant. One school spoke of a considerable process of induction into the school's philosophy for new staff. Lambert (2003) considers this enculturation of new teachers as critical both to sustainability and to bringing the changed school community together. However, others spoke of a lack of time to be able to do it effectively. Although Fullan (2001) considers schools often do not plan for induction of new staff, some schools in this study largely considered it too much of a challenge rather than something not considered. Another principal, who lost their entire teaching staff of three described beginning the process again. She considered this a beneficial process as it helped to re-establish shared beliefs and goals. However, this may also mean that schools have less time for implementation,

thereby limiting the length of change period available, a key principle for sustainability (Hargreaves & Fink, 2006).

In the five schools where principals had left during the implementation process, teachers commonly described feelings of considerable frustration, of wasted time and of changing priorities, as this teacher describes;

So for the staff that was a total waste of the year, we were just swimming around, and then you get somebody else in who says well the children at the school are well below on their levels (Kelly, Whio School Teacher).

Although the situation is different, this closely supports Goodson et al.'s (2006) identification of the negative impacts of repeated and multiple change initiatives on staff, which they believe have the potential to impact on potential success of current and future change. A new principal may potentially therefore, not only have a reduced amount of time for curriculum implementation, but may face resistance from staff required to begin again. Southworth (2007) does suggest that a new principal may represent a new generation of school leader with more contemporary instructional leadership philosophies and practices, and the experiences and actions described by two principals in this study who took over from long-serving principals supports this to some degree. Nevertheless, the challenges they faced as a result in enacting the fundamental change required were significant. Their descriptions of their approaches to this fundamental change did, however, go against the more commonly reported suggestion that new principals are unprepared for the challenges of small school leadership (Barter, 2008; Clarke & Stevens, 2003).

The small school principals in this study continue to follow the trend recognised by Brooking et al. (2003) of staying in schools for a relatively short period. Of the seven principals in this study, five had been in the position less than two years and two of these were now considering other leadership opportunities. With Fink and Brayman (2006) suggesting changes in principal may threaten the sustainability of school improvement efforts, these short serving principals may not only face challenges for NZC implementation as a result of their mid-implementation entry into a school as described

above, but may limit the chances of curriculum change being sustained as they leave. Ensuring NZC implementation can be sustained beyond a principal's departure is clearly an issue that small rural schools need to address. In these situations, Lambert (2003) believes teachers need to step up to the role, which perhaps, considering the development of professional communities and the shared responsibility for developing and implementing curriculum change described by the schools, may be increasingly possible as a result of the move away from traditional hierarchical structures (Leithwood & Mascal, 2008).

A second area was the impact of the Government's recently announced drive to implement National Standards in literacy and numeracy from 2010. Although discussion was generally more focused on their impact on student learning, some principals and both advisors recognised the impact they were likely to have on curriculum implementation. Such shifts in educational policy focus are considered likely to take school's focus away from school's curriculum change efforts (Davies, 2007; Fullan, 2001b), or to reduce resources that support them (Datnow, 2005), a suggestion that appears increasingly likely following the Government's recent announcement to cut professional development funding in some curriculum areas to focus on National Standards support. Two principals, two teachers and one advisor also believed that National Standards could result in the narrowing of school's curriculum focus. The result, Hargreaves and Fink (2006) suggest, is that many curriculum changes made thus far may be unlikely to be sustained. Cowie et al. (2009) do however suggest that National Standards may also strengthen the NZC by reinforcing its emphases and providing increased depth in the core learning areas, a view shared by one principal in this study;

If they can merge the national standards to the new curriculum, I think we could be onto a good thing. As long as one doesn't dominate the other, you'd get a happy merger (John, Hihi School Principal).

As Cowie et al. (2009) do acknowledge though, this will require schools to find ways to accommodate the two to ensure they reinforce rather than compete with each other. This will clearly require time and focus from small rural principals to achieve, reducing focus on NZC implementation.

Thirdly, and exacerbated by the previous two, the time available for curriculum implementation was considered insufficient. A number of schools did not believe sufficient time was provided (three years) for curriculum implementation considering the scope of what was being asked for. With Fullan (2001) suggesting bringing about institutional reforms can take five to ten years, the likely outcome of insufficient time appears that change will not become embedded, and is therefore unlikely to be sustained (Fullan, 2001; Hargreaves & Fink, 2006). This may be an even bigger issue for small rural schools that have experienced principal or staff changes, and Cowie et al. (2009) believe they will require support to be successful.

Support and guidance

There was universal criticism of the direct support provided by the Ministry, both in terms of their introductory courses to the NZC which were considered too late and too broad, and in their lack of guidance of how to manage the implementation process. Although almost all teachers and principals participants were highly supportive of the flexibility the revised NZC offered for designing a school curriculum, many principals and teachers felt the support offered failed to provide a sufficient framework or model of how to do it. Robinson (2006) believes that there are significant mismatches between the context in which principals currently work and the conditions that would enable them to be stronger instructional leaders, adding that school leaders may require significant and in-depth opportunities to develop the instructional leadership skills and knowledge required for leading such complex change as the educational and leadership expectations differ considerably. Gilbert et al. (2008) believe this may be particularly true for small school principals typically in their first principalship position. Additional support for principals to understand the underlying philosophies and potential implementation strategies and processes, as the majority of participants consistently stated, may therefore have been beneficial. As Henderson and Gornik (2007) explain, such a shift in curriculum philosophy requires a transformation in curriculum leadership, a transformation that does not appear to have been supported by the Ministry.

Five principals did, however, believe that the Ministry's support through the provision of two teacher only days for NZC implementation, although typically considered not

enough, provided them the time for quality deep reflection on the NZC, further facilitated in three schools by working together with other schools. Providing quality time outside of their normal working day for teachers to reflect and work together, Bailey (2000) suggests, is more likely to promote quality teacher learning, and working with other small schools may also lead to exposure to a broader range of ideas (Starr & White, 2008).

The support and guidance that was considered most beneficial by principals and teachers was the exposure to alternative ideas or practices and the ability to share and discuss their own progress. For principals this was with principal advisors, first time principal mentors, other principals or cluster groups. For teachers it was professional development or local school clusters. Robertson (2005) labels such interactions learning relationships, where participants are open to new learning and engage together as professionals committed to each other's learning development and wellbeing. What makes them effective she believes is that they focus on the local context and address current issues, utilising both self-reflection and the experiences of others. Starr and White (2008), in recognising increasing collaboration between small schools, suggests their effectiveness is due to the mutual benefit of shared capacity development. It is this approach, as overwhelmingly supported by the participants in this study, that may help overcome the limitations of the limited pool of ideas for curriculum change in small rural schools. With teachers consistently reporting few opportunities for working with others, however, these limitations may be harder to overcome. Despite the challenges of time and money, therefore, providing teachers such opportunities may be of great importance in developing and improving the quality of school curriculum implementation.

This discussion chapter has focused on three key themes, perceptions of the NZC, rural school contexts, and curriculum implementation and change. In summarising each of these, this study has recognised the positive perceptions of the NZC by participants and the improved likelihood of successful implementation as a result. With regard to context, it has suggested that the caring, supportive and collaborative nature of these schools provides a positive environment for NZC implementation. It also considers that the role conditions of small rural school principals have changed which may facilitate NZC implementation. These small rural schools utilised effective analysis to create a shared vision for curriculum change, although many faced challenges converting this vision into

action. This was considered to be the result of a both a fundamental shift in curriculum philosophy and the need for most schools to enact a fundamental process of change, challenges exacerbated by a high rate of principal turnover, the lack of professional support from the Ministry and the lack of principal experience and time in the position of some of these principals. Curriculum implementation was led through close professional communities who were increasingly adopting reflective approaches to identifying student needs and who were engaged in relevant professional learning. The principals in these small schools appeared critical in facilitating learning at each level of the school system and demonstrated both a direct and indirect influence on this. However, the contextual factors of a small staff and the multiple impacts of staff and principal turnover associated with these small rural schools appear to challenge the potential sustainability of curriculum change. It was the support from other principals, teachers and advisors that was considered to best help the small rural schools meet the challenges of curriculum implementation. The next chapter considers the implications of these key themes and their use in providing recommendations for professional practice and future research.

6. Conclusion

The revised New Zealand Curriculum (NZC) represents a significant shift in curriculum policy for New Zealand and creates a number of new demands for schools that Dewey (2008) suggests may require significant change. There are numerous internal and external factors that may influence schools and context is the unique condition that the interrelation of these factors creates (Southworth, 2004). There is increasing evidence that small rural schools share a number of common contextual factors that may create both opportunities and challenges for educators within them. The primary purpose of this study was to determine how the contextual factors of small rural schools in New Zealand have impacted upon the implementation of the revised New Zealand Curriculum (NZC) by considering the experiences of seven small rural New Zealand schools.

It is evident that the contextual conditions of the seven small rural schools in this study impacted on NZC implementation in many ways, creating both opportunities and challenges. Five major themes became apparent, a new curriculum philosophy, relationships, small professional communities, small school leadership and staff turnover and the conclusions, implications and recommendations for each are summarised below.

A new curriculum philosophy

Within this study there was almost universal support for the NZC's perceived educational and implementation opportunities, philosophies and priorities, a perception at odds with much previous literature focused on state mandated curriculum reform. The main reason for this appears to be that the revised NZC represents a different curriculum philosophy to those advocated in many other countries and in the previous New Zealand Curriculum Framework (NZCF). The small schools in this study believed this philosophy, considered student-centred, emphasises a focus on the needs of the learner, recognises the need to meet more holistic educational needs, provides flexibility for the development of a school curriculum focused on local wants and needs of all stakeholders and encourages a collaborative approach to curriculum design. New Zealand is currently one of few countries adopting a national policy that places so much control of curriculum development and implementation in the hands of schools themselves (Timperley et al.,

2007), and it is clearly a policy that small rural schools are embracing. As such, and as Hargreaves and Fink (2006) and Fullan (2003) suggest, the support and positive attitude of those involved makes the likelihood of successful and sustained implementation and change more likely. Participants did, however, recognise that its success requires teachers, principals and the wider school community to challenge and reconsider their current practices, values and beliefs. These increased opportunities may therefore require increased responsibility, reflection and commitment from all those involved.

School and community relationships

These small rural schools all enjoyed close relationships with their students, staff and communities. Through collaboration and support throughout their school communities, they demonstrated the desire to work together to develop a curriculum that best met the needs of their students and the wishes of their communities. Schools took further advantage of these relationships to develop more meaningful learning contexts and broader holistic learning environments. They were also focused on developing the knowledge and capacity of staff and parents to make collaborative curriculum design more effective. Lambert (2003) suggests such meaningful participation may provide the cornerstone for the development of professional and school communities focused on improvement. The greater the participation, she believes, the greater the benefits for student learning. As such, these findings provide strong support for the suggestion that small rural schools are not only able to create a school curriculum that may best meet the needs of their students as viewed both by the staff and wider school community members, but that the collaborative process may lead to a more supported, more owned, more relevant and, ultimately, more successful school curriculum.

Professional communities

Small staff teams in these schools worked as effective professional communities, allowing ideas for change to be discussed, evaluated, designed and implemented collaboratively and, many believed, without the politics or delays of larger schools. In most schools these professional communities were based upon already established practices of collaboration and collaborative decision making, trust, care and support, and open and honest dialogue and discussion. Most schools were also working to improve the individual and shared

capacity for reflective inquiry. These conditions relate closely to those identified as features of effective professional learning communities (Fullan, 2003; Kruse & Louis, 2009; Lambert, 2003). With Kruse and Louis (2009) and MacBeath (2009) both suggesting that effective professional communities are likely to have a positive impact on improving student, teacher and organisational learning, it appears that these small rural schools, both through their existing capacity for working as a professional community and through their efforts to improve this capacity further, may be able to manage curriculum implementation and change in a way that improves learning throughout their schools.

Small staff teams, however, appear to be one contextual factor that may limit the effectiveness of their professional communities in designing and implementing the school's curriculum as a result of their more limited pool of ideas. This was particularly evident when these schools spoke of discussing, developing and evaluating practices and ideas appropriate to a specific curriculum level. Almost all participants believed that this limitation could be overcome through networking, support and shared development with other small schools, a view strongly supported by Starr and White (2008). It appears vitally important, therefore, that both principals and teachers in such small rural schools have the opportunity to regularly meet and work with other professionals to provide a broader range of ideas and support appropriate to the small rural school context.

Small school leadership

The small rural school principals in these schools all exerted a significant influence on student, teacher, organisational and system learning. They had a considerable direct influence on student learning as teaching principals and through their knowledge of student strengths and needs. They influenced teacher learning through providing and participating in professional learning opportunities, supporting individual learning, trialling and evaluating alternative practices for themselves, and modelling, sharing and reflecting on their own pedagogical knowledge. They influenced organisational learning through working alongside teachers in the process of collaborative curriculum design and implementation, by building the collective capacity for reflective inquiry, and through facilitating professional communities based on trust, collaboration, support and honest dialogue. They influenced system learning through developing partnerships with parents

focused on school curriculum design, improving parents' knowledge of the NZC and contemporary learning and working alongside other schools in local clusters. As a result, these small rural school principals appear to have a significant direct and indirect impact on the ultimate success of NZC implementation through leading the fundamental process of change required in most of these schools for learning at every level. Cowie et al. (2009) report that New Zealand principals are very important for successful NZC implementation. This study would suggest that small rural school principals are especially so as a result of their considerable influence on learning throughout their schools.

Two factors did appear to limit the potential successes of these small rural principals in implementing the NZC. Firstly, principals faced a considerable and varied workload, exacerbated for most by the dual role of teaching and leading. Although, unlike most previous studies into small school leadership, their leadership role was not overloaded by Ministry sanctioned administrative tasks, teaching principals considered themselves as primarily needing to be leaders with teaching having to be considered a secondary responsibility. For some participants this created conflicts of duty between doing the best for their children and doing the best for the school as a whole. Leading change of this magnitude in small rural schools may therefore benefit from the provision of additional release time to allow small rural principals time to better focus on leading curriculum change.

Secondly, there was considerable criticism of the value of support provided by the Ministry through support days, and considerable need was expressed for a model or guide to help lead the implementation process. Considering the scope of change most principals in this study were attempting, their significant influence on learning and curriculum change and, for four of these principals, their recent appointments as principals, it appears very important that these small rural principals are supported in this comprehensive programme of change. This will require the Ministry to consider how it may better support these principals, and, as this study shows, that may be through providing more focused and context-appropriate professional learning support for both guiding the implementation process and developing principals' professional knowledge.

Staff turnover and sustainability

Staff turnover represented a challenge that appeared likely to impact on the likelihood of successful and sustained NZC implementation and change in small rural schools. When teachers and principals leave, the beliefs and practices developed over a period of time that support the school's curriculum philosophy are lost. Fullan (2001) describes the gradual watering down of capacity and knowledge through time as staff leave and are replaced. However, in small schools it may be more apt to describe capacity and knowledge as being washed away. Small rural principals, as discussed above, have a significant influence both on learning and on the success of NZC implementation and change. However, as this study concurred, small rural principals commonly remain in positions for a relatively short time and when they leave, any progress made may leave with them. The impact of this may be that these small rural schools may find themselves in a continual cycle of change and re-change, leading, as observed in some of these participant schools, to a sense of frustration and lack of lasting curriculum change. With schools given a limited period for curriculum implementation, this impact could currently be even more significant.

Lambert (2003) suggests that professional communities may provide a way for change to be sustained by supporting new teachers and principals through a significant and collective programme of enculturing into a particular school's philosophy. Considering the strength of professional communities recognised within the small rural schools of this study, this suggestion may offer a potential solution for ensuring implementation and change can be sustained beyond any particular principal or staff. However, this will clearly require further professional community development within schools so they may better support and transition new teachers and principals into their school's philosophies, beliefs and priorities for curriculum.

Recommendations

These conclusions have provided practical recommendations that may serve to guide other small rural principals, schools and the Ministry which may be particularly important with the official implementation period set to end shortly. For principals, it recognises the need to provide teachers with increased opportunities to work with other schools to

overcome challenges associated with a small staff team and to continually reflect on their own knowledge, strengths and needs. For small rural schools and all staff within them it identifies the need for all to take an active role and responsibility in reflecting on current practices and how they may better meet students' needs, and highlights the need to further develop professional communities by developing a collective responsibility for better supporting and transitioning new teachers and principals into their school's philosophies, beliefs and priorities for curriculum. For the Ministry, it provides clear evidence that enacting such a comprehensive programme of change requires consideration of how to better support these principals through increased release time to ensure sufficient time is available for leadership focused on curriculum implementation and through more focused and context-appropriate professional learning support and curriculum implementation guidance.

Limitations of this study and further research

The main limitation of this research reflected the very nature of complex change in schools, in that it requires a maintained focus over a number of years. This study was only able to represent a snapshot of a particular point in these schools' implementation of the NZC, and, due to the rapid turnover of principals in small rural schools, many participant schools were only beginning or restarting their curriculum implementation journeys. It did, however, represent the reality of NZC implementation in small rural schools.

Further research that involves revisiting these schools may provide greater understanding of the long term impact of school's processes and practices on student learning, and perhaps, the long-term impact of staff and principal turnover on sustainability. This may be particularly relevant following the introduction of National Standards for New Zealand schools from 2010, which may require principals to shift their focus to these rather than ongoing curriculum implementation. A second key area for further research could be exploring how small rural schools can most effectively support the transition from one principal to another to ensure curriculum change can be sustained.

These conclusions present an overall picture of small rural schools as professional communities that have the potential to collaboratively develop a successful school curriculum that may best meet the needs of their students and have the support of their

communities. As such, the concerns that led to this study, of the significant and unique challenges that small rural schools may face when implementing the NZC, appear unwarranted. Instead, this study provides positive affirmation that small rural schools are not only able to manage the complex and demanding challenges of implementing the New Zealand Curriculum, but are also able to unite teachers, leaders and the community in a collaborative commitment to providing better learning opportunities for their students. As such it enhances current understanding of how curriculum implementation and complex change may be successfully managed in small rural schools, the impact of different contextual factors on such change, and the role of the small rural principal in leading curriculum implementation and change.

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Appendices

Appendix 1: Interview questions for principals, teachers and advisors

Interview questions - Principals

Demographics:

Name:

School:

School details: Size: Decile: Teaching responsibility:

Experience: Time in current position:

 Previous positions of leadership:

1. What is special about your school?
2. What are some of the biggest challenges you face here?
3. What do you feel the revised curriculum offers your students, staff, school community and yourself?
4. What does it demand of them and of yourself?
5. What are the main steps you've taken so far in implementing the curriculum? What are you focusing on next?
6. What has been successful for you as you've started to implement the curriculum?
7. Can you tell me about anything that has made implementation more difficult?
8. Have your school or role contexts had any influence on curriculum implementation? In what ways?
9. What support have you made use of?
10. Would any other support be useful to you?

Interview questions - Teachers

Demographics:

Name:

School:

Experience: Time in current position:

 Time teaching:

1. What is special about your school?
2. What are some of the biggest challenges you face here?
3. What do you feel the revised curriculum offers students, staff, the school community and yourself?
4. What does it demand of them and of yourself?
5. What are the main steps you've taken so far in implementing the curriculum? What are you focusing on next?
6. What has been successful for you as you've started to implement the curriculum?
7. Can you tell me about anything that has made implementation more difficult?
8. Have your school or role contexts had any influence on curriculum implementation? In what ways?
9. What support have you made use of?
10. Would any other support be useful to you?

Interview questions – Advisors

1. Demographics:

Name:

Experience: Time in current position:

 Previous positions of school leadership / support:

2. What do you see as your key roles in your position of leadership and management advisor?

3. What do you feel the revised curriculum offers schools, their principals and staff, and their communities?

4. What does it demand of them?

5. In what ways have principals you have been working with been successful with regards to implementing the new curriculum?

6. In what ways have then been challenged, making implementation of the revised curriculum more difficult?

7. Have schools' contexts had any impact on curriculum implementation? In what ways?

8. What kind of support have principals been seeking?

Appendix 2: Analysis codes generated from the interviews with principals, teachers and advisors

Research question: What do participants perceive to be the key features of the NZC? What do they believe it offers and demands?

Curriculum strengths and demands			
NZC+***	Opportunities / strengths	NZC-***	Demands
SCHOOL LEVEL			
NZC+FLE	Flexibility to personalise curriculum to local context	NZC-VAG	Vagueness / openness (DEM-OPE) Too broad
NZC+KC	KCs Focus on holistic learning / life skills	NZC-NAT	National Standards impacting on curriculum focus
NZC+VIS	Clear vision for school	NZC-REP	Repetition – If already running well, little needed
NZC+VAL	Focus on societal values		
NZC+LA	Improved learning areas	NZC-LA	Learning areas / AOs very broad
NZC+INT	Coherent - Integration of different aspects (e.g. vision, values, principles, KCs)	NZC-ALI	Aligning current practice
NZC+CHA	Creating conditions for change	NZC-TIM	Timescale for completion
NZC+PED	Builds on recent good pedagogical practice evidence	NZC-LAT	Challenges when starting late
NZC+PD	Builds on PD contracts(e.g numeracy, AToL, ICT)		
NZC+OLD	Chance to clear out old practices	NZC-SYS	Modification of existing systems
NZC+REV	Revising rather than really different	NZC-BEL	Challenge staff beliefs
NZC+NEW	Mandate for new approaches to teaching / learning	NZC-TIM	Timeline
NZC+FRA	Provides a framework for change	NZC-RES	Requires additional resources in LAs
NZC+BEL	Develop shared beliefs	NZC-LIT	Overfocus on lit / num
NZC+GUI	Serves as a guide		
NZC+CUL	Embrace the community culture		
TEACHER SPECIFIC			
		NZC-CRE	Creativity
		NZC-PLA	Planning for learning rather than teaching
COMMUNITY			
NZC+COM	Community involvement in their child's education	NZC-COM	Need for community involvement even if not willing
NZC+PAR	Community partnership	NZC-EDU	Need to educate community
		NZC-CON	Need to consult / report to
		NZC-PRO	Consultation just as lip-service
PRINCIPAL / TEACHERS			
NZC+PRO	Teacher autonomy / professionalism	NZC-WOR	Heavy workload for implementation

		NZC-PED	Teacher upskilling – pedagogy
		NZC-PLA	Modification of all planning
		NZC-NEG	Negative perceptions
		NZC-BEL	Changing established philosophies / beliefs
		NZC-IND	How to indirectly improve student outcomes Leading learning
		NZC-KNO	Need good knowledge of students
STUDENTS			
NZC+STU	Student ownership of own learning		
NZC+STUD	Student direction of own learning		
NZC+INQ	Inquiry learning		
NZC+CON	Community contexts		

**Research question: How have schools managed the process of implementing the NZC?
What have been the successes and challenges?**

Curriculum change			
SCH+***	Successes	SCH-***	Challenges
SCH+SCH	Meeting local student needs	SCH-STR	Current strategic planning models not effective for leading change
SCH+CHA	Providing a mandate for change	SCH-PRI	School / community priorities that focus on other areas
SCH+STA	Work as a whole staff	SCH-FOC	Other external foci
SCH+PER	Changing perceptions	SCH-NAT	Impact of National Standards / reporting to parents focus
SCH+INT	Integrating all aspects of leading the school	SCH-REP	Reporting to parents
SCH+STU	Focusing on the student / learner	SCH-INF	Insufficient info at the start
SCH+PRO	Viewed as an ongoing process	SCH-CASH	Money to meet PD needs / relievers
SCH+UNP	Unpacking and understanding the curriculum	SCH-RAT	Rate of change
SCH+FRA	Developing a framework / process for change	SCH-TIM	Time available
PED+INQ		SCH-CASH	Money
		SCH-VAG	Vagueness of the curriculum does not aid the process
		SCH-RES	External resources influencing design
		SCH-HAR	Too hard
		SCH-UNN	Unnecessary
		SCH-LAT	Late starting the process
		SCH-MAN	Managing all the other demands
		SCH-COM	Implementation for compliance
		SCH-NEG	Negative / minimal application to

			change
Change process			
PRO+***	Successes	PRO-***	Challenges
PRO+EVO	An evolving process of change	PRO-FRA	Developing a framework for managing the process
		PRO-RAT	The rate of change required
Changing culture			
CUL+***	Successes	CUL-***	Challenges
CUL+COL	Increased staff collaboration	CUL-RES	Resistance to cultural change
CUL+EDL	Educational leadership by staff	CUL-EST	Established behaviours / routines / ways
CUL+VAL	Legitimate focus on values	CUL-CRO	Getting a cross-section of views / beliefs
CUL+PD	Acceptance of need for professional learning / dev.	CUL-UND	Need to really understand the culture and individuals
CUL+PRO	Increased professionalism	CUL-COL	Establishing a collaborative community
CUL+CHA	Recognition of the need for change	CUL-THI	Changing teachers thinking
CUL+BES	Examination of best practice / beliefs / academic theory	CUL-NEW	Understanding of new curriculum philosophy
CUL+CUL	Internalised – changing culture		
Cul+VIS	Focus on vision		
CUL+TEA	Teams to share implementation		
CUL+BEH	Restorative approaches to manage behaviour		
CUL+STA	Work as a whole staff		
CUL+HIE	Removal of hierarchical structures		
CUL+TRU	Developing trust		
CUL+IND	Getting others driving change		
CUL+NEW	New staff		
CUL+ART	Evidence of artefacts		
Changing pedagogy			
PED+***	Successes	PED-***	Challenges
PED+PD	Consolidation of recent PD	PED-RES	Resistance to change of personal practice
PED+PLA	Improved planning	PED-TIM	Time available
PED+LA	Refocus on learning areas	PED-PED	Resistance to pedagogical change
PED+NEW	Adoption of new ped. practices	PED-ENQ	Resistance to enquiry process / evidence
PED+KC	Focus on holistic learning	PED-KNO	Improving pedagogical knowledge
PED+ENQ	Enquiry process of teaching	PED-OLD	Teachers using old practices
PED+DEV	Focus on development		
PED+TRA	Transfer of skills to other areas		
PED+EXT	Use of external advisors to improve pedagogy	PED-EXT	Demands for external advisors

PED+ALI	Realignment of current practices	PED-CON	Consistency across levels
PED+ICT	Integrated use of ICT	PED-DRO	Dropping ineffective practices / priorities
PED+BES	Examining what is best practice	PED-PRO	Lack of progress / going round in circles
PED+REA	Professional reading	PED-RAT	Rate of pedagogical change
PED+RUB	Development of rubrics for teaching and learning		
PED+NS	Use of national standards		
PED+FUN	Change that excites teachers		
PED+STU	Focusing on student needs		
PED+CON	Use of local contexts		
PED+PER	Personalised learning		
PED+LEA	Investigating best learning practices		
PED+ASS	Focus on assessment		
PED+MOD	Modelling / trialling new practices		
PED+DIS	Discussion of practices		
PED+FA	Formative practices		
PED+PRO	Identifying student progress		
PED+STUD	Student ownership		
Changing and utilising systems			
SYS+***	Successes	SYS-***	Challenges
SYS+ALI	Alignment of systems	SYS-ALI	Misalignment of systems
SYS+STR	Improved strategic planning		
Sys+ASS	Development of related assessment systems		
SYS+SYS	Development of management systems to support curriculum		
SYS+SYS	Use of other staff to share mgmt workload		
SYS+VIE	Developing visual representations		
SYS+APP	Linking the appraisal process		
SYS+PAR	Parking other things, just focus on curriculum		
SYS+FUT	Future planning, creating systems of new staff		
Partnerships and networks			
PAR+***	Successes	PAR-***	Challenges
PAR+COM	Community consultation informs curriculum	PAR-EDU	Need to educate the community
PAR+PAR	Community partnership	PAR-INV	Getting community involved
PAR+SCH	Use of other schools for modelling / sharing of practices	PAR-CRO	Getting a cross-section of the community
PAR+PRI	Use of principal clusters for sharing of practices	PAR-UND	Understanding the community
PAR+COL	Collaborative process of design		

PAR+VIS	Shared vision		
PAR+SHA	Sharing practices with others		
PAR+EDU	Community becoming more educated		
PAR+EXP	Expectations on community to be involved		
Principal professional development			
DEV+***	Successes	DEV-***	Challenges
DEV+PGR	Use of postgraduate study to inform practice	DEV-LEA	Keeping up with prof learning
DEV+LEA	Professional learning		
DEV+REF	Reflective practice		

Research question: What contextual factors do participants believe impact on small, rural schools and their staff?

Research question: How have small, rural school contextual factors impacted on the implementation of the NZC?

Contextual conditions			
CON+***	What is special	CON-***	Challenges
CON+ENV	Environment (SP-ENV)	CON-ENV	Environment (CHL-ENV)
CON+SIZ	Size (SP-SIZ)	CON-SIZ	Small size
CON+CEN	Centre of community (SP-CE)	CON-CEN	Always in community (CHL-CEN)
CON+COM	Community (SP-COM)	CON-GRO	Growth (CHL-GRO)
CON+REL	Relationship with community (SP-REL)	CON-CUL	Negative culture (CHL-CUL)
CON+RELS	Relationships with students (SP-RELSTU)	CON-FAM	Overfamiliarity (CHL-FAM)
CON+BOT	Board support (SP-BOA)	CON-EXP	Community / parent expectations/traditions
CON+STU	Students (SP-STU)	CON-REM	Remoteness
CON+CIT	Closeness to the city	CON-RES	Many responsibilities
CON+TEA	Close staff team	CON-SCH	Impact of nearby schools
CON+CLA	Class sizes	CON-PER	Perceptions of the school
CON+EXP	Experienced teachers	CON-TRA	Traditions
CON+EDU	Original view / DELIVERY of education	CON-LEA	Threat of leaving / changing schools Students leaving at Y6
CON+VAL	Focus on values / care	CON-MON	Money issues
CON+TRU	High trust / professionalism	CON-SUP	Lack of support staff
CON+CUL	Culture of the school	CON-ADM	Lack of management / leadership documents
CON+CHO	School of choice	CON-BEH	Behavioural issues
CON+MUL	Multi level teaching	CON-STA	Staff issues
CON+INF	Informal prof devt.	CON-MUL	Multi level teaching
		CON-TUR	Impact of staff turnover
		CON-DIV	Divided community

		CON-LIM	Small staff for discussion / ideas
		CON-COM	Competition
		CON-YEA	Teach kids for a number of years
Principal role conditions			
CONP+***	What is special	CONP-**	Challenges
CONP+DUA	Being able to teach still	CONP-EXP	Lack of experience
CONP+LEA	Pace / scale of own learning	CONP-REL	Using principal release time for other staffing
CONP+VAL	Testing own beliefs and values	CONP-MUL	Dealing with multiple issues
CONP+REF	Trialling and reflecting own practice	CONP-DUA	Pressures on teaching time / principal time
CONP+FAM	Keeping a balance with family life	CONP-SIC	Illness or stress as a result
		CONP-FAM	Impact on family
		CONP-LEA	Principals leaving after a short time
		CONP-WOR	High workload
		CONP-LON	Lonely job
		CONP-DEC	Making difficult / unpopular decisions
		CONP-EXI	No desire to remain as principal long term
		CONP-KNO	Lack of mgmt / leadership knowledge
		CONP-SHA	Working with another teacher
Teacher role conditions			
CONT+***	What is special	CONT-**	Challenges
CONT+PRI	The principals leadership	CONT-LEV	No one to share with
		CONT-BT	Beginning teacher / broad curriculum
		CONT-MUL	Dealing with multiple issues
Contextual influences			
INF+***	What is special	INF-***	Challenges
INF+PD	Current PD	INF-LAT	Late starting
INF+TEA	Staff willing for change	INF-FTP	New principal
INF+CHA	Rate of change in a small school	INF-STA	Small staff
		INF-NEW	New staff / changing staff
		INF-COL	Over-collaboration
		INF-REL	Limited staffing impacts on release for PD
		INF-SUP	Lack of support staff
		INF-CHA	Reluctance to change
		INF-SUS	Sustainability

Demographics			
DEM+***	Opportunities / strengths	DEM-***	Demands
Teaching component			
DEM+FUL	Boards supports additional release to be fully released	DEM-REL	Using principal release for other staffing
DEM+TAR	Provide targeted release for teachers		
DEM+LEA	Being able to focus fully on leadership		
Staffing			
		DEM-STA	Staff been at school a long time
		DEM-NEW	New staff

Research question: What support is available to small, rural schools? What is its effectiveness?

Support made use of (HELP+/-***)			
HELP+***	Effective	HELP-***	Ineffective / missing
HELP+EXT	External advisors	HELP-EXT	Too many advisors / experts / resources
HELP+CLUT	School clusters - Teachers	HELP-CLUT	Poor value from teacher cluster time
HELP+CLUP	School clusters – Principals	HELP-CLUP	Poor value from principal cluster time
HELP+DOC	Supporting documents / guides	HELP-TOD	Poor value from teacher only days / not enough
HELP+PD	Existing PD contracts	HELP-PD	Hard to get onto contracts
HELP+WEB	Online resources	HELP-WEB	Poor internet connection reliability
HELP+FTP	First-time principals conferences	HELP-RES	Release of support resources too slow
HELP+PLG	Professional learning groups		
HELP+MOD	Ministry supported days	HELP-MOE	More specific guidance needed from MoE
HELP+TOD	Funded teacher only days	HELP-SCH	Taking ideas from other schools without enough thought
HELP+SCH	Use of other schools / ideas		
HELP+ERO	Support from ERO as part of review		
HELP+FAM	FAMILY	HELP-VAG	Vague guidance
HELP+MOE	Ministry staff		
HELP+PGR	Own postgraduate study		
HELP+REA	Own prof learning / reading		
HELP+PRI/ HELP+TEA	Othr principals / TEACHERS		
HELP+WPA	Waikato principals		

	association		
HELP+CON	Conferences		
HELP+PRI	Principal guidance (teachers)		
Additional support considered useful			
SUP+***	Further beneficial support	SUP-***	Ineffective / Missing
SUP+TIME	Additional time		
SUP+ADV	A specific appointed curriculum advisor for your school / cluster		
SUP+FRA	An overall framework or model		
SUP+PGR	Postgraduate study		
SUP+MON	More money to allow for decent PD release		
SUP+RES	More teaching resources		
SUP+SHA	Sharing between schools		
SUP+OLD	Use of more detail in old curriculum		
Advisor support - roles			
ADV+***	Further beneficial support	ADV-***	Ineffective / Missing
ADV+FTP	Supporting FTPs	ADV-LEA	Schools wanting advisors to lead the process
ADV+PRI	One to one principal support	ADV-UNK	Principals not knowing / using advisors
ADV+FAC	Facilitating principals leadership		
ADV+UPD	Principals update programmes		
ADV+REF	Help reflect on progress / needs Facilitate discussion		
ADV+MOD	Bring models / ideas to a group / individual		
ADV+UNP	Unpacking the curriculum		
ADV+CLU	Working with clusters		
ADV+REA	Professional readings		

Appendix 3: Participant information sheets and consent forms



Research project: Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand

Kia ora

Thank you for your interest in participating in my research into implementation of the revised New Zealand Curriculum in small, rural schools. As introduced previously, my name is Matt Stockton and I am principal of Waitetuna School, a two teacher school near Raglan. I am currently on three terms Ministry study leave to complete a major research project as part of my Masters in Educational Leadership and Management at Unitec in Auckland, a course I began in 2006.

Research project

The purpose of this research is to investigate the extent to which small rural schools have been successful and are challenged by the demands associated with implementing the revised New Zealand Curriculum. By taking part in this research you will greatly improve our understanding of the specific opportunities and challenges of the small, rural school environment and how these shape and affect school curriculum. This may be used to highlight the needs of small schools and to develop support where it is most needed.

I am working with a number of Waikato schools with less than 100 children. I will be interviewing the principal and a teacher from each school and also principal advisors.

What it will mean for you

I want to interview you and talk about:

- Your school context and the opportunities and challenges it presents
- What the revised curriculum means to you
- Aspects of curriculum implementation that have been particularly successful or challenging
- How your school context has impacted on implementation
- What professional support has been available to you and what else would be useful

The interview will take between 45 minutes and one hour and will be held at a time and place convenient to you, such as your school.

The interviews will be recorded and transcribed and a copy will be sent to you for your approval. Neither you nor your organisation will be identified in the final thesis. The results of the research activity will not be seen by any other person in your organisation without the prior agreement of everyone involved. You are free to ask me not to use any of the information you have given in the fourteen days following interviews. I will also provide the opportunity to share the overall findings of this research before it is submitted.

What happens next

If you are happy to take part, please complete the attached consent form and return in the envelope provided. As I am interviewing both principal and a teacher at your school, could you also ask the board chairperson to sign the board approval form so the school can be involved. If you have any other questions, please don't hesitate to contact either myself on 07 825 5286 or

matt@waitetuna.school.nz, or my supervisor Carol Cardno on 09 815 4321 ext 7411 or ccardno@unitec.ac.nz.

I hope that you will agree to take part and that you will find your involvement interesting and of benefit to both yourself and to the wider small, rural school community. Many thanks in advance,

Matt Stockton

UREC REGISTRATION NO. 09/976

This study has been approved by the UNITEC Research Ethics Committee from June 2009 to May 2010. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.



Research project: Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand

Consent form for research participation

Thank you for agreeing to participate in my research into implementation of the revised New Zealand Curriculum in small, rural schools. Please complete the form below and return in the envelope provided.

Participant consent

Title: *Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand*

Researcher: Matt Stockton, Unitec New Zealand

I have been given and have understood an explanation of this research project and what will be required of me. I have had an opportunity to ask questions and have them answered. I understand that neither my name nor the name of my organisation will be used in any public reports, and that I may withdraw myself or any information I have provided for this project without penalty of any sort within the agreed period.

I agree to take part in this research project

Name: _____

Position: _____

Institution: _____

Date: _____

Signed: _____

Researcher countersignature

Name: _____

Signature: _____

Date: _____

UREC REGISTRATION NO. 09/976

This study has been approved by the UNITEC Research Ethics Committee from June 2009 to May 2010. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.



Research project: Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand

Dear Board Chairperson

Staff members within the school have agreed to participate in my research into the implementation of the revised New Zealand Curriculum in small, rural schools. The information below provides an outline of the project. Please complete the form below to confirm the board's approval and return in the envelope provided.

Research project

My name is Matt Stockton and I am principal of Waitetuna School, a two teacher school near Raglan. I am currently on three terms Ministry study leave to complete a major research project as part of my Masters in Educational Leadership and Management at Unitec in Auckland, a course I began in 2006.

Title: *Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand*

The purpose of this research is to investigate the extent to which small rural schools have been successful and are challenged by the demands associated with implementing the revised New Zealand Curriculum. By taking part in this research you will greatly improve our understanding of the specific opportunities and challenges of the small, rural school environment and how these shape and affect school curriculum. This may be used to highlight the needs of small schools and to develop support where it is most needed.

I am working with a number of Waikato schools with less than 100 children. I will be interviewing the principal and a teacher from each school and also principal advisors.

If you have any other questions, please don't hesitate to contact either myself on 07 825 5286 or matt@waitetuna.school.nz, or my supervisor Carol Cardno on 09 815 4321 ext 7411 or ccardno@unitec.ac.nz.

Board of Trustees approval

Title: *Meeting the demands of a new curriculum philosophy: A study of small rural schools in New Zealand*

Researcher: Matt Stockton, Unitec New Zealand

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered. I understand that neither the names of people involved nor the organisation will be used in any public reports.

I approve the participation of the school in this research project.

Name: _____

Position: _____

Institution: _____

Date: _____

Signed: _____