MANDATED CURRICULUM CHANGES:

PERSPECTIVES OF TEACHERS

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STATEMENT OF AUTHORSHIP AND SOURCES

This thesis contains no material published elsewhere in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

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ABSTRACT

Change is ongoing and relentless and it affects all sectors of society. In education, change is reflected in the international borrowing of ideas, which result in an evershifting landscape of reforms adopted at government level, and mandated for implementation in schools. The black and white productivity model of meeting performance targets is applied, and it is expected that teachers will negotiate curriculum changes efficiently and effectively to raise the standards of student performance. While success for all is the goal, and quality teaching is emphasised as the key to education, the reality is that the performance of Australian students in international and national testing does not meet the expectations of the government. The way teachers negotiate mandated curriculum changes do not appear to be delivering teaching and learning that results in the required standards of student achievement.

The purpose of this research is to explore the way teachers negotiate mandated curriculum changes. Situated within the context of a co-educational, Preparatory to Year Seven primary school in the state of Queensland, Australia, the study is undertaken in a school that is part of a system that operates within the Catholic tradition. Moreover, the study concentrates on the years between 1999 and 2009, and the curriculum changes that occurred at the research site during that time.

The following research questions emerged from a synthesis of the literature. These questions were the focus for the conduct of the study.

Overarching question

How do teachers negotiate mandated curriculum changes?

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

The negotiation of curriculum changes is essentially a social process therefore the epistemological position of constructionism using an interpretive perspective was the choice for the research. Case study methodology allowed for a detailed exploration of the perceptions and lived experiences of the 20 selected teacher participants who had a range of professional experiences. Data were collected through surveys, semi-structured interviews and researcher-generated documents. Interrogation of the data was accomplished using the constant comparative method to compile case summaries and the building of a theory through this case study research. The process of building theory involved a deeper interrogation of the data through replication logic, to move the qualitative inquiry beyond a descriptive study into theory construction. Thus, two levels of iteration were undertaken in the study. The subsequent contributions to new knowledge, practice and policy were supported by the conclusions of the research study.

The first contribution to new knowledge is that the approaches and practices of teachers in the study reflected the types of Curriculum Keepers, Curriculum Shapers and Curriculum Changers. Educating teachers to identify their attitudes, choices and responses to mandated curriculum changes through these curriculum perspectives may offer a catalyst for the growth of teacher capital in the management and understanding of mandated changes. The second contribution

to new knowledge is that teachers in the study appeared to learn best in the comfort of the social culture of the school environment. It is possible that capitalising on this social communication through mentoring, coaching and networking within a school setting could promote the professional learning of teachers and the performance culture of the school.

The contribution to practice is that the negotiation of mandated curriculum changes needs to be well-planned and a four-stage approach is proposed. The first is a strategic approach for negotiating mandated curriculum changes through 'A Change Plan' to give teachers clarity of direction and common understandings. Next is a strategic approach for negotiating mandated curriculum changes through 'A Choice Plan' to promote the confidence and assurance of teachers, and give them control and ownership of the changes that confront them. The third is a strategic approach for negotiating mandated curriculum changes through 'A Performance Plan' to identify the professional learning required to implement changes is the design of 'A Formation Plan', to develop the philosophical and theological understandings of teachers in the values base of a school. Such plans would enable teachers to engage in strategic thinking about what changes mean for them, their school and their students.

The contribution to policy addresses the lack of clarity around change processes for teachers in the study. Consequently, the suggestion is that policy-makers take into consideration the challenge of change for teachers and develop change policies that will contribute to promoting the confidence of those charged with and engaged in curriculum changes. Much teacher activity surrounded the negotiation of mandated curriculum in the research school. However, there was uncertainty about the influence of the changes on the classroom practices of teachers. The suggestion is that policy-makers develop policies about approaches and teaching practices to embed sustainable changes that focus on improving student outcomes, rather than simply initiating a reform.

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ABBREVIATIONS

Australian Council for Educational ResearchACER
Australian Curriculum, Assessment and Reporting AuthorityACARA
Consistency of Teacher JudgmentCTJ
Department of Education, Employment and Workplace RelationsDEEWR
Digital Education RevolutionDER
Department of Education Science and TrainingDEST
Diocesan Learning FrameworkDLF
Early Years CurriculumEYC
Essential Learnings and StandardsELS
Ministerial Council of Education, Employment, Training and
Youth AffairsMCEETYA
National Assessment Programme Literacy and NumeracyNAPLAN
Organisation for Economic DevelopmentOECD
Outcome Based EducationOBE
Programme for International Student AssessmentPISA
Progress in International Reading Literacy StudyPIRLS
Queensland Common Assessment TaskQCAT
Queensland Curriculum Assessment and ReportingQCAR
Queensland Studies AuthorityQSA
Religious EducationRE
Trends in International Mathematics and Science StudyTIMSS
United Nations Educational, Scientific and Cultural OrganisationUNESCO

CHAPTER 1: THE RESEARCH DEFINED

1.1 Introduction

The more things change, the more things stay the same. This all too familiar saying still haunts us in education. Real change comes hard. Sure, we can all point to new programs and other innovations that have been adopted in our schools, but most just don't seem to matter very much. Some changes quickly fade away, some changes stay, but few changes touch teachers and students and few changes affect teaching and learning in the long run. (Sergiovanni, 1995, p. 278)

One of the challenges in education, as in other policy fields, is that the pizzazz is around having the seemingly new idea, whereas the real work is in making it happen. While innovations tend to get the profile, the slog work of implementation is what makes the difference in the end, and this work gets much less attention in the literature on education change. As many business analysts would agree, having a great new idea is less important to success than getting ordinary things done correctly and efficiently. Moreover, governments, schools and systems tend to be much bigger on announcing new initiatives than they are on putting in place all the mechanisms necessary for those new announcements to turn into reality and become permanent features of the landscape. (Levin, 2012, pp. 5-6)

The opinions of these two researchers span almost twenty years of educational change, yet they bear the same message. Governments mandate curriculum changes in schools however, "the real work of making it happen" (Levin, 2012, p. 5) depends on the way teachers negotiate the changes.

Worldwide, education systems cope with the ever-shifting landscape of mandated curriculum changes and the work of teachers intensifies with the ongoing challenge to integrate change demands into an already overcrowded school year (Ball, 2008). Education commands a strong share of the expenditure of nations in the developed world and trends are transferred internationally to maintain competitiveness (Mackay, 2004). Educational policy positions teachers as agents of change, but government agendas can have short-term electoral cycles, resulting in uncertain transitions of curriculum changes and unintended consequences (Reeves, 2008). The capacity of

teachers to arbitrate policy as it moves from one setting to the next relies on the way they make meaning of change expectations (Elmore, 2004). In reality, the practices of schools are maintained, regardless of government policies, and it is proposed that changes often do not eventuate (Priestley, 2010).

Teachers tend to blame the initiative and the change instigators blame the teachers when change initiatives do not succeed (Day, 2007; Hall & Hord, 2006). Negotiating mandated curriculum initiatives is not only about delivering prescribed content or interpreting syllabi. It is about teachers changing their behaviours, routines and habits in the busy social situation of a school. To negotiate changes, teachers need to have clear expectations, future certainty, positive social interaction, and control of their work environment and ownership of the events in it (Sergiovanni, 2000). Researchers describe this variously as "will and skill... understanding and commitment" (Levin, 2012, p. 81), building the capacity of teachers, schools and systems (Fullan, 2008) or working together with moral purpose (Elmore, 2011). Much theory exists about curriculum changes adopted by nations to improve the outcomes of students (Jensen & Reichl, 2012; Spady, 1994). However, in most schools there is often no tradition of organised support to inculcate the ongoing practices that such changes require (Levin, 2012).

The negotiation of mandated curriculum changes occurs between the policies of the government and the practices of the teachers and this space is the focus of the current study. A position in current research on leading and managing change is that effective, successful and sustainable changes in schools remain elusive (Elmore, 2011). Perhaps, as Elmore (2011) suggests, the actual change is not the issue. It is how we think about that change that is the concern, and "figuring out the right thing to do" is important so that mandated curriculum changes are not "implemented in a tentative, ill-informed, or unpractised way" (p. 69).

2

Hence, against a background of constant educational changes, this research seeks to understand how a group of teachers in one school negotiated mandated curriculum changes.

	The Research Defined	
$\overline{\varsigma}$		
1.	.2 Research Context: A Summary	•
1.	.3 Research Problem and Purpose	
1.	.4 Research Questions	
1.	.5 Research Paradigm and Design	
1.	.6 Significance of the Study	
1.	.7 Structure of the Thesis	

The following graphic provides an overview of this chapter.

1.2 Research Context: A Summary

The negotiation of mandated curriculum changes in schools occurs in a global society that is marked by rapid developments in technology and science, and the interdependency of multi-cultural, multi-religious, mobile populations. The educational arena in the western world is competitive, and governments recognise the performance of students in international testing as a benchmark for curriculum efficacy. In 2000, fifteen year old Australian students ranked in the top ten in Reading, Mathematics and Science in the Programme for International Student Assessment (PISA) test, but this was no longer the case in 2009 (OECD, 2010b). Consequently, the effectiveness of school curricula is currently a concern for the Australian government.

This concern is reflected in recent reports from the Australian Council for Educational Research (ACER) (Thomson, Hillman, Wernert, Schmidt, Buckley & Munene, 2011). The Progress in International Reading Literacy Study (PIRLS) of Year 4 students in reading, and the Trends in International Mathematics and Science Study (TIMSS) of Year 4 and Year 8 students are large-scale assessment sources that enable the comparison of the

achievement of Australian students with the wider world. Data collected by ACER from this testing shows that, generally, Australian students rank midway in a field of approximately fifty participating countries. Hong Kong, Singapore, Korea and Chinese Taipei lead the world in this testing. Such international benchmarking informs educational policy and practice and influences curriculum reform decisions in Australia. The disquiet with the academic performance of Australian youth has exerted pressure to redefine curriculum. Consequently, strategic directions to improve the educational outcomes for all young Australian students were set in the 2008 Melbourne Declaration of Educational Goals (MCEETYA, 2008). The goals of providing a curriculum that promoted equity, excellence, successful learners, confident and creative individuals and active, informed citizens were identified, and teachers have been charged with transferring this theory of academic success into their classroom practices.

Since the turn of the century primary schools in the state of Queensland, Australia, have transitioned through a number of mandated curriculum changes, including Outcome-Based Education (OBE), Inclusive Education, The Digital Education Revolution (DER), The Early Years Curriculum (EYC) and Essential Learnings and Standards (ELS). At the same time, teachers have negotiated the accountability demands of mandated state and national testing agendas and reporting frameworks. Such mandated curriculum changes have promoted the re-structuring, re-culturing and re-defining of processes and procedures in many schools (Degenhardt & Duignan, 2010). OBE was a system mandated curriculum change negotiated in the research school by the majority of participants in the study. Hence, this mandated curriculum change provided the researcher with a starting point for data collection in the study.

OBE was a curriculum approach that advocated a long-term concentration on learning attributes rather than the short-term educational tradition of rote learning and memorisation (Spady, 1994, 2001, 2007). The approach was

promoted widely in the world as a curriculum reform that would enable all students to succeed. Theoretically, students engaged with learning experiences until they achieved a specified outcome, similar to the process of obtaining a driver's licence (Middleton, 2000; Spady, 1994; 2001, 2007). In the United Kingdom and the United States of America, the rationale for the OBE reform was that it would create greater access to education for a larger number of students. In South Africa it was an avenue to address apartheid issues (Aldridge, Laugksch & Fraser, 2006; Jansen & Christie, 1999). Some Eastern countries implemented versions of OBE without the constraints of western accountability and adopted the concept of life-long education and a vision of thinking schools (Medel-Anonuevo, Ohsako & Mauch, 2001; Steiner-Khamsi, Silova & Johnson, 2006). Taking such approaches into account shows that there was diversity of interpretation by different nations engaged with the same curriculum change.

As with all mandated curriculum changes debates existed about the success and suitability of the OBE reform. Teachers in England labelled the curriculum as unwieldy and Canadian educators criticised the lack of content (Hargreaves & Moore, 1997). In Hong Kong, the United Kingdom colonial government had implemented OBE in the 1990s before their departure, but the approach proved unsuccessful and was quickly discarded. Australian teachers complained of the increased workload and they questioned the absence of assessment rigour, insisting that the excessive number of outcomes resulted in superficial and shallow coverage of knowledge (Blyth, 2002; Eltis, 2003). Consequently, unrest with the OBE reform resulted in a global shift to a standards-based approach (Blyth, 2002). With this shift, Hong Kong had become a leader in world education, according to the Organisation for Economic Co-operation and Development (OECD) 2012 reports (Jensen & Reichl, 2012; Wardlaw, 2006). In the research school, OBE was a key mandated curriculum change introduced in 1999 and negotiated by teachers until 2008. It was superseded by a shift to the standards-based curriculum

change of Essential Learnings and Standards (ELS) in the state of Queensland by 2010.

Significantly, this study is undertaken in a school that operates within a particular faith tradition, namely, Catholic Education. The Catholic philosophy encourages the transcending of class and self-interest through compassionate, moral and ethical thinking (Cook, 2004) and ongoing faith formation (De Souza, 2002). However, a perceived growing lack of Catholic identity confronts Catholic institutions in the 21st Century, and the suggestion is that Catholic schools are in danger of being seduced by the materialism, pragmatism and technocracy of a secular culture (McLaughlin, 2000). In some places, popular trends of ecumenical expression are replacing traditional Catholic modes of celebration and worship (McNichol, 2008). It is within this duality of life and living that the teachers in the research school negotiated mandated curriculum changes. Their challenge was twofold, firstly to provide an academic education and secondly, to encourage the adults of tomorrow to enter into the richness of a Catholic way of life (Spry, 2004).

1.3 Research Problem and Purpose

Considering the ongoing consistency of curriculum reform in Australia, it is timely to explore the way teachers negotiate mandated curriculum changes. There continues to be public and government demand for the delivery of high quality and high equity teaching and learning in schools (Luke, Weir & Woods, 2008). Changes continue, as seen in the current implementation of a national approach with the introduction of an Australian curriculum. Policy makers identify teachers as the integral link to the success of curriculum changes, but there appears to be a breakdown of the effectiveness of the negotiation of these changes at system, school and classroom levels (Levin, 2012). Subsequently, the research problem is the perceived dissonance between the rhetoric of mandated curriculum changes and the impact of these changes on teachers. Therefore, the purpose of the study is to explore how teachers negotiate, manage and respond to mandated curriculum changes.

purpose of the study is directed by the word *negotiate*. The dictionary definition for negotiate is to "transfer for consideration"; to "arrange or bring about the desired result" or to "get over, through or dispose of a difficulty" (Sykes, 1982, p. 678). To negotiate infers coping with a task or completing it successfully. The meanings imply that there could be shared understandings, successful implementation or definite progress. To negotiate means to confer with others in order to compromise or reach an agreement. Conversely, there may be dispute, or the endorsement of certain information through discussion with no resolution or no forward movement. Such descriptions of the nuances of meaning for the word *negotiate* highlight the layers of negotiation that were engaged with by teachers in the study.

1.4 Research Questions

The questions for the study emerged from a review of the literature on change theories and processes, and the understanding and management of curriculum changes within a particular school culture. The position of the literature is in the social sciences and the research questions focused on how teachers negotiate mandated curriculum changes. The following are the guestions for the study.

Overarching question

How do teachers negotiate mandated curriculum changes?

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

1.5 Research Paradigm and Design

The choice of the research design for the study is outlined in Table 1. The research design was grounded in the theoretical framework of the literature review and the above questions.

Table 1

The Research Design

Theoretical Framework	
Epistemology Theoretical Perspective	Constructionism Symbolic Interactionism (Interpretive)
Research Methodology	Case Study
Data Collection Methods	Survey
	Semi-structured interviews Researcher-generated documents

This research is a qualitative study within the epistemology of constructionism. The basis of constructionism is that truth is constructed rather than revealed (Creswell, 2009). The study is inquiry driven by the assumptions and perspectives of the researcher. Subsequently, the theoretical perspective of symbolic interactionism provides the researcher with an interpretivist lens (Schwandt, 2001). The premise of the intepretivist lens is that people construct a sense of self through interactions with others (Blumer, 1998; Charon, 2001). The educators in the study acted according to their definitions as they decided what was meaningful to them (Crotty, 1998; Patton, 2002). Consequently, the lived experience of the teachers in the research school defined their realities.

Case study was the methodology chosen to develop the study. It is a unique story, offering an in-depth description of people, circumstances, community and culture through the interpretation of data that deal with beliefs and motives (Creswell, 2007). This case study is an embedded, single case study limited to a particular organisation, with an explanatory focus about the general circumstances of a contemporary phenomenon (Merriam, 2009). The study expresses a desire to come to an understanding of a particular case to explain the learning and behaviour of people (Yin, 2009). Consequently, case study is an appropriate choice to examine the way teachers negotiate mandated curriculum changes within their contexts.

The methodology used in case study can include quantitative and qualitative data collection methods (Merriam, 2009), and both are used in this study. There is a greater emphasis, however, on the qualitative data. The quantitative data collection utilised was a survey, and the qualitative methods were individual, semi-structured interviews and researcher-generated documents.

The survey was constructed to focus on the mandated curriculum change of OBE to elicit broad perspectives from teachers involved in the study. Twenty teacher participants from the research school completed the survey. Although twenty was a small number for a quantitative data analysis (Smith & Gorard, 2005), the strength of the data collection was that these teachers represented a cross-section of age and teaching experiences in engagement with the mandated OBE curriculum change within the Catholic Education system. Analyses of the survey data concentrated on relative frequencies, expressed through percentages. The data were entered into IBM SPSS: Version 16 (IBM SPSS, 2008) and descriptive statistics showing the percentage frequency for each item were calculated for the demographic data and the four sections of data collected in the survey. The sections in the survey were Responses to the Mandated Change of Outcome-Based Education; Planning, Teaching,

Assessing and Reporting to the Mandated Change of Outcome-Based Education and Personal Reflections about the Mandated Change. These data assisted the researcher to design questions to probe areas of agreement or polarisation in the negotiation of mandated curriculum changes for the subsequent interview questions.

Thirteen participants were selected for the interviews, and the selection ensured as wide a representation of people, places and experiences as possible (Silverman, 2005). The criteria for the choice of these participants affected the quality of the findings (Seidman, 2006). The perspectives of the participants and the researcher were explored through the qualitative data of these semi-structured interviews and supported by the data of researchergenerated documents.

Researcher-generated document sources included the reflective journaling of the researcher from the transcripts of the participants' interviews, plus a collection of historical curriculum data generated by the researcher at the research site between 1999 and 2007. The reflective journaling data had a systematic, analytical focus. The researcher undertook both macro and microanalyses of the different perspectives of the topics discussed by participants during the interviews and engaged in extensive reflective journaling to explore the way teachers approached and negotiated curriculum change. This included comparisons of the views of teacher groups to illicit their understandings of curriculum changes, as well as the exploration of the personal and professional philosophies and assumptions of teachers in the study.

In addition to the reflective journaling, a number of historical researchergenerated documents had been compiled by the researcher between 2000 and 2005. These documents provided a recount of the implementation of the OBE change at the research site and were a record of the way teachers had negotiated a particular curriculum change during this period of time. They were an accurate reference for the researcher (Eisenhardt, 1989, Eisenhardt & Graebner, 2007), having been compiled from conference presentations, forums, focus groups, mini research projects, parent information nights and visiting teacher question sheets. They were a source of information explaining the processes, procedures and structures that surrounded curriculum change in the research school. Such researcher-generated documents provided a valuable source of reflective and historical field-note data. The researcher was able to compare these data with the process data gathered from the participants in the study, adding depth and rigour to the exploration of the research problem (Merriam, 2009).

The analysis of the data of the semi-structured interviews and the researchergenerated documents was conducted through two processes. The researcher refers to these processes as Iteration 1 and Iteration 2. In Iteration 1, the raw data of the interviews were analysed using the constant comparative method (Glaser & Strauss, 1967; Wellington, 2000). The simultaneous comparison of all units of meaning generated the four themes of the research. The themes were Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. A descriptive narrative for each of the interviews of the thirteen selected participants was written under these themes, and four findings emerged from the analysis of data. Because the researcher chose to take the study from description to theory construction, another layer of data analysis was undertaken. This level of data analysis was Iteration 2, and it involved a process of interrogating the four themes of the study to build a theory that was grounded in the detailed case summaries of the participants. Within each case, patterns emerged, and this enabled a cross-case comparison that led to pattern generalisation to strengthen the theory. Central to the building of theory from case study is replication logic, which is a process of repeating, contrasting and extending the emerging theory (Yin, 2009). Through the ongoing constant comparison of data and constructs, the theory develops into "a single, well-defined construct" (Eisenhardt, 1989, p. 41). The theory building

from the current study resulted in the development of The Selective Engagement Theory and the major finding of the study.

There were limitations and de-limitations for the study. A key limitation was that the researcher was an insider, which meant there was the need to be aware of researcher bias (Gillham, 2000). The challenge was maintaining the balance of relationships and keeping some distance from the participants. Steps were taken to address this. The researcher accounted for the personal and professional multiple influences the topic had for her, and continually acknowledged the perspectives and experiences of the participants and the audience for the research (Gilgun, 2010). Self-reflection was enhanced by giving participants access to the transcriptions of their interviews and using colleagues as critical friends. These colleagues were external to the research with the researcher. The delimitation was that the scope of the inquiry was determined by the place of the research in a single school setting, and what was consciously included and excluded (Creswell, 2007).

All ethical considerations were explained to the participants and the rights of those invited to participate were considered (Corbin & Strauss, 2008). Research objectives were outlined clearly, and confidentiality was ensured. Participation was voluntary and withdrawal was an option at any time. The researcher did not judge the participants in any way and pseudonyms ensured anonymity through chronologically sequenced coding (Saldana, 2009). All the necessary permissions were sought from employing authorities, university and individuals before the data collections began (Denzin & Lincoln, 2008; Merriam, 2009).

The validity of the research was concerned with the integrity of the study and the trustworthiness of the way in which data were collected, analysed, interpreted and presented. Trustworthiness was addressed with respect to internal validity, reliability and external validity. It was enhanced through the process of triangulation. Triangulation is the act of combining data from multiple sources to search for regularities and irregularities in order to give a richer and more accurate account of the research (O'Donoghue & Punch, 2003).

In summary, the goal of the researcher was to address the identified research problem, meet the stated purpose of the study and answer the research questions. The design of the study reflected the epistemology of constructionism and applied an interpretivist lens of symbolic interactionism, while utilising case study methodology. The data collection methods were a survey, semi-structured interviews and researcher-generated documents. The data were analysed through the techniques of constant comparison and the process of building theory from case study research, moving from description to theory construction. The researcher took all the necessary steps to protect the integrity of the study and address possible researcher bias.

1.6 Significance of the Study

The research offered a perspective on the way teachers negotiated mandated curriculum changes during a specified period, within a Catholic context in one school in Queensland, Australia. Each participant shared a lived experience of negotiating a number of curriculum changes in the timeline that bounded the focus of the study, namely, the ten years between 1999 and 2009. The study was significant for the following reasons.

Firstly, it provided a voice for the classroom teachers in the research. Although teachers have invested much effort into negotiating mandated curriculum changes, classroom practices can be criticised by governments as ineffective, and teachers are blamed for the decline in educational standards. There is the possibility that teachers have misinterpreted the aims of curriculum changes because of inadequate professional development, badly managed change or top-down decisions that generate negativity and resistance (Thompson & Zeuli, 1999). Evidence suggests that at times the engagement of teachers with change agendas has been shallow because they lack the capacity to align the purpose and practice of curriculum changes (Hargreaves & Shirley, 2009). Consequently, this study was an opportunity for a group of teachers to highlight the issues they believed impacted on their capacity to negotiate changes associated with curriculum reforms.

Secondly, there is benefit in learning from past challenges because it offers the opportunity to examine directions for future educational reforms. When situations are analysed through developed theory, such analysis has the potential to bring about change for the situation studied. It is timely to identify the approaches and practices adopted by teachers to manage mandated curriculum changes as schools in Australia are currently engaged in negotiating a national curriculum (ACARA, 2011). The study responds to the lacuna in the scholarship between the theories of change and the approaches and practices of teachers as they engage with the implementation of mandated curricula.

Thirdly, the research has the potential to improve approaches to the negotiation of mandated curriculum changes in schools by examining the contextual reality of the process of change (Hargreaves, 2003). Curriculum change occurs within the personal and professional spheres of teachers. Consequently, this study provides the opportunity to investigate the personal and professional responses of teachers involved in the negotiation of mandated curriculum changes.

Fourthly, the study offers system leaders, principals and teachers in Catholic schools an opportunity to reflect on the culture of a particular learning environment. It is an occasion to explore the possible influences of the Catholic tradition on the implementation of the curriculum. With the changing face of the Church, the formation of students in Catholic faith and identity is becoming the increasing responsibility of teachers. The significance of the research lies in the questions this raises for the system about the

sustainability of a Catholic identity in contemporary society and the influence of the Catholic culture (Spry, 2004), if any, on the negotiation of curriculum changes.

Finally, the study has the potential to inform and shape future policy and practice for systems and schools. It is possible that the study could prompt a review of policies concerned with change management processes and professional learning approaches. Such policies may apply to similar situations so that educators might avoid making the same mistakes in a different time and place.

1.7 Structure of the Thesis

This study is an exploration of the experiences of teachers in one primary school as they negotiate mandated curriculum changes. The research problem was defined in the current chapter. In addition, the study was justified and the design and significance of the research explained.

The background of mandated curriculum changes at national, state, system and school level is provided in Chapter Two. The research is positioned in the context of mandated curriculum changes in the state of Queensland, Australia between the years 1999 and 2009. A Conceptual Framework illustrating the organisation of the literature review is provided as Figure 1.

Relevant scholarly literature is reviewed in Chapter Three. The literature is organised in three layers and each layer identifies external and internal channels as the conduits for change. The first layer is the Change Processes Layer and it is here that the external channels of change theories and organisational change are discussed. This supports further discussion of the internal channels of change at school level and the school improvement approaches available to support the change process. The way teachers approach the negotiation of mandated curriculum changes are underpinned by the Change Process Layer. The second layer is the Change Pathways Layer. It is examined through the external channels of learning organisations, including the phases of change, the curriculum and government accountability agendas. The internal channels of change are identified as the social and emotional intelligences of the people involved, the impact of change on teachers and the influence of teacher leadership and professional learning in the change process. The emotions, choices and responses of teachers involved in the negotiation of mandated curriculum changes are reflected in the Change Pathways. The third layer is the Cultural Layer. It is viewed through the external channels of contemporary society and the traditions of the system in which the study is undertaken, namely, Catholic Education. The internal channel of school culture underpins the discussion on Catholic identity and the negotiation of curriculum changes within the Catholic tradition. The norms of the school and the way the culture of a learning environment is shaped by people and tradition are discussed in the Cultural Layer.

The design of the research is the focus of Chapter Four. The epistemology is constructionism, the theoretical perspective is symbolic interactionism (Creswell, 2003) and the research methodology is case study (Merriam, 2009). Data collection methods include a survey, semi-structured interviews and researcher-generated documents. The survey informed the construction of the interview questions. The researcher-generated documents included reflective journaling based on the analysis of the interview data, as well as historical school-based data and field-note observations about curriculum changes at the research site. The study is undertaken in one Catholic primary school and the teachers in the school are the participants. Twenty of these teachers participated in the survey and thirteen were invited to be part of the semi-structured interviews.

An analysis of the quantitative and qualitative data is reported in Chapter Five. The quantitative data were collected with the survey and the qualitative data were collected from the semi-structured interviews and the researchergenerated documents. The researcher examined the data that were collected through two iterative processes, namely, Iteration 1 and Iteration 2. In Iteration 1, the use of the constant comparative method enabled an analysis of the raw data, resulting in the formulation of four themes with underlying concepts that were used to develop the study. The themes were Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. These themes were a guide for the writing of the within-case descriptive narratives of the case summaries and two of these summaries are included in the chapter. Cross-analysis of the case summaries to compare the similarities and differences in the data resulted in the four findings of the study.

The themes of the study were deeply interrogated through Iteration 2 in Chapter Six, to build theory from the current research. This process of building theory from case study draws on the ideas of theoretical sampling, theoretical saturation, overlapped coding, data collection and analysis (Glaser & Strauss, 1967). It includes case study design, replication logic and concern for internal validity (Yin, 1984, 2009) and the tools of tabular display of evidence (Miles & Huberman, 1984). Priori specification of constructs, participant specification, flexible instrumentation, cross-case analysis tactics and several uses of the literature develop a testable hypothesis and theory to support more generalisations across settings (Eisenhardt, 1989, Eisenhardt & Graebner, 2007).

The process is highly iterative and involves "using one or more cases to create theoretical constructs, propositions and/or midrange theory from casebased, empirical evidence" (Eisenhardt & Graebner, 2007, p. 25). In this study, four dimensions and three types of approaches emerged to describe the management and implementation of curriculum changes by teachers. The four dimensions of the engagement of teachers with mandated curriculum changes were *Interpreting*, *Adapting*, *Adopting* and *Committing*. Two processes underpinned each dimension, and these processes reflected the different mental models of teachers involved with curriculum changes. From the dimensions and processes, three types emerged to characterise the approaches and practices of teachers engaged with curriculum change. Types were Curriculum Keepers, Curriculum Shapers and Curriculum Changers. The hypothesis that was shaped in this theory building process measured and verified the relationships of the themes, concepts and dimensions of the study. The hypothesis was:

The Hypothesis:

Teachers in the study selectively engaged with mandated curriculum changes according to their choices.

Consequently, the theory that emerged from the process of building theory from this case study research was:

The Theory:

The Selective Engagement Theory.

A discussion relating to the findings of the research was developed in Chapter Seven. The discussion drew together past and present research and findings from the data where perspectives of the participants were articulated. The initial discussion was organised under the four themes identified in Chapter Five, namely Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. The second part of the discussion related to the characteristics of the approaches and practices of the emergent types, namely Curriculum Keepers, Curriculum Shapers and Curriculum Changers. The five findings of the study included four from the themes of the research and one major finding from the process of theory building which resulted in The Selective Engagement Theory. The findings sought to answer the questions of the study.

The development of the theory is provided in Figure 1.

	LAYERS OF THE LITE	ERATURE REVIEW	
Contextual	Change Processe		ays Cultural
Ç			>
	DESIGN OF THE	E RESEARCH	
Epistemolog Constructionis	sm Symbolic Ir	nteractionism N	R esearch /lethodology Case Study
Ç			P
	DATA COLLECTI		
Survey	Interview		cher-generated ocuments
Ç			
	DATA ANALYSIS:		1
Theme 1 Capacity to Change	Theme 2 Teacher Capital	Theme 3 Learning Together	Theme 4 Shaping Culture
+ Aspects	+ Aspects	+ Aspects	+ Aspects
	Ļ		
	DATA ANALYSIS		
Dimension Interpreting by filtering and auditing	Dimension Adapting by agreeing and manipulating	Dimension Adopting by accepting and practising	Dimension Committing by transferring and transforming
	Ļ		
	TYPE		
Curriculum k	Keepers Curricul	um Shapers Curri	culum Changers
	Ļ		
— · ·	HYPOTH		
Teachers in t	the study selectively en changes, according	00	d curriculum
	Ļ		
	THEO		
	The Selective Enga	agement Theory	

Figure 1. The development of the theory.

Finally, the conclusions and recommendations of the research study were offered for consideration in Chapter Eight. The significance of the research was considered for policy makers, systems, schools and teachers, and implications of the study for the direction of future research were drawn. A proposal is offered about what could be done in the future to improve the negotiation of mandated changes for teachers through the use of an enhanced model of professional learning. The model proposes a four-stage approach to planning for changes at system, school and classroom levels. It calls all those involved in education to be inspired by the following vision when challenged to negotiate mandated curriculum changes.

The Vision

Envisage the change Engage with the initiative Embed the practices

CHAPTER 2: CONTEXT OF THE RESEARCH SCHOOL

2.1 Introduction

An overview of the study was provided in Chapter One. In this chapter the Contextual Layer of change is examined, and the contexts are described at national, state and system levels. The following graphic displays the mandated curriculum changes discussed in this chapter.

The Contextual Layers
2.2 National, State and System Curriculum Contexts
2.2.1 External Channel 1: The National Context
Citizenship Programs
Accountability Initiatives
Inclusive Education
The Digital Education Revolution
2.2.2 External Channel 2: The State Context
Consistency of Teacher Judgement and Moderation Processes
Early Years Curriculum
The Queensland Curriculum Assessment, Reporting Framework
2.2.3 External Channel 3: The System Context
Outcome-Based Education
Essential Learnings and Standards
The Diocesan Learning Framework
2.3 Internal Channel: The Local Context

2.2 National, State and System Contexts

Between 1999 and 2009, teachers in the research school negotiated ongoing mandated curriculum changes at national, state and system levels and the change initiatives that challenged them are the context for this research study. The mandated changes that were specific to teachers in the research school are outlined in Table 2.

Table 2

Timeline of Mandated	Changes in the	Research School

Year	Mandated Change Initiatives	Mandated Level
1997-2004	Discovering Democracy	National
1999	Outcome-Based Education	System
2000	Year Two Diagnostic Net	State
2000	Consistency of Teacher Judgment and Moderation	State
2003	Outcome-Based Religious Education Syllabus	System
2004-2007	Values Education	National
2005	Inclusive Education	National
2007	Early Years Curriculum	State
2008	Digital Education Revolution	National
2008	Queensland Common Assessment Tasks	State
2008	National Assessment Programme Literacy and Numeracy	National
2008	Five part Reporting Framework	National
2008	Diocesan Learning Framework	System
2009	Queensland Curriculum Assessment Reporting	State
2009	Essential Learnings and Standards	System
2009	Diocesan Learning Platform, mandated in 2010	System

2.2.1 External Channel 1: The National Context

Australia operates under a federal system similar to Canada and the United States of America, although the additional level of a state government complicates alignment of policy and practices in the national arena. The policy documents of governments define mandated curriculum changes, and in 2004, the focus for change was Literacy, Numeracy, Special Learning Needs, the New Arrivals Programme and the School Languages Programme (DEEWR, 2004). The 2008 Education Act focused on the National Secondary School Computer Fund, optic fibre connections to schools, Trade Training Centres, National Action Plans for Literacy and Numeracy, a pilot program on Local Schools Working together to share facilities and the development of a National Curriculum (DEEWR, 2008). These policies defined the breadth of
change initiatives in the Australian educational arena and underpinned the mandated curriculum changes experienced by teachers in the research school.

The first national initiative to be considered in the study is the civics and citizenship foci of the Federal Government. This included the Discovering Democracy Program and the subsequent Values Education Program. Discovering Democracy targeted upper primary classes and included studies on political heritage, democratic processes, the judicial system and the history of societies in Australia (MCEETYA, 1999). The purpose was to instil a sense of civic pride and responsibility in the future citizens of Australia. The success of the initiative was questioned at government level when research findings showed that schools were disconnecting social justice from learning, resulting in the teaching of thin rather than thick democracy (Carr, 2008). In the research school, the arrival of resources to support the program occurred before the information about the initiative was received, and there was some confusion about what was expected.

Following the Discovering Democracy initiative, *The National Framework for Values Education in Australian Schools* was developed from a 2003 Values Education Study (DEST, 2003). Nine shared values and eight guiding principles emerged to encourage commitment to a multicultural and environmentally sustainable society (Halstead & Taylor, 2000). Research indicated that a range of values and education philosophies, traditions and beliefs existed in schools and evidence showed that values were linked strongly to religious foci. Concerns were raised about the preparation and adequacy of teachers in the teaching of values-based programs because it was possible for personal value systems to influence the way values were taught (Reynolds, 2001). The teaching of this program was not a priority in the research school, because of the predominance of a Gospel values-based approach.

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A national agenda that underpinned mandated curriculum changes for teachers in the research school was the effect of government accountability measures. In May 2008, 210,000 students in 1,900 Australian schools completed the Years 3, 5, 7 and 9 National Assessment Programme for Literacy and Numeracy (NAPLAN) for the first time. Since then, the tests have become a reporting device for States and Territories to compare the progress of students and schools against national standards (Curriculum Corporation, 2007). There have been references made to the failures of this type of testing and reporting in other countries (Harrington, 2008). However, the Australian Government assured the nation that the approach was grounded in solid research and the initiative would improve the academic performance of students. Government authorities promised that there would be unprecedented rigour and openness in the collection and publication of school data, and comparisons of schools would be within similar socio-economic bands on the MySchool website (ACARA, 2010). However, the direct comparison of national data on like schools was not reflective of school variables and demographic compositions, and the government's claim was challenged (Wu, 2011). The 2008 results of students in the Northern Territory, Queensland and Western Australia were lower than Victoria, New South Wales and the Australian Capital Territory, and this was the cause of some disquiet with newspaper headlines comparing results in the different States. In Queensland, the age of the cohorts was younger than other jurisdictions between 2008 and 2010 because of the difference in the school starting age in the state. Notwithstanding, the 2008 NAPLAN tests heralded the groundwork for the implementation of a National Curriculum, with the introduction of syllabi for Mathematics, English and Science in 2012 in some, but not all Australian states.

Part of the national accountability agenda was a five-part reporting framework. The supposition was that this would promote greater parent understanding of report cards and consistency of reporting processes across schools (Eltis, 2003). An A to E reporting scale was mandated for Years 4 to 10. The fivepart reporting framework supported the introduction of Essential Learnings and Standards (ELS) in the Queensland curriculum and replaced previous reporting paradigms in the research school (QSA, 2008).

A national initiative that involved legislative policy was the Inclusive Education mandated change. Underpinned by the 1994 UNESCO Salamanca Statement and Framework for Action on Special Needs Education, the legislation dismantled the potential exclusion of students with disabilities from mainstream schooling, addressing possible injustice and disadvantage in educational opportunities (Slee, 2003b). The Commonwealth legislation and policies of Disability Standards for Education (2005), the Disability Services Act of Queensland (2006) and the Education (General Provisions) Act of Queensland (2006) increased the diversity of the student populations in schools, and challenged educational systems to accommodate the disparate learning needs of students (Fisher, Roach & Frey, 2002). The difficulty teachers in the research school experienced was the expectation that they were to be authorities in dealing with the needs of students with Attention Deficit Disorder, Asperger's Syndrome, Intellectual and Medical Impairment, Speech Language Disorders and Social Emotional Disorders. It took some time to develop the knowledge, skills and capacity of teachers to cope with this change.

Another national initiative to be considered was the impact of technology on education. The Federal Government's 2008 Digital Education Revolution (DER) was a \$1.2 billion five-year national strategic vision for ICT infrastructure and online resourcing in schools (DEEWR, 2008). The national DER commitment encompassed learning management systems, portfolios, collaboration, communication spaces, digital education resources, and planning and teacher professional development for school transformation. The costs were ongoing and escalating and, to date, the Australian Government has made a \$2.4 billion investment to support the effective integration of ICT into education (DEEWR, 2011). Between 1999 and 2009, the use of

technology escalated in the research school, moving from an isolated approach with fifteen computers in one room to fully networked classrooms with provision for e-learning. An ongoing rollout of computers for classroom teachers was facilitated at system level, funded by the 2008 DER commitment. This stimulated electronic approaches to planning, assessing and reporting, and encouraged teachers in the research school to engage in pedagogical e-learning approaches that capitalised on the use of technology.

In summary, the Federal Government mandated curriculum changes negotiated by teachers in the research school included the civics and citizenship initiatives, Inclusive Education, the Digital Education Revolution and national accountability agendas. Change was ongoing and consistent in schools, and had the potential to overload teachers.

2.2.2 External Channel 2: The State Context

Between 1999 and 2009, teachers in the research school negotiated a number of State Government mandates. These included the Queensland Curriculum Assessment and Reporting Framework (QCAR) of the Queensland Studies Authority (QSA). In addition, accountability agendas were negotiated with the Consistency of Teacher Judgment and Moderation initiative (CTJ) and the Queensland Common Assessment Tasks (QCAT) for Year 4, Year 6 and Year 10 (QSA, 2008). With the move from Pre-school to Preparatory Year in 2008, the Early Years Curriculum (EYC) was implemented, emphasising a play-based learning approach.

The QCAR Framework was developed under the Smart State Strategy of the Queensland Government to promote consistency of curriculum, assessment and reporting across schools (QSA, 2006). The QCATs complemented the QCAR Framework and the Essential Learnings. Initially, QCATs were expected to replace the previous Year 3, 5, 7 state testing agenda, which had been in place for almost ten years. This did not occur. Although it was mandatory for all Year 4 and Year 6 students in Queensland to sit the QCAT

tests in 2008, the QCAT state testing agenda and the QCAR Framework were short-lived in the research school, because federal policy advocated a move to an Australian national curriculum in 2012. This meant that the research school negotiated the OBE change between 1999 and 2007, transitioned to Essential Learnings between 2008 and 2011 and engaged in the national curriculum agenda in 2012.

The QCAT testing was underpinned by CTJ moderation approaches. The moderation process was foundational to the assessment of the Year Two Diagnostic Net, the achieved and not-achieved OBE approach, the ELS and the QCATs. On a pupil-free day in October each year, teachers from the research school moderated with teachers from across the region to ascertain the standards of student performance by examining a cross section of work samples. Research conducted in eleven Catholic schools identified strategies that promoted the reliability of the process (Gardiner, Tom & Wilson, 2000). Successful strategies included collaborative planning and assessing, the use of a common assessment task to compare student work, the development of a common criteria sheet around core learning outcomes and reflection on shared understandings. It was necessary for teachers to have the skill and ability to engage in professional dialogue and rigorous debate to establish common understandings in order to set valid and credible intra and interschool standards. Past research findings showed that this type of teacher judgment was seen as subjective, however, it was generally quite reliable (Cumming, Wyatt-Smith, Elkins & Neville, 2006; Masters & McBryde, 1994). Teachers in the research school engaged in intra-school moderation processes at school reporting times, and inter-school moderation processes at the annually scheduled moderation day.

In 2007, the introduction of the Early Years Curriculum (EYC) accompanied the transition from Pre-school to Preparatory Year for students beginning school in Queensland. The purpose of the change was to align the school starting age of primary students across the nation (Edwards & Taylor, 2009). The EYC was grounded in studies on the development of four and five year old children (Pianta & La Paro, 2003; Raver, 2002; Schweinhart & Weikart, 1997). The influence of this research was that EYC targeted social and personal learning, health and physical learning, language learning and communication, early mathematical understanding and brain-building learning processes (Bertram & Pascal, 2002; Potter & Briggs, 2003). The introduction of the EYC in Queensland was expected to have a positive impact on student achievement and performance, but the 2011 National Assessment Program Literacy and Numeracy (NAPLAN) Year 3 results of the 2008 Preparatory cohort did not reflect this (ACARA, 2011).

In summary, the State mandated initiatives negotiated by teachers in the research school included moderation processes to set standards, the Queensland Curriculum Assessment and Reporting agendas, state testing agendas and the Early Years Curriculum.

2.2.3 External Channel 3: The System Context

The research school is part of the Catholic sector and, as such, operates under the tradition of the Catholic Church. Curriculum is delivered in a culture that has an educative vision expressed through an authentic understanding of Christ and his teaching. Learning occurs through the synthesis of culture, faith and life. The system complies with Federal Government mandated curriculum changes, and exercises the option to mandate state government changes.

A mandated system initiative that changed the delivery of curriculum in the research school in a number of ways was Outcome-Based Education (Spady, 1994, 2001, 2007). The introduction of the OBE syllabi was staggered, with Science and Health and Physical Education in 1998, Languages Other Than English and The Study of Society and Environment in 2000, Technology and The Arts in 2002 and Mathematics in 2004 (QSA, 2004). The English syllabus was scheduled for implementation in schools in 2006, but this syllabus was never published beyond the draft stage. In addition, a new Religious

Education (RE) curriculum, framed under the OBE approach, was introduced into the research school in 2003 (Barry, Elliott, Harvey, Koszarycz, Lavercombe, Rush, Sunter & Walsh, 2003).

The OBE curriculum was underpinned by a developmental, constructivist philosophy in which the dispositions and attitudes of students took priority over knowledge (Luke, Weir & Woods, 2008). The main feature of the OBE approach was a life-long learning concept of demonstrating outcomes over ten years of study, rather than covering prescribed content on an annual basis. The OBE philosophy was based on mastery learning, which maintained that all students succeed if the learning is manageable, sequentially developed and enough time is given (QSCC, 2002). Mastery learning approaches promoted a move from the genotype of group-based, teacher-paced learning to individual-based, learner-paced learning. Such an approach accommodated the diversity of student ability in cross-age home groups instead of chronological-age year level groups. Theoretically, the approach allowed students to work within different contexts to meet the same outcome. Teachers were facilitators rather than directors of learning experiences, and the emphasis was on individualised, corrective instruction (Bloom, 1968). The findings of a meta-analysis conducted by Hattie (2009) on mastery learning highlighted the success of the approach on the cognitive and affective outcomes of students.

By 2005 in Queensland, there was unrest and dissatisfaction with the vagueness of the content of the OBE syllabi, and the perceived lack of rigour in the assessment process of the approach. In 2006 and 2007, forums were conducted throughout the state to identify the core content of the OBE syllabi in order to streamline the learning content as Essential Learnings and Standards (ELS), (Freebody, 2005; Tognolini, 2006). In 2009 the research school was directed by the Diocesan curriculum authority to audit OBE learning programs to the content of the ELS, and ELS became the point of reference for planning documents.

From 2008 on, the OBE approach was implemented in the research school under the umbrella of the Diocesan Learning Framework (DLF). The DLF was described as a foundation for the conceptual understanding of curriculum implementation in the Diocese. It reflected the theology of Lonergan (1973), and was designed to the philosophical and theological understanding of, "be in love with the Mystery that is the ground of all being, be attentive, be intelligent, be reasonable and be responsible" (p. 20). Curricula were linked to the concepts of experiencing, understanding, judging and deciding. The Framework highlighted the processes of communication, creative, artistic, inquiry, mathematical, scientific, problem solving and reflection as methods underpinning curriculum development. To provide consistency for curriculum infrastructure in schools, the electronic tool of the Diocesan Learning Platform (DLP) was designed by system personnel. This tool organised planning, assessing and reporting approaches and it referenced the theology of Parker Palmer (1998), posing questions around the what, the how, the why and the who of teaching. Although documents existed on the Diocesan intranet to inform teachers of the processes and proposed pedagogical development of curriculum in the research school, conjecture existed for some teachers about the alignment of system philosophies with classroom practices.

In summary, the system mandated curriculum changes negotiated by teachers in the study were Outcome-Based Education and Essential Learnings and Standards. The Diocesan Learning Framework provided theological and philosophical understandings for curriculum development and the Diocesan Learning Platform was the tool designed by system personnel for planning, assessing and reporting.

2.4 Internal Channel: The Local Context

The local context was examined through the aspects of history, demographics and curriculum infrastructure in the research school. Because the importance of the teacher as an agent of change was highlighted in research studies (Hattie, 2009; Timperley, 2005), the teacher population of the research school was considered in relation to age, professional teaching experiences, relocation and retention.

The first aspect of the local context was the history of the school. The school was located in a large regional centre and founded by the Sisters of St Joseph at the invitation of the Parish Priest in the early 1960s. The original building was the place of worship for parishioners on Sunday, and it became the school from Monday to Friday. In the 1970s, the Labour Government initiated a funding formula for independent schools, which raised the profile of religious schools. Accountability for the management and financial viability of the research school became the responsibility of both the Parish and the newly established Catholic Education Office. The first lay Principal was employed in the 1970s, and the last Sister of St Joseph to work at the school left in 1995. A Parish Priest remained in residence until 2003, and currently a Pastoral Leader, under the governance of a Priest Director, oversees the day-to-day management of the Parish and the liturgical celebrations of the research school. Over the years, the infrastructure of the school has developed through Capital Works Projects financed by national and state government grants. Such financial support has enabled the building of new classrooms and the refurbishment of old, plus the construction of an administration area, a library, a multi-purpose space and an indoor sporting complex. These historical aspects shaped the growth of the research school during the past fifty years.

The second aspect of the local context was the demographics of the school. Government data collected in 2010 indicated that the school had a Socio-Economic Standing (SES) value of 1062, which is slightly above the average of 1000 for the nation. This standing is one of the highest for schools in the Diocese (ACARA, 2011). Student enrolment constituted 196 girls and 213 boys, with student attendances of 96% for the year. There was an Indigenous population of 1%, a language background other than English of 5% and the school finance turnover in 2009 was \$2,769,438. The student net recurrent income was \$6,788, with a total capital expenditure of \$299,718. Almost 70%

of students in the school were from Catholic families residing within the Parish. In 2009, the school had 20 full-time staff with teaching roles and 15 school officers. Out of the 20 teachers, 80% were Catholic, with 20% on the Parish roll and another 40% practising in their Parish of residence. Consequently, a large percentage of the parent and teacher population at the school were affiliated in some way with the Catholic faith.

The third aspect of the local context was the curriculum structures in the research school. In 1998, an invitation to participate in the *Curriculum 2000 Project* was extended to schools in the Diocese by the Catholic Education Office, and the research school nominated to pilot the Stage-Based Integrated model to implement the system mandated curriculum change of OBE (Middleton, 2000). The choice to implement the approach was the decision of the teachers, principal and parents. System funding to support the pilot program was available to the school in 1999 and 2000. In November 2000, a report was compiled to explain the strengths and challenges of the implementation of the stage-based model so that Diocesan principals could make informed choices about implementing the change as from 2001.

The stage-based OBE approach in the research school accommodated the two-year cycles of learning in the OBE syllabus. Year-based classes were restructured into stages of mixed year level classes from Year 2 to Year 7. Because of the perceived disruption that such changes could cause, teachers were reluctant to trial the approach in the early years, so the junior grades of Pre-school/Preparatory Class and Year 1 remained in year levels.

Consequently, different areas of the school were negotiating mandated curriculum changes under different class structures and planning approaches. An understanding of the complexity of the curriculum structures in the research school between 1999 and 2009 is provided in Table 3.

Table 3Curriculum and Class Structures in the Research School

Year	Class	Class structure	Curriculum structure and approach		
1999 to 2006	Pre-school 2 classes	Year-based	Pre-school Curriculum, integrated School-Based planning		
2000	Year 1	Year-based	OBE, integrated planning		
	Stage 1 Year 2 & 3 mix	Stage-Based, 3 classes	OBE, integrated planning		
	Stage 2 Year 4 & 5 mix	Stage-Based, 3 classes	OBE, aggregated & integrated planning		
	Stage 3 Year 6 & 7 mix	Stage-Based, 3 classes	OBE, aggregated & integrated planning		
2007	Junior Stage Prep/ Year	Year-based, 1 class	Early Years/OBE Curriculum, integrated planning		
	Prep/Year 1	Composite, 1 class	Early Years/OBE Curriculum, integrated planning		
	Stage 1 Year 2 & 3 mix	Stage-Based, 4 classes	OBE, aggregated & integrated planning		
	Stage 2 Year 4 & 5 mix	Stage-Based, 3 classes	OBE, aggregated & integrated planning		
	Stage 3 Year 6 & 7 mix	Stage-Based, 3 classes	OBE, aggregated & integrated planning		
2008	Junior Stage Preparatory Year & Year 1	Year-based, 4 classes	Early Years Curriculum Early Years/OBE, integrated planning		

Year	Class	Class structure	Curriculum structure and approach
	Stage 1 Year 2&3 mix	Stage-Based, 4 classes	OBE, aggregated & integrated planning
	Stage 2 Year 4&5 mix	Stage-Based, 4 classes	OBE, aggregated & integrated planning
	Stage 3 Year 6&7 mix	Stage-Based, 4 classes	OBE, aggregated & integrated planning
2009	Junior Stage Preparatory Year & Year 1	Year-based, 4 classes	Early Years/ELS, integrated planning
	Stage 1 Year 2&3 mix	Stage-Based, 4 classes	ELS, aggregated & integrated planning
	Stage 2 Year 4&5 mix	Stage-Based, 4 classes	ELS, aggregated & integrated planning
	Stage 3 Year 6&7 mix	U	ELS, aggregated planning only

The local context was influenced by the teachers in the research school. The range of ages and personal and professional teaching experiences of the teachers in the study were diverse, including first-year graduates and veteran teachers with over thirty years' experience. With this profile there was potential for attitudes to mandated changes to be positive or negative, passive or reactive, energised or compromising, as teachers adapted and adopted strategies to cope with and maintain a sense of control over the demands of change.

Between 1999 and 2002, staff retention in the research school was close to 100% and the stability of the group promoted common understandings and practices about change. With staff variations between 2003 and 2005, those who had re-structured and re-defined the mandated curriculum changes in the

school took on a role to induct, coach and mentor those who re-located. Between 2006 and 2008, teacher turnover influenced the negotiation of curriculum changes in the research school as many different interpretations of the OBE change filtered into the school. The teachers involved in the research study in 2008 represented a 75% turnover from those who had been involved in the OBE curriculum changes in 1999. Consequently, ongoing staff changes continually influenced and reshaped the interpretations of mandated changes at the research site.

2.5 Conclusion

Between 1999 and 2009, teaching and learning in the research school was influenced by mandated curriculum changes advocated by policy makers. However, there appears to be some discord between the rhetoric of the proposed success of mandated changes by policy makers and the effective negotiation and implementation of these changes by teachers. The OBE change impacted on the content of curriculum and it did not result in success for all students. Class structures were reorganised to accommodate the delivery of a two-year cycle of curriculum, as defined in Table 3. The national assessment agenda did not improve student performance standards as expected. Such dilemmas highlight the area of concern for this research study. It can be observed that changes can bring a philosophical disconnect between the change and the beliefs and assumptions on which teachers base their pedagogy. What happens between the policy of curriculum changes and practices of teacher is the focus. Consequently, the overarching question for the research is:

Overarching Question

How do teachers negotiate mandated curriculum changes?

Having defined the overarching question, a review of the scholarly literature pertaining to change and the implementation of change initiatives within the culture of a school learning environment is undertaken in the following chapter. The literature is reviewed in three layers, namely Change Processes Layer, the Change Pathways Layer and the Change Culture Layer.

The Conceptual Framework for the review of the literature for this study is provided in Figure 2.

CONCEPTUAL FRAMEWORK FOR THE LITERATURE REVIEW



Figure 2. The conceptual framework for the study.

CHAPTER 3: REVIEW OF THE LITERATURE

3.1 Introduction

The purpose of this study was to investigate how teachers negotiate mandated curriculum changes. The context was one Catholic school in Australia and the study focused on curriculum changes between the years 1999 to 2009. During this time, national, state and system authorities sanctioned mandated curriculum reforms and teachers were expected to translate the theories of the curriculum changes into their classroom practices. The following graphic gives an overview of the literature reviewed to develop this research study.

The Literature Review							
$\boldsymbol{\xi}$							
3.2 The Change Processes Layer							
3.2.1 External Channel 1: Change Theories							
3.2.2 External Channel 2: Organisational Change							
3.2.3 Internal Channel 1: Change at School Level							
3.2.4 Internal Channel 2: School Improvement Approaches							
3.3 Sub-question 1: How do teachers understand and manage the							
change processes associated with the negotiation of mandated							
curriculum changes?							
3.4 The Change Pathways Layer							
3.4.1 External Channel 1: Change Phases							
3.4.2 External Channel 2: Curriculum							
3.4.3 External Channel 3: Accountability Measures							
3.4.4 Internal Channel 1: Social and Emotional Intelligences							
3.4.5 Internal Channel 2: Teachers as Leaders							
3.4.6 Internal Channel 3: Professional Learning							
3.5 Sub-question 2: How do teachers respond to the negotiation of							
mandated curriculum changes?							
3.6 The Change Culture Layer							
3.6.1 External Channel 1: Contemporary Society							
3.6.2 External Channel 2: Catholic Tradition							
3.6.4 Internal Channel 1: School Culture							
3.6.5 Internal Channel 2: Catholic Identity in Schools							
3.6.6 Internal Channel 3: Curriculum in a Catholic School							
3.7 Sub-question 3: How does the culture of a school influence the way							
teachers negotiate mandated curriculum changes?							

The literature that surrounds the study was reviewed through four conceptual layers, namely the Contextual in the previous chapter and the Change Processes Layer, the Change Pathways Layer and the Change Culture Layer in this chapter.

3.2 The Change Processes Layer

The Change Processes Layer was developed through the external channels of change theories and organisational change, plus the internal channels of change at school level, which included a discussion on school improvement approaches.

3.2.1 External Channel 1: Change Theories

Change theories originated in the business world and some of these changes gradually filtered into the educational arena. Generally, the theories explain change as multi-dimensional and complex and indicate that accomplishments materialise through people, strategies, technology, processes and systems. In education, this equates to teachers, leadership, schools, systems, curricula and government policies. Therefore, this study of curriculum changes begins with a study of the literature on organisational change.

Many theories of change have emerged since the 1970s and the place and role of people in the change process is highlighted. The studies of Schein (2004), Argyris & Schon (1978, 1996), Argyris (1992), Conner (1992), Larson (1992), Lewin (1946), Handy (1993, 1996), Hammer and Stanton (1995), Bridges (1995), Kotter (1995, 1996, 2003), Corner (2000), Mulford & Silins (2003), Fisher (2005) and Kotter and Rathgeber (2006) are just a few that are often quoted and widely known. The following gives a short explanation of these theories to situate the study in this change literature.

The studies of Schein (2004) examine the way people establish routines and patterns to reduce uncertainty and stress as they deal with change to give it meaning, predictability and stability within their environments. He explains that the management of change involves the cognitive restructuring of patterns and routines by people. Lewin (1946) describes change as as a process of the unfreezing and refreezing of behaviours and thoughts, and Schein (1998) emphasises that people involved in the process need to be convinced that there is a need for change. Those on the change journey may opt to go slowly and remain in the familiar or plunge more rapidly into the unknown and new. According to Argyris and Schon (1996), the actions of people often mirror the mental maps they have about change, rather than the theories they hold. In addition, Argyris (1992) proposes that change is reflected in what people value, but he makes the point that what people claim they value is not always consistent with their decisions and actions. The human element is the core of performance and for people to change they must let go of the old, grieve for what is lost, and sort out and discard past patterns of thoughts and actions in order to cope with new beginnings (Argyris, 1992). Consequently, change equates to a transition curve that moves people through feelings of gradual acceptance to take them forward (Fisher, 2005). It is uncomfortable for many, and, generally, uninformed optimism is followed by informed pessimism (Conner, 1992).

Dealing with this pessimism, resistance and negativity in change involves understanding the co-relation of the psychological needs of people and the effectiveness of the management of change (Corner, 2000; Mulford & Silins, 2003). Resistance is articulated through the question why, and it is necessary for those leading change to engage in dialogue to answer this question. It is proposed that the goal of school communities should be to develop their own capacity to learn, but this will not occur unless people are prepared to engage with change. Guiding people through change requires keeping one-step ahead of them and it is important to appreciate the time taken for them to feel comfortable with the new desired state. (Kotter, 2003). It is through experiencing, dealing with and learning from the confusion of change that real improvement occurs within systems (Senge, 2001). "It is becoming clear that schools can be re-created, made vital, and sustainably renewed not by fiat or command, and not by regulation, but by taking the learning orientation" (Senge, 2001, p.5). Therefore, to be successful, change leaders must first create a climate for change, then engage and enable an organisation to implement, sustain and anchor the change in the culture (Kotter & Rathgeber, 2006).

Employee acceptance of change is recognised as the measure of success and studies indicate that 60% of new initiatives are actually thwarted by what they are trying to transform, namely, the attitudes and behaviours of people (Kotter, 1995; Prosci, 2005, 2009). Successful change is bound to the change components of communicating the story, modelling from those in leadership roles, reinforcing systems and structures and ensuring all have the skills to move towards the chosen outcome (Price & Lawson, 2003). This reflects the expectancy theory of motivation proposed by Vroom (1964) almost 50 years ago, which states that people involved with change need to answer the following questions:

Do I know what it is that needs to be accomplished?

Are the benefits of accomplishment important to me and desired by me?

Do I have a clear idea of exactly what it is that I need to do to accomplish this?

Should I attempt accomplishment, will I be successful? (Sergiovanni, 1995, p. 287)

While the simplicity of asking these four questions is recognised, change is complicated because of the values, assumption and choices made by the groups of people involved (Schein, 1985). Argyris (Smith, 2001) explores organisational learning systems and the way people operate according to their theories and actions (Argyris & Schon, 1978), highlighting the importance of the choices people make in their negotiation of change. The collective decision making of an organisation shapes the culture and relationships and

underpins attitudes and beliefs about change. It is proposed that organisations learn and develop through the theories of action, theories in use and espoused theories (Argyris & Schon, 1978) of their workforce. For change to be effective, there must be congruence between theory-in-use and espoused theory, and reflection has a key role in connecting the two. However, the research of Schein (1985) identifies the stages of change progression in organisations as early growth, mid-life and maturity, and he acknowledges that advancement from one to the other is not inevitable.

Many have researched what constitutes successful change, but Shermer (1997) researched why people do not change. He showed that there was dependence on anecdotes, dressing up one's beliefs in the trappings of science and pedagogical jargon, and the making of bold claims that did not come to fruition. When there is an over-reliance on past experiences rather than the experience of others, and the belief that personal experience is sufficient evidence for grounding decisions, there is no openness to what new initiatives offer. This is circular reasoning, and Hattie (2009) uses the myth of class size as an example to explain such thought processes.

Hattie (2009) argues that the 200-year-old transmission model in schools has been barely touched by change. He notes that pleas for smaller class sizes, better salaries, bigger buildings, longer school days and appeasing parents are simply about what people think, and they tend to camouflage the true purpose of education, which is the focus on improving student achievement (p. 254). While class size is quoted as a major influence on student outcomes, there is no evidence to show that the reasons being given for smaller classes have credence.

In summary, change theories highlight the individual as central to successful change. The theories of growth and decline indicate that change is part of the fabric of the living organism of a school, influenced by what people bring to the process. Change theories highlight the fact that people do not adapt to change

at the same time, or in the same way on behavioural, psychological, social, emotional or intellectual levels (Argyris & Schon, 1996; Mulford & Silins, 2003; Schein, 2004; Sergiovanni, 2003). Consequently, acknowledging the place, role and influence of people in the change process is essential.

3.2.2 External Channel 2: Organisational Change

Change can be viewed as either an event or a process (O'Mahony, Barnett & Matthews, 2006). As an event it is black and white and it begins and ends, often resulting in a three to five year strategic plan that is documented, filed, put on a shelf and possibly forgotten. As a process it is social, relating to the community engagement of the group and the interaction of the individual with the organisation.

Evidence suggests that the individual changes, not the organisation, and the success of any project is in one employee approaching or doing his or her work in a different way, then multiplying this by the number of employees involved (Murphy, 2001). If the perspective of the individual is ignored, there can be much activity around change, but limited progress towards the goal. Few organisations navigate the change process satisfactorily, and 70% of change initiatives fail because of unstructured change management processes and a simplistic view of human behaviour (Aiken & Keller, 2009).

In 1995, research showed that the success rate for change programs that met targets and came in on time and budget was 30% (Kotter, 1995). In 1998, a study indicated that 88% of executives thought the changes they had undertaken had succeeded, but the reality was that only 33% had achieved notable success (Turner & Crawford, 1998). In 2005, a change research organisation reported a 29% success rate (Prosci, 2005) and in 2008, the achievement rate for effective change continued to hover at 30% (Fine, Hansen & Roggenhofer, 2008). More recently, results from a 2011 survey suggest that improvement associated with change stands at 34% (Standish Group, 2011). These data reveal that, despite all the investment of time,

energy and money in the implementation of change, success is illusive, and there has been little forward movement in the past 17 years.

The process of organisational change begins when objectives are real and relevant to people and they become inspired. Rational change stories revolve around improving and becoming more competitive to address employee underperformance, but research shows that this type of approach effects only 20% of those involved (Beck & Cowan, 1996; Zohar, 1997). It is thought that money and fair processes are motivators for people, but findings indicate it is the social norms of small, unexpected rewards, not performance reviews that influence work satisfaction (Keller & Aiken, 2008). Some consider that selfdiscovery generates inspiration for change, but those who prefer conventional methods condemn such an approach as a waste of time when there is a belief that the answer is known. However, this type of logic destroys the energy and ownership that drives change. Research shows that it would be better to spend time listening to the concerns of those involved in change instead of communicating what is required, because people make meaning of change by building better communities, providing a better service and working together (Keller & Aiken, 2008).

Change begins when people have a shared vision and make the choice to accept it. According to Jauncey (2006), the choices of people underpin the effectiveness of change, motivation and attitude. There is a tendency for to rationalise ineffectiveness through excuse and people blame. Notwithstanding, when a person knows what to do, how to do it and has the ability to execute the task, choice will lead to action. Making the choice to adopt a change means that a person will engage with what they are asked to do, whether they want to or not. Consequently, being specific about what needs to be done, making a plan and acting on it results in individual and collective successes (Jauncey, 2006).

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While the research of Jauncey focussed on the place of the individual in change, a past study by Miles (1987) investigated organisational change in 170 schools and measured the varying degrees of success. Miles (1987) identified the four preconditions of principal leadership, staff cohesiveness, school autonomy and processes of sustainability as integral to successful change. A reproduction of the flow chart of his study is provided in Figure 3 (Beare, Caldwell & Millikan, 1991, p. 132).



Figure 3: Relationships of the negotiation of change. Reprinted from Creating an Excellent School (p.132), by H. Beare, B. Caldwell and R. Millikan, 1991, London: Routledge.

The findings of Miles (1987) underpin much of the contemporary literature on school change with his identification of the pre-conditions of change, and his exploration of observed causal relationships and hypothesised causal relationships in the negotiation of change. Although much energy has gone

into researching the effectiveness and dynamics of what constitutes successful organisational change since his study, it appears from this chart that the preconditions for change in schools have remained similar over the past 40 years.

Supporting the flow chart of Miles (1987) on the relationships involved in the negotiation of change is the work of Australian researchers Matthews, O'Mahony and Barnett (2006). They synthesised the process of organisational change into a Seven Steps of Change Matrix, and Figure 4 is an adaptation of their model. In addition, research on change undertaken by Kotter (1996) suggested that those involved in the change process go through two decision gates, one at the beginning of a change and one towards the end. These decision gates can be superimposed on the Seven Steps of Change Matrix at the *capacity to change* and *reinforce and solidify* junctures, to highlight the fact that at either point, a choice can be made by those involved in the change to return to the comfort of old ways and maintain the status quo. The matrix explores what is required for successful change, and identifies the mental models and behaviours that can occur for people if one of the seven steps is neglected.

The Seven Steps of Change Matrix clearly identifies what is required in the organisational change process. Sustainable change is underpinned by the capacity of an organisation to embed the seven steps of change. This requires creating a three to five year strategic approach that is developed in annual action plans to generate school renewal and improvement approaches. A learning organisation needs to pay attention to these steps of change and the capacity of people to negotiate the identified processes. Adapting to change is grounded in an awareness and desire to change, then the knowledge and ability to manage the change. Effective change relies on good communication, clear direction and effective resistance management (Matthews, O'Mahony & Barnett, 2006). If the channels of managerial leadership, employee sentiment

and the acquisition of knowledge break down, so does the learning organisation, and effective, sustainable change is unlikely.

Pressure for change	Clear shared vision	Capacity for change	Actionable first steps	Model the way	Reinforce and solidify change	Evaluate and improve	Successful change
MISSING	Clear shared vision	Capacity for change	Actionable first steps	Model the way	Reinforce and solidify change	Evaluate and improve	Successful change
Pressure for change	MISSING	Capacity for change	Actionable first steps	Model the way	Reinforce and solidify change	Evaluate and improve	A quick start that fizzle
Pressure for change	Clear shared vision	MISSING DECISION GATE ONE	Actionable first steps	Model the way	Reinforce and solidify change	Evaluate and improve	Anxiety and frustration
Pressure for change	Clear shared vision	Capacity for change	MISSING	Model the way	Reinforce and solidify change	Evaluate and improve	Haphazard efforts and false starts
Pressure for change	Clear shared vision	Capacity for change	Actionable first steps	MISSING	Reinforce and solidify change	Evaluate and improve	Cynicism and distrust
Pressure for change	Clear shared vision	Capacity for change	Actionable first steps	Model the way	MISSING DECISION GATE TWO	Evaluate and improve	Go back to old ways
Pressure for change	Clear shared vision	Capacity for change	Actionable first steps	Model the way	Reinforce and solidify change	MISSING	Sceptical and stagnate

Figure 4. The seven steps of change. Adapted from Managing Change: Leading School Improvement, by R. Matthews, G. O'Mahony and B. Barnett, 2006, Heatherton, VIC: Hawker Brownlow Education and Change Management Theories, Change Management Models, by J. Kotter, 1996, <u>http://www.practical-management-skills.co/changemanagement-teories.html</u>.

3.2.3 Internal Channel 1: Change at School Level

Schools are promoted as learning organisations which provide educational services, and there are worldwide examples of attempts to generate change through school improvement, renewal and revitalisation processes (Andrews

& Lewis, 2004; Crowther, 2011; Fullan, 2009; Hargreaves & Shirley, 2009). The ultimate aim of change in schools is to improve student outcomes. If change does not do this, then true change is not achieved.

Educational change to improve student outcomes has been approached in a number of ways, as exemplified in the No Child Left Behind restructuring in United States schools. Reform focussed on the external re-organisation of schools (Dee & Jacob, 2011) and re-structuring of schools occurred under the models of chartering, turnarounds, contracting, state and takeovers (Hassel, 2006). Chartering involves closing and reopening schools as a public charter and turnarounds is a process of replacing staff and/or principals of failing schools. Contracting brings in an outside entity to operate the school and takeovers turn school operations over to state educational agencies. Each approach is a change process which attempts to improve the effectiveness of the educational service offered, however, the success of the changes in improving student outcomes remains questionable (Fullan, 2005). Although visible change in schools is seen when there is restructuring and reorganising, the danger is that such activity could lack depth. It may simply promote external restructuring that does not address the internal improvement of student achievement (Degenhardt & Duignan, 2010; Hargreaves & Shirley, 2009; Walberg, 2007). Consequently, alternative models of change that move from an external to internal focus are suggested.

The Canadian researcher, Fullan (2005), supports the notion of internal change. He views the key to successful change as the building of the internal capacity of schools through deconstruction, reformulation and re-defining educational objectives. His premise was that change in schools is grounded in values-based decision making that has a clear moral purpose to change the school from the inside out. According to Fullan, the agents of sustainable change are school leadership, the collective capacity of teachers and the involvement of external partnerships. The research of Hargreaves and Shirley (2009) reinforces this. They equate true educational change with social

change that leads to a more inclusive and sustainable future. In addition, Crowther (2011) explores the forms of capital related to the internal capacity building of schools, namely, social, organisational and intellectual. This notion of capital is highlighted in the school improvement literature (Hargreaves, 2001). Social capital is explained through the lens of the trust and networking of people, intellectual capital is in their knowledge and experience and organisational capital resides in the shared and collaborative practices of a school community (Crowther, 2011). To improve, schools need to increase their internal capital in all the above areas, and to be effective, this capital should inform evidence-based practices.

The concept of building the internal capacity of schools is well supported in Australian studies. Over ten years ago, the publication, *Awakening the Sleeping Giant: Leadership Development for Teachers* (Katzenmeyer & Moller, 2001), claimed that teachers were the key to revitalising and changing schools. In February 2012, the Grattan Report re-states the need to develop the capacity of teachers to manage ongoing curriculum changes through "the creation of a strong culture of teacher education, research, collaboration, mentoring, feedback and sustained professional development" (Jensen, 2012, p. 2). Consequently, developing the internal capacity of the teacher to negotiate curriculum change is highlighted as pivotal to the process of school improvement.

3.2.4 Internal Channel 2: School Renewal and Improvement Approaches

A number of studies have explored internal capacity building through school renewal and improvement approaches. School renewal and improvement is grounded in models of change that originated in the business world, but schools deal with students, not targets. In the United States, Newmann and Wehlage (1995) explored the concept of building the capacity of the professional learning community of the school and their findings indicated that it was through the development of the expertise of teachers that the outcomes of students improved. Similarly, Hargreaves (2001) showed that school

improvement practices relied on developing the capacity of the social and intellectual capital of teachers. The Canadian Fullan (2005b) strengthened the argument of capacity building in schools with his focus on leadership networking and system-wide support, while Mitchell and Sackney (2001) advocated that the integration of personal, interpersonal and organisational capacity building was essential to any school improvement approach. In addition, the findings of research from Finland, London and New York support a broad distribution of internal and external capacity building at system and school level for the sustainability of school renewal and improvement practices (Ingvarson & Kleinhenz, 2006). Consequently, worldwide research advocates the capacity building of teachers, school leadership and system personnel as central to any renewal and improvement initiative.

In Australia, The Innovative Designs for Enhancing Achievement in Schools (IDEAS) is a school improvement capacity-building, parallel leadership model developed under the concepts of strategic vision, teaching and learning, community expectations, work practices and professional learning in schools (Crowther, Andrews, Dawson & Lewis, 2001). Based on a study of disadvantaged communities, it emphasises the impact of teacher leadership in school revitalisation processes, promoting capitalising on the skills of people and the distribution of leadership within an organisation to foster ownership of change. Further research into the implementation of IDEAS developed the COSMIC C-B Capacity Building Model, deepening the concept of parallel leadership and highlighting the need for an aligned focus on improving student outcomes at classroom, school and system levels (Crowther, 2011). Effective school improvement is measured through change that focuses on improving the outcomes of every student in a supportive, trusting professional learning environment (Crowther, Andrews, Dawson & Lewis, 2001; Degenhardt & Duignan, 2010; Fullan, 2005).

However, school improvement attempts struggle. In three different school systems in the United States there was a focus on improvement in literacy and

math, assessment for learning data, professional development, leadership models and system wide change (Fullan, Hill & Crevola, 2006). The findings showed that after some initial improvement, the moves failed "to touch deeply day to day classroom instruction and to touch it in a way that will get results for all" (Fullan, Hill & Crevola, 2006, p. 6). In Australia, Elmore (2004) was of the opinion that school improvement did not "explicitly connect to fundamental changes in the way knowledge is constructed, nor to the division of responsibility between teachers and students [or] the way students and teachers interact with each other around knowledge" (p. 10). Although research clearly defines what should or could happen, the disconnection between the theories of school improvement and the classroom practices of teachers continues.

The studies of school renewal and improvement practices indicate the effectiveness of any model is gauged by the sustainability of what is in place (Crowther, 2011; Degenhardt & Duignan, 2010; Edwards, 2010; Hargreaves & Fink, 2006; Robertson, 2007). Sustainability has traditionally been the responsibility of the principal, and it has often been unsuccessfully attempted through the leadership models of "sink or swim; moving, mentoring and monitoring; spray and pray; learning in action or corporate academies" (Mintzberg, 2004, pp. 676, 677). Ongoing research raises the question of responsibility for sustainability, and current evidence suggests that this resides within a systemic context (Barber & Mourshed, 2007; Fullan, 2011). The findings are that district or system leadership is instrumental in working with school leaders to manage the changes caused by turnover of staff and the pull of the status quo (Barnes, Camburn, Sanders & Sebastian, 2010; Hargraves, 2011). This puts the system and the school in partnership in the sustainability of school renewal and improvement approaches. It is advocated that the glue that binds the system, school and a successful school improvement process is the moral purpose of putting the learner at the centre of teaching and learning (Fullan, Hill & Crevola, 2006). The heart-of-the-matter resides in classroom instruction, but it is postulated that, to date, this black box of teaching remains relatively unexamined.

Individual teachers...work in isolation forging their own methods of practice behind closed classroom doors....[T]eachers have come to regard autonomy and creativity – not rigorously shared knowledge – as the badge of professionalism. This in turn has produced highly personalised forms of instruction and huge variations in teacher quality and effectiveness. In effect, each teacher is left to invent his or her own knowledge base – unexamined, untested, idiosyncratic and potentially at odds with knowledge from which other teachers may be operating. (Burney, 2004, p. 528)

If the words of Burney are correct, it may be that many schools remain in maintenance mode regardless of their attempts at school renewal and improvement initiatives. While the external and structural context in which schools operate may change, the prevailing model of classroom practices may not change (Jensen, 2012). High performing schools are places of consistent and continuous improvement, and evidence suggests that lack of improvement is bound to the shallow engagement of teachers with improvement processes (Sachs, 2003). This contention leads to the formulation of the first sub-question for the research.

3.3 Sub-question 1

The Change Processes Layer highlights the importance of managing organisational change and the impact of the psychological dispositions of the individual and the group (Argyris & Schon, 1978; Argyris, 1992; Bridges, 1995; Conner, 1992; Handy, 1993; Hammer & Stanton, 1995; Kotter, 1996; Larson, 1992; Schein, 1991). The research emphasises the need to build the internal capacity of the system, the principal, the school and the teacher to deal with changes (Crowther, 2011; Crowther, Andrews, Dawson & Lewis, 2001; Fullan, 2005; Hargreaves, 2001; Hargreaves & Fink, 2006; Hargreaves & Shirley, 2009; King & Newmann, 1999; Mitchell & Sackney, 2001; Newmann & Wehlage, 1995;). While partnerships between schools and systems are recommended, teachers are seen as the key to internal school improvement.

Consequently, the literature in The Change Processes Layer underpins the first sub-question of the study, which is:

Sub-question 1

How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

3.4 The Change Pathways Layer

The next layer of the literature review is the Change Pathways Layer. The Change Pathways Layer is explored through the literature on the external channels of change phases, curriculum and accountability measures, and the internal channels of the social and emotional intelligence of teachers, teacher leadership and professional learning.

3.4.1 External Channel 1: Change Phases

All change moves through stages or phases. Hattie (2009) refers to these phases as initiation, implementation and evaluation and postulates that innovation occurs during the implementation phase. He believes the key to successful and effective change for teachers, schools and systems lies in searching for what does not work when it is implemented.

Innovation occurs when a teacher makes a deliberate action to introduce a different (not necessarily new) method of teaching, curriculum, or strategy that is different from what he or she is currently using. The aim is to encourage teachers to construe their teaching in terms of a series of related experimental designs, then the benefits of the increased attention to outcomes can be accrued. (p. 251)

Research studies support Hattie's phases of change, having identified innovation, implementation, intervention and institutionalisation as imperative to the change process (Hall & Hord, 2006; Matthews, O'Mahony & Barnett, 2006). Research indicates that unless each phase is specifically addressed, change will not succeed. The proposal is that "most educational changes fail

for one or more of three main reasons: they are the wrong changes, they do not give adequate attention to political dynamics or they are not effectively implemented" (Levin, 2012, p. 67). Studies highlight implementation as the key, and Figure 5 is an adapted flowchart of the phases of change from the work of Hall and Hord (2006) and Matthews, O'Mahony and Barnett (2006).



Figure 5. Change phases. The seven steps of change. Adapted from Managing Change: Leading School Improvement, by R. Matthews, G. O'Mahony and G. Hall and S. Hord, 2006, Implementing Change – Patterns, Principals and Potholes. Boston: Allyn and Bacon.

The focus of any innovation in a school should be enhancing and improving student outcomes, however research shows that in the past, reform has had loose connections to student improvement and little or no impact on classroom practices (Fullan, 2011; Hargreaves & Fink, 2006; Reynolds, 2000). Unfortunately, confusion often exists around innovations because interpretation is left to the teacher, and different teachers can interpret changes in different ways. The individual brilliance of teachers in implementing changes is acknowledged, but the overall sustainability of collective teacher practices and school improvement that focuses on improving students is still in doubt (Slavin, 2006).

The above statements about the importance of the implementation of change are supported by a United States study undertaken by Champion (2003) when a new mathematics program was introduced. Observation of classroom teachers indicated that the implementation of the initiative looked very different from one classroom to another. Consequently, Champion (2003) asked the questions "What exactly is Program X" and "What does this program look like when it is fully implemented in the classroom?" (p. 69). Such questions promoted the development of strategies such as the Innovation Configuration and the Professional Practice Model (Anderson & Cawsey, 2009; Champion, 2003). These strategies for introducing and managing change initiatives give clarity to addressing the many aspects of change, which include the policies, the goals, the expectations, the timelines, the monitoring, the resourcing and the professional learning needs of staff through a multi-level lens.

Teachers generally pay little attention to what surrounds change. They focus mainly on two aspects, namely, the information associated with it and their personal concerns. Their worries revolve around what is going to happen and what it means for them, their colleagues and their school (Day, 2007). If the change threatens basic work needs, there is resistance. Teachers may speculate about the necessity for the change, the political background, the direction it takes education and the potential to improve what they are doing. Consequently, it is important to provide teachers with the relevant information on the phases of change when they are considering the implementation of new curriculum initiatives.

3.4.2 External Channel 2: Curriculum

Within the educational arena, the implementation of curriculum initiatives is the focus of the learning organisation of the school. Curriculum may be viewed through either a broad or a narrow lens. A broad lens acknowledges that each child brings different family and life experiences into the school, as well as different norms of behaviour, independence and prospective achievement. Viewed through a narrow lens, curriculum is what is taught explicitly in the delivery of the syllabi, and it is described as a map, a journey, a communication tool or a record (Green & Stortz, 2006; Habanek, 2005; Thompson, 2007).

Curricula send powerful messages to students about who they are as a person, a scholar and a social being. The rules, authority, language, relationships, compromises and expectations of the learning environment are

standards of measurement that students accept and engage with in some way. This is the hidden learning of the implicit and null curricula, present in the unstated norms, beliefs, values, principles and attitudes of the school community (Habanek, 2005). The null curriculum is what is not taught, the unspoken messages that are unwritten and the unintended lessons that surface as learning experiences (Giroux, 2001; Nespor, 2002; Seaton, 2002). These dimensions of curriculum influence the formation of the individual, the communication of the culture of the people and the uniqueness of the school as a professional learning community.

Curriculum content is provided to teachers in a subject or key learning area syllabus, from which teachers are expected to design and plan teaching and learning experiences, assess the knowledge, understanding and skills of the individual student and report periodically on student progress and performance to parents. However, there is divided opinion about the ability of the teacher to produce quality units of instruction from the syllabus content, and whether or not they should be expected to be experts in the design of such teaching programmes. A past study compared teacher ownership of planning with purchasing off the shelf designs and it showed that the type of planning used by teachers made little difference to the achievement of students (Stringfield, Millsap & Herman, 1997). Therefore, a paradigm of telling teachers what constitutes good practice was suggested. In opposition to this approach, Galton (2000) argued that giving teachers a mandated teaching programme reduced teaching to a technical curriculum activity based on regulation rather than the needs of the student. It ignored the fact that teaching was an "art" and a "science" (p. 201). Although it is proposed that teacher ownership of a teaching program is integral to the process of good teaching practices (Robinson, Lloyd & Rowe, 2008; Timperley, 2005), research has shown that student learning is promoted more through organised classroom approaches and the consistency, cohesion and predictability of schooling (Teddlie & Reynolds, 1999). Consequently, it could be concluded from the above that student learning and improved outcomes relies on the delivery of the planned learning experiences, not on teacher ownership and design of planning.

When curriculum changes are mandated, it is assumed that evidence of the effectiveness of the reform will be seen in classrooms (Reynolds, 2000). When this does not occur, education authorities put measures into place through policy and reform in the hope that this will improve the situation. The Office for Standards in Education (OFSTED) inspection process in England is an example of this. To improve student outcomes, curriculum was defined. The form and content of lessons and types of teaching such as high frequency questioning and higher order skills were prescribed. This encouraged pedagogical change through the mandating of teacher behaviours, negating the historical belief that teacher ownership of pedagogy was essential if teachers were to be effective (Reynolds, 2000). The argument given was that taking time to discover what is successful or unsuccessful does not improve teacher effectiveness and there is no guarantee that teachers will discover effective pedagogical methods. Consequently, veteran and graduate teachers were given planning programmes to teach and accountability shifted to the effectiveness of teaching practices in improving student outcomes. The theory of this approach seemed plausible, but the success of the initiative has not produced the results the government had hoped (Hargreaves & Shirley, 2009). Because of the pressure to complete planning programs in a given time, teacher focus became the implementation of the work program, not the individual learning journey of the student. The unintended consequence of this government policy was that improving student outcomes became secondary to teacher accountability in the delivery of the programme.

3.4.3 External Channel 3: Accountability Measures

Similar to England, government policy shapes curriculum approaches in Australian schools however, mandated approaches are different. Australian educational policies have seen schools fluctuate between external top-down models of implementation to bottom-up approaches of internal school management, autonomy, control and governance. This top-down, bottom-up argument of curriculum control is debated as the "too tight, too loose dilemma" (Fullan, 2006, p. 37). It reflects the external and internal tensions between accountability control measures and student performance, teacher capability, capacity building and professionalism. Since the turn of the century accountability frameworks have been imposed on the education sector in Australia and the practice of quantifying school performances through quality assurance, benchmarks and transparency measures has eventuated (Nespor, 2002). Research indicates that this type of accountability will not reach the internal substance of school reform, renewal and improvement, which relies on individual and group capacity building, pedagogy and a sense of working together as a team and system (Fullan, 2011).

Australia takes its standardised testing lead from the United States and the United Kingdom however, research findings indicate that these accountability measures yielded mixed success in England and the national approach of inspections, audits, prescriptive teaching and testing in most year levels did not prove to be as transparent and successful as promised (Cuttance, 2005; Dowling, 2008). The external pressure of accountability did not improve instructional approaches or generate intrinsic motivation in teachers (Hargreaves, 2002). In Canada, there were moves to abolish the government's Years 3, 6, 9 tests because evidence showed that they were not contributing to the educational progress of students (Fullan, 2008). Consequently, the benefits of standardised testing as an accountability measure are questionable and debatable.

Accountability testing attaches high stakes to the performances of students, it is costly for taxpayers and it encourages parents and the wider public to compare teachers, schools and systems because results are widely published (Harrington, 2008). The argument is that it is possible for governments to measure school performances with alternative testing approaches, such as standardised testing through the longitudinal tracking of student progress or
annual sample testing in selected schools (Wu, 2011; Hu, 2007). Therefore, it is possible to reduce the stress and tension generated by national testing accountability measures.

National testing has surfaced in the past decade as integral to the measurement of student achievement in Australian schools. It follows the corporate world model of meeting targets and outcomes. This testing is datadriven with an expectation that teachers have the capacity to analyse test data and use it to design programs to improve student performance. Such analysis requires statistical skills and the ability to interpret and identify trends and diagnose abnormalities. Research indicates that teachers do not use data well (Pettit, 2010; Schildkamp & Kuiper, 2009). An Australian study in a secondary Catholic schools found that "much analysis had been undertaken by a select few members of staff, often in isolation from other teachers, with little involvement of the majority of staff" (Pettit, 2010, p. 99). The study indicates that teachers lack expertise in their ability to transfer findings about student needs into learning programs. Therefore, if the analysis of data is to become part of the standard approach to designing teaching programs, the skill of defining, collecting interpreting and presenting evidence of learning is required (Katz, Sutherland & Earl, 2001). Earl and Katz (2006) suggest that teachers need to develop a school culture of inquiry and must become data literate. However, a shift in the mindset of teachers may be required to make data the core of decision-making around learning. Consequently, the theory of the benefit of data analysis may not be reflected in teaching practices.

Because the annual national testing regime in schools is high-stakes, the academic and social consequences on students and teachers are proving to be both positive and negative (Abrams, 2004). In American, European and Asian countries it was shown that standardised testing had some positive impacts on the motivation and achievement of the more academic students (Roderick, Jacob & Byrk, 2002). Research suggests teachers raise their expectations of students with disabilities and these students show

improvement (Ysseldyke, Dennison & Nelson, 2004). The negative academic and social aspect is that little evidence exists to show that testing increases overall student achievement or closes the achievement gap between high and low achievers (Volante, 2008). Standardised testing makes it difficult for the ethnic minority to succeed and widens this gap (Boe & Shin, 2005; Gipps, 2003). High stakes testing is blamed for increasing drop-out and retention rates for low performers (Hursh, 2005), and stress and anxiety levels increase for those students who do not achieve well (Scott, 2007). Consequently, national testing may be reinforcing rather than helping to address these educational agendas.

The anxiety caused by national testing agendas extends to teachers (Hargreaves & Shirley, 2009). Research findings indicate that low student performance demoralises and disappoints teachers and one response to the pressures of high-stakes testing includes cheating (Lashway, 2001). It was shown that teachers involved in preparing students for testing focus mainly on literacy and numeracy and neglect other subjects. The testing promotes superficial content coverage and discourages higher-order thinking, as teachers rely heavily on rote learning and the memorising of facts and test-taking strategies (Volante, 2004). A consequence of this testing is that teacher exit rates from at-risk schools are on the increase, resulting in a lack of experienced and committed teachers in the schools that need them most (Hargreaves & Fink, 2006). Regardless, government testing in Australia has become a national annual event, and the publishing of school results on the *MySchool* website continues to put pressure on schools, teachers and students to perform (ACARA, 2010).

An accountability measure that emerged with the introduction of OBE in primary schools in Queensland was the Consistency of Teacher Judgment and Moderation processes to set standards for student achievement. Teachers were expected to compare and moderate samples of student work through professional conversation and dialogue (Gardiner, Tom & Wilson, 2000). An external review reported that primary teachers confused the concept of certainty of judgment and consistency of judgment (Stewart-Dore & Bartlett, 1999). It was discovered that there was more consistency of moderation across classes within a school than across schools. Tension existed around the ethics teachers brought to moderation tasks because collegial loyalty, non-interference and solidarity of teaching communities had the capacity to erode a robust process (Campbell, 2005). A study revealed the convention that the teacher, as a professional, did not "interfere in the business of other teachers, criticise them or their practices, or expose their possible negligent or harmful behaviour, even at the expense of student well-being" (Campbell, 2005, p. 209). Consequently, the validity of moderation processes in a primary school setting could be questionable.

Accountability measures are characteristic of the industrial era and they promote teachers as passive conformists to mandated curriculum agendas, perpetuating a culture of semi-professional recipients of reform policies (Nespor, 2002). This conflicts with the teaching and learning philosophy of high quality pedagogical interactions that evoke student engagement. Accountability measures have the capacity to crush holistic curriculum approaches because tension exists between national testing regimes, curriculum innovation and creativity (Klenowski & Wyatt-Smith, 2011). Consequently, teaching to the test over-rides teaching to learn and students can be seen as no more than instruments that undermine, modify or support reform.

3.4.4 Internal Channel 1: Social and Emotional Intelligence

Within the fabric of society and schools, teachers co-exist in a social and emotional life-world that focuses on satisfaction and a system world with success as the target (Schein, 2004; Sergiovanni, 2000, 2003). A gap exists between the two worlds. The system-world is characterised by authority and the need to meet real or imagined expectations and the life-world revolves around the needs, wants, perceptions, understandings, emotional energy, choices and realities of the individual. Motivational forces and choices drive both worlds and the effects of each shape the culture of a school (Jauncey, 2006; Schein, 2004; Sergiovanni, 2000, 2003). If the energy points of people are blocked, they do not meet their life-world satisfaction goals and are not motivated to meet the challenge of change. Consequently, it is the psychological attitudes and the social and emotional behaviours of teachers towards change that influence the success or failure of reform and improvement initiatives.

Positive beliefs foster psychological resilience and help people cope with change while negative emotions narrow the perspectives of people. A positive attitude enables people to move beyond their comfort zone into their growth or learning zone (Russell & Feldman Barrett, 1999; Taylor, Kemeny, Reed, Bower & Gruenewald, 2000). This comfort zone concept was explored in an adventure education study of secondary students, and the study investigated the stress involved with perceived risk (Zink & Leberman, 2003). The study shows that people respond differently to cognitive conflict as they restructure conceptual understandings and accept or reject anomalous data. The finding was that when new experiences were integrated into existing cognitive structures, there was a process of assimilation, accommodation and equilibration, which influences optimal learning (Leberman & Martin, 2003). Such social psychology understandings about the effects of stress and perceived risk offered a lens for viewing the responses of teachers involved in the implementation of mandated changes.

Similarly, White (2008) studied the behavioural models and performance management styles of people in their comfort zones. He identifies emotions in the form of motivation and anxiety as sub-sets of stress and his theory is that the way people manage stress is the key to positive or negative attitudes. Frederickson (2001) contributes to these finding in his study on the way thoughts, actions and behaviours encourage positive attitudes in people. His findings indicate that looking at different ways to solve problems and stepping

back to view situations objectively creates an upward emotional spiral for the future.

Changes can be challenging and emotional for many and success hinges on helping people feel better and be better (Deutschman, 2005). A state of mind that promotes creativity, inquiry and the building of personal resources is an enabler for coping with all types of adversity (Ashkanasy, 2000). Consequently, the value and need for high emotional intelligence is an indicator of the ability and capacity of the individual to manage change successfully (Goleman, 2005).

The influence and impact of the emotional intelligence of the individual in managing change is a relatively recent area of research (Goleman, 1998). As leaders of learning, it is thought that teachers work best with a balance of cognitive and emotional intelligence and a sense of individual and collective efficacy. This is reflected in high morale, job satisfaction, commitment to the organisation and a sense of belonging and self-worth (Day & Gu, 2010).

Research supports the importance of the emotional intelligence of teachers as leaders of learning (Crowther, Kaagan, Ferguson & Hann, 2002, p. 30). The capacity of the individual to perceive, understand, use and manage emotion is a strong predictor of personal effectiveness in the teaching profession. Table 4 reflects the research of Crowther, Kaagan, Ferguson and Hann (2002) in this field, highlighting the importance of high emotional intelligence for those who choose the teaching profession.

Table 4

Emotional Aspects	Teachers as Leaders
(Goleman, 1998)	(Crowther et al, 2002)
Self-awareness	 contribute to an image of teachers as professionals who make a difference seeking deep understanding of tacit teaching and learning processes

Linking Emotional Intelligence to Teachers as Leaders.

Emotional Aspects (Goleman, 1998)	ts Teachers as Leaders (Crowther et al, 2002)		
	 valuing teaching as a key profession in shaping meaning systems synthesising new ideas out of colleagues dialogue and activities 		
Self-management	 demonstrating tolerance and reasonableness in difficult situations managing issues of time and pressure through priority-setting adopting a no-blame attitude when things go wrong 		
Social awareness	 approaching professional learning as consciousness-raising about complex issues standing up for children, especially marginalised or disadvantaged individuals or groups creating a sense of community identity and pride 		
Social skills	 encouraging a shared, school-wide approach to teaching, learning and assessment testing the boundaries rather than accepting the status quo acting on opportunities for others to gain success and recognition 		

Reprinted from Developing Teacher Leaders: How Teacher Leadership Enhances School Successes, by F. Crowther, S. Kaagan, M. Ferguson and L. Hann, 2002. p.30, Thousand Oaks, CA: Corwin Press.

Unfortunately, there is no guarantee of the emotional, intellectual and moral commitment of people to a common cause. In socially based activities, people are generally bound to the task through relationships, and personal values and beliefs are the motivators. Research indicates that the social impact of group perceptions of change is significant (Surowiecki, 2004) in the acceptance of the change. Consequently, social networks have the capacity to mobilise people and shared cultural practices may strengthen and reaffirm individual and group values and commitment (Bevan, Roberts, Maher & Wells,

2007). Surowiecki (2004) refers to the motivation and mobilisation of groups as the wisdom of crowds. He studied large-scale social movements and the way people became energised into collective, sustainable action. It is proposed that people are more likely to engage in change when it is perceived as social, inevitable, consistent and system sanctioned. If change is seen as promoting and protecting existing social structures, it is deemed and judged as acceptable (Jost & Hunyady, 2005; Surowiecki, 2004).

In the social environment of a school setting, teachers create their norms and traditions of acceptable behaviours and beliefs about change. They are swayed by industrial action, administrative decisions, politics, the economy, society and spheres of influence in the parent and staff community. As a group, they enter into positive or negative psychological and social contracts with change initiatives and their approaches are either rules-based or norms-based (Sergiovanni, 1996). Rules-based is characterised by mandating new directions and standardising workflow to script behaviours or outcomes, while norms-based highlights the professional socialisation, purposing, choices, shared values, collegiality and natural interdependence of teachers within the school culture. Consequently, the positive or negative responses of individuals and teaching staff create norms which promote or resist change.

When the motivation for change is rules-based, change is usually imposed. However, norms-based motivation is bound to a moral purpose of teachers, and that is part of the day-to-day living of the school. Sergiovanni (1996) researched the flow of motivation and identified the moral purpose of the person as central to engagement with change.

The Rules of Motivation are outlined in Table 5, and they are a simple representation of the psychological and emotional contracts and reasons that underpin the choices people make about engaging with change.

Table 5

Rules of Motivation

The Rules	Why People Behave	How They Are Involved
What gets rewarded gets done.	Extrinsic reasons	Calculated Involvement (stay involved as long as they like the deal)
What is rewarding gets done.	Intrinsic reasons	Intrinsic Involvement (stay involved without supervision)
What is thought to be good gets done.	Felt duties and obligations	Moral Involvement (stay involved without supervision and even when rewards are not available)

Adapted from Leadership for the Schoolhouse: How Is It Different? Why Is It Important? By T. Sergiovanni, 1996, San Francisco, CA: Jossey Bass.

Teachers make their choices to engage with change according to their concerns. A study of the concerns of beginning teachers highlighted the influence feelings and emotions have on performance. The study resulted in the development of the Concerns-Based Adoption Model (Hall & Loucks, 1978; Hord, Rutherford, Huling-Austin & Hall, 1987; Loucks-Horsley, 1996; Hall & Hord, 2006). The Concerns-Based Adoption Model (CBAM) supports and reflects the Rules of Motivation (Sergiovanni, 1996), providing insights into how people learn about, prepare for, engage with and modify change.

The six stages of concerns from the CBAM are outlined in Table 6. The stages of concern begin with concerns and feelings about *self*, move into concerns and feelings about *the task* and culminate in concerns and feelings about *the impact* of a particular change. While not prescriptive, the stages can be used as a reference to evaluate and ascertain the readiness of individuals and groups to engage with change (Hall & Hord, 2006).

Table 6 Stages of Concern

Concept	Stage	Label	Description
Impact	6	Refocusing	Concerns about exploring broader benefits from the change, including the possibility of major alterations or adaptations.
Impact	5	Collaboration	Concerns about coordinating and co- operating with others regarding the change.
Impact	4	Consequence	Concerns about how the change affects students, which student outcomes are influenced, and which adaptations might be necessary to improve results.
Task	3	Management	Concerns about the processes and tasks involved in applying the change and the best use of information and resources. Attention centres on efficiency, organisations, management, scheduling and time demands.
Self	2	Personal	Concerns about the demands of the change and one's adequacy in meeting those demands. Attention centres on one's role in the change process, the reward structure, decision making and potential conflicts with existing structures and personal commitments.
Self	1	Informational	Concerns about the details of the change. Although unworried about one's personal involvement in the change, attention centres on gaining more information about substantive aspects of the change, such as general characteristics, effects and requirements for use.
Self	0	Awareness	Little concern or interest about the change is indicated.

Adapted from Innovation Configurations: Analysing the adaption of Innovations, by G. Hall and S. Loucks, 1978, In R. Marzano, R. (Ed), *A new paradigm for educational change*, <u>http://findarticles.com/p/articles/mi_qa3627?is_199501/ai_n8730397/pq1</u> and from The Concern-Based Adoption Model (CBAM): A Model for Change in Individuals, by S. Loucks-Horsley, 1996, <u>http://www.nas.edu/rise/bac.kg4a.htm</u>

3.4.5 Internal Channel 2: Teachers as Leaders

Teachers are described as the key to change, because "within every school there is a sleeping giant of teacher leadership, which can be a strong catalyst for change" (Katzenmeyer & Moller, 2001, p. 2). Worldwide, the role of teachers as leaders of learning (McBeath & Dempster, 2008) is officially recognised. In Australia, it is promoted through leading teacher classifications and status, in Korea it is chief teachers, in the United States it is lead teacher and in Finland it is district teacher co-ordinators.

The benefit of teacher leadership is recognised in teacher efficacy and innovation, and the development of a culture of collaboration, which challenges the top-down hierarchical structures of organisations (Spillane, 2009).Teachers develop and grow through influence, trust and respect as work, conditions, targets and outcomes flourish in a culture of supportive colleagues when distributed and shared leadership models are promoted (York-Barr & Duke, 2004). Teacher leadership is enabled by principals who promote the concepts of distributed, devolved, dispersed, shared, teamed, delegated, parallel, transformational or democratic leadership models (Crowther, Andrews, Dawson & Lewis, 2001; Harris, 2004, 2008, 2009; Harris & Spillane, 2008; Leithwood, 2009a; Leithwood & Janz, 2006; Mulford, 2007; Solansky, 2008; Spillane, Halverson & Diamond, 2004). It is thought that this type of shared leadership approach in schools supports the internal capacity building of the teacher, and teacher capacity promotes the resilience needed to deal with continuous change (Hopkins & Jackson, 2003).

Although research highlights the benefit of teacher leadership and indicates that it promotes the building of good working relationships between teaching colleagues (Crowther, Ferguson & Hann, 2009; Hallinger & Heck, 2010), there are negatives to this approach. Teachers taking on leadership roles within teaching circles may be ostracised. Colleagues may be unsupported by peers when there is resistance to change in the school culture, and principals may be hesitant to support teacher leadership if there is a belief that collaborative approaches create time and workplace pressures (Katzenmeyer & Moller, 2001). If principal leadership delegates and does not support and define the expectations of teacher leadership, growth in the role may be minimal. There is a suggestion that the idea of teachers as leaders may be a motivational ideal rather than a grounded reality if the model is in place and it does not necessarily result in pedagogical practices that improve the learning of students (Webster-Wright, 2009). Consequently, while it is clear that capacity building is highly regarded, the question about what constitutes effective teacher leadership in schools remains a challenge.

3.4.6 Internal Channel 3: Professional Learning

If teachers do not stay abreast of change "it is possible, indeed, fairly common, to get a great deal right and still miss the point of the reforms" (Thompson & Zeuli, 1999, p. 345). Traditionally, the paradigm of ensuring that teachers "get it right" is teacher learning through professional development to promote the pedagogical principles of uniformity, consumption, memorisation and replication. The underlying supposition for the delivery of professional development from external providers is that teachers do not know something (Sergiovanni, 1996). Research indicates that the key to building the capacity of schools is within and through the professional learning communities of teachers (King & Bouchard, 2011). Such communities generate internal structure that develop knowledge, craft new norms of practice, and sustain participants in their efforts to reflect, examine, experiment and change (Mitchell & Sackney, 2001, 2009). If these professional teaching and learning communities are to be promoted, then the learning of teachers must be seen to be as important as the learning of the students.

Teachers are adult learners, and adult learning occurs formally and informally across settings and circumstances. It is affected by the experiences of the individual and it is problem oriented. Adult learning theories propose that learning results when people are challenged and supported (Hansford, Tennent & Ehrich, 2003). Researchers have investigated what contributes to

effective adult learning experiences, and the value of collaboration (Senge, 2008), networking (Kekale & Vitala, 2003) and professional dialogue (Yeigh, 2008) is highlighted. When teachers reflect collectively, they develop each other professionally (Barnett & O'Mahony, 2008; Katz & Earl, 2010). Reflection reshapes and builds teacher capacities through intrinsic motivation, drawing on the principles of adult learning and maximising the development of potential and performance (Marzano, Waters & McNulty, 2005; O'Mahony & Matthews, 2006; Zeus & Skiffington, 2003). Professional development should result in professional learning and schools should focus on a performance culture that promotes improvement of classroom practices (Fleming & Kleinhenz, 2007).

At the turn of the century, there was evidence that 75% of teachers spent approximately six days a year at professional development activities and the overall approach was fragmented and piecemeal (McRae, Ainsworth, Groves, Rowland & Zbar, 2001). It was hypothesised that effective professional development required more than 80 hours of relevant learning if it was to make a difference (Garet, Porter, Desimone, Birman & Yoon, 2001). There is evidence to suggest that only 20% of what teachers learn at standard forms of professional development is applied in classrooms, but when they engage in collaborative professional learning processes, there is 90% transference (Joyce & Showers, 2002). Evidence that external professional development sessions delivered to teachers influence or improve classroom practices is not conclusive (King & Bouchard, 2011). It is believed that the most effective professional development occurs in the internal context of school life, as teachers converse with other teachers about the teaching and learning that occurs in their classroom (Joyce & Showers, 2002).

Teacher co-learning through talk, observation and feedback is highlighted as a powerful conduit for professional development (Avalos, 2011; O'Mahony, Matthews & Barnett, 2009). Such approaches are diverse and they reflect a mentoring model that capitalises on internal and external, formal and informal

school structures. The positive outcome of mentoring is the growth of the individual teacher through the sharing of ideas, collaborating and networking based on either personal or professional relationships (Ehrich, 2008).

If mentoring is developmental, it is seen as a process that has learning at its focus and is based on power sharing where both parties (i.e. mentors and mentees) are seen to benefit by the experience.... The other version of mentoring is 'sponsorship' mentoring which focuses on the power and position of the mentor to bring about positive career gains for those who are mentored (Ehrich, 2008, p. 4).

Formal mentoring has an organised approach, and is seen in the support of graduate teachers and new staff in schools, while informal mentoring is positioned more in the social learning environment. When teachers are engaged professional learners they communicate well, exhibit high levels of emotional competencies, have good skills and problem solving capacities and understand the dynamics of conflict management and team-work (Desimone, 2009; Ehrich, 2011, Newmann & Wehlage, 1995). These processes rely on the social aspects of trust, mutual respect, diversity, and shared power in teaching and learning (Inkpen & Currall, 2004; Limerick, 2002).

If teachers see themselves as mentors and co-learners, they support and help each other, analyse what they do and how they do it and create safe learning spaces for themselves and others (Conzemius & O'Neill, 2001). However, research shows that much professional development remains separate from classroom practices with no feedback from any quarter. The traditional isolation of teachers in classrooms continues, and the notion of developing a performance culture based on professional learning through professional development that occurs outside classroom practices may be more an ideal than a reality (Hargreaves & Fullan, 1998). Consequently, evidence indicates that external, one-off professional learning experiences may have little impact on teacher performance (Sandholtz & Scribner, 2006).

When teachers rethink their practices in a community of peers they can improve their instruction methods through reflection and feedback (McLaughlin & Talbert, 2006). Learning may occur through the reconceptualisation of a teaching method to solve a math problem or a different approach to writing a particular text type (Lieberman & Wood, 2003). Over thirty years ago a model of professional development that encouraged teachers "to share a new language, talk together in new ways about values, assumption and beliefs, and collaboratively create new inventions" was suggested (Isaacson & Bamburg, 1992, p. 43). While the theory of the suggestion is well accepted in educational circles, the model appears to remain on current agendas. This leads to the formulation of Sub-question 2.

3.5 Sub-question 2

The literature on the Change Pathways Layer included a review of the research on the external channels of change phases, curriculum and accountability measures and the internal channels of the social and emotional intelligence of teachers, teacher leadership and professional learning. The change phases were defined as innovation, implementation, intervention and institutionalisation and the value of the Concerns Based Adoption Model in ascertaining the developmental stages of those involved with change was highlighted (Champion, 2003; Hall & Hord, 2006; Loucks-Horsley, 1996). Research on teacher leadership in schools and professional development that results in professional learning was explored. Consequently, the review of the literature in the Change Pathways Layer underpins the second sub-question of the study, which is:

Sub-question 2

How do teachers respond to the negotiation of mandated curriculum changes?

3.6 The Change Culture Layer

Schools exist within the culture of society, the culture of the educational system in which they function and the culture of the uniqueness of their

learning environment. Because the research is in a school in the Catholic tradition, the learning environment exists within a Catholic culture. The external channels that contribute to the Change Culture Layer include society and the Catholic tradition while the internal channels are the influence of a school culture with a Catholic Identity that may, or may not, influence the negotiation of mandated curriculum changes.

3.6.1 External Channel 1: Contemporary Society

Schools are social and cultural microorganisms of society and they reflect the dilemmas of duality and tension in the contemporary world (Bate, 2005). In contemporary society, such dilemmas can result in disillusionment, mental health issues, drug and alcohol overuse, suicides and lack of spiritual direction (Canavan, 2003; Carr-Greg, 2004; Mackay, 2004). Governments use education as a vehicle for social change and this puts pressure on teachers to deal with the breakdown of families, time-poor parents, fragmented family support systems and escalating work pressures (Degenhardt, Lynskey & Hall, 2000). Consequently, schools deliver a broad curriculum of programs, on family life, sex, drugs, resilience, health and wellbeing, financial literacy, environmental sustainability, values and democracy.

In some instances what is presented as a value by people in a school community is not what is actually valued and this causes confusion and disconnection between learning and life (Argyris 1992; Groome, 1998). This disjuncture is reflected at home when literacy is emphasised by parents, but time allowed for watching television is not monitored, and when there is zero tolerance of violence, yet children are exposed to video games that promote it. The parent helps to establish the social identity of the child and the worldview of the parent is the perspective brought into schools by the child. In his recent research, Hattie (2009) has shown that family values have the greatest impact on the moral, social and educational development of the child, and the effect of the partnership between the school and parent is a powerful determinate of student success.

....parents educate by osmosis – through the process of socialisation in the shared life of the home. The family's entire ethos and lifestyle, its relationships and conversations, its attitudes, outlooks, and values, its faith – just about everything that goes on there – educates its members in the most foundational sense of influencing and sustaining their identities......the socialisation of the original family is the most consequential "education" people ever receive. (Groome, 1998, p. 26)

In the past, parents were passive supporters of teachers and schools, but, generally, this is no longer the case (Sachs, 2003). They are increasingly more involved with and more demanding of schools. High expectations are held for the academic progress of children and quality behavioural monitoring and pastoral care is expected. Many are quick to blame, quick to accuse and quick to pursue legal recourse if they feel they are wronged. Ironically, schools are blamed for the very problems parents are expected to address (Lacey & Gronn, 2007).

Contemporary society is described as the Information Age, and the school world is influenced by the way technology has changed approaches to communication and social interactions. Consequently, the attitudes and beliefs of digital natives in the schools of today are challenging those of the past (Degenhardt & Duignan, 2010). Research indicates that parents play a major role in nurturing digital and cognitive skills and attitudes (Harvard Family Research Project, 2004). However, many are passing this responsibility onto the school. In a connected world of mobile/cell phones and the internet, there is less emphasis on physical and social interactive development (Bauerlein, 2008), and this impacts on the interests and involvement of students in the social institution of the school. In addition, there is an expectation that teachers will make learning relevant and engaging to a Net Generation whose expertise and manipulation of technology may overshadow the knowledge and skills of their teachers (Tan & Subramaniam, 2009).

The digital age offers a networked, integrated and collaborative mode for teaching and learning however, the uptake of sophisticated digital technologies is proving slow and costly for schools (Shaw, 2011). The

availability of Information Communication Technology (ICT) to students, the successful use of ICT in schools, the ICT literacy of students and its positive impact on increased student motivation, empowerment and ownership of learning have been well researched (Andrews, Burn, Leach, Locke, Low & Torgerson, 2002; Becta, 2003; Lonsdale, 2003; Meiers, 2009). The findings show that the use of technology is a supplement rather than a substitute for teacher instruction, and good pedagogical practices will always depend on human interaction and timely feedback (Cuban, 2001; Hattie, 2009). If ICT is adopted simply because it is there, it will not serve best practice in teaching and learning (Herbert, 2012). The meta-analysis of Hattie (2009) indicated that the use of computers is effective when there is adequate teacher pre-training and diversity of teaching strategies such as peer learning and student control of ICT tasks. If pedagogical practices ignore technology there will be:

....a sharp disconnect between the way students are taught in school and the way the outside world approaches socialisation, meaningmaking and accomplishment. It is critical that education not only seeks to mitigate this disconnect in order to make these two worlds more seamless, but of course also to leverage the power of these emerging technologies for instructional gain. (Klopfer, Osterweil, Groff & Haas, 2009, p. 5)

Consequently, the use of technology should encourage thinking and inquiry, and teachers should endeavour to connect learning to the lives of students.

The capacity of teachers to plan, structure and integrate ICT into learning to engage students who are classified as searchers, explorers, self-improvers and participators is an ongoing challenge (Pesche, 2008). Herbert (2012) offers an example of teaching critical thinking skills with the use of technology. Evaluation of the most serious threat to the loggerhead turtle can be extended through use of Skype to connect with a classroom that is located near a loggerhead turtle population. This would enable students from both schools interactive access to a real life learning experience, enabling them to compare and discuss their findings. Plotting the migration patterns of the turtles on a world map may be enhanced by the use of mapping co-ordinates using the satellite imagery of WikiMapia. Consequently, the emergence and integration of technology approaches into classroom pedagogy has the capacity to foster a true student-centred approach in a connected, network-creating learning environment. For such an approach to be successful, the attitude of teachers to the integration of technology in the learning process is the key.

3.6.2 External Channel 2: Catholic Tradition

The study is located in a school that negotiates curriculum changes within a particular tradition, namely, the Catholic tradition. Church teachings emphasise an inextricable link of the culture of a school in the Catholic tradition to the teachings of the Church (Congregation for Catholic Education, 1998). *Gravissimum educationis* highlights the illumination of all knowledge with the light of faith as a distinctive feature of Catholic schooling, arguing that Church teaching promotes the growth of students in Christian virtues in the light of the Gospel message (Declaration on Christian Education, 1965).

Education is, in a very special way, the concern of the Church, not only because the Church must be recognised as a human society capable of imparting education, but especially it has the duty of proclaiming the way of salvation to all men (sic), of revealing the life of Christ to those who believe, and of assisting them with unremitting care so that they may attain to the fullness of that life. (par 3)

As a nominated teaching arm of the Church, the Catholic school tells and retells the Christian story, so that it becomes meaningful and speaks to the lives of students in their contexts (De Souza, 2002; Flynn & Mok, 2002). Proclamation of the Word is in the personal story-telling of the school, which connects the word of God to the traditions of liturgy, prayer, sacramental celebrations, community service and pastoral care. If this connectedness extends to the parents of the student and the wider community, the proclamation dynamic grows through dialogue and partnership that reflects the ethos and culture of the Catholic tradition (Flynn, 1993; Griffiths, 1999; McLaughlin, 2000). As the life, teaching and promises of Jesus, the Son of God, are proclaimed, the formation of the human person through relationship occurs. This is evangelisation in action. When the communication between students and teachers is more than surface level, authentic humanity through witness is present (O'Brien, 2007).

Church tradition in contemporary Australia is undergoing change and understanding what is core and inspirational to being Catholic is in question (Boeve, 2006). The notion of church as a tradition for the wider community is no longer prevalent and research explains that this has occurred through period and cohort effects. Period effects occur when the attitudes and behaviours of people shift over time, and cohort effects result when values change as older people die and younger people replace them (Hoge, Dignes, Johnson & Gonzales, 2001). The void between the period and cohort effects is the lens of Catholic tradition for many contemporary Catholics and is reflected in the culture of Catholic schools as families re-evaluate the place of church and faith in their lives (Wuthnow, 2007).

In this era, the search for spiritual nourishment is becoming an individual rather than a community journey, often taken outside the Church (McLaughlin, 2000; Ranson, 2002; Saker, 2006). Papal decrees alienate many because they are unresponsive to the realities of life such as divorce, remarriage and birth control (McLaughlin, 2000). Contemporary Catholic youth are concerned with identity, spirituality, exploration of Church ministry and Religious Education, but Church attendance is not a priority (Rossiter, 2002). Although parents are supportive of values and virtues related education with good disciplinary standards within the religiosity and Catholicity of schools, many are Catholic by name only (Canavan, 1995; Gardner, Lawton & Cairns, 2005; Gibson & Associates, 2000). It may be true to say "the face of Christ in the school is the only face of Christ (students) will encounter, at least the only encounter with Christ that makes any sense to them" (Treston, 1998, p. 70).

Catholic schools have been part of Australian education for over 150 years and the school was defined as an extension of the Parish and the home. Irish immigration contributed to the growth of Catholicism, and in the wake of Vatican 11, a clear direction was set for Catholic schools as places of message, community, service and worship. Since then, traditional, evangelising, secular, ecumenical and public sector models of Catholic schooling have evolved under a common definition (Treston, 2001; McLaughlin, 2000).

The Catholic school aims to generate a challenging, authentic educational environment, faithful to the Catholic tradition of offering a synthesis of faith and culture, which, while promoting integral human growth, provides a catalyst for students to take the opportunity to initiate or continue a personal relationship with Christ, that witnesses its practical expression in an active, inclusive care for others, while confronting contemporary injustices in economic and social structures, all of which gives meaning to and enriches human existence, and contributes to a fuller human life. (McLaughlin, 2000, p. 59)

Traditionally, Catholic schools in Australia were managed by religious orders such as the Sisters of Mercy, the Christian Brothers, the Presentation Sisters, the Good Samaritans, Sisters of the Sacred Heart and Sisters of St Joseph. The founders of the orders included Mary MacKillop, John Bosco, Catherine McAuley, Nano Nagel and Edmund Rice and each created a unique story, a particular charism and a rich heritage in the schools they established (Buchanan, 2009; Cresp, 2005; Wicks, 2005). The religious orders led and managed the schools, offering a formal curriculum of structured courses for everyday study and an informal curriculum of learning experiences that broadened and enriched the religious experience of the student. The school environment nurtured an understanding of value for faith and operated from the foundational belief of Jesus as Lord and Saviour (Buckingham, 2010; Flynn, 1993).

Historically, the Catholic school was a catalyst for the upward mobility of the poor and marginalised, predominately Irish Catholic communities (Dixon, 2005), but twentieth century Catholic schools are called to be schools for all (Congregation for Catholic Education, 1998). However, the rhetoric is not

always present in the reality. In today's climate, it is clear that children from disadvantaged families often do not attend Catholic schools as payment of school fees deters enrolment (Kennedy, Mulholland & Dorman, 2011). This finding conflicts with the original purpose of the Catholic school and promotes the privatisation mask reflective of an institution with a persona of social elitism. It highlights the danger of absorbing an ethos that may be described as pragmatic, competitive, consumerist or materialist (McLaughlin, 2000).

As the religious orders declined and were replaced by lay teachers, the culture of Australian Catholic school communities changed (Treston, 2001). The images of Catholic schools with religious Sisters and Brothers taking practicing Catholics to Mass are not evident, and parents are no longer the lived examples of practising Catholics (Ranson, 2006). As the first educators of their children, parents are called to be in partnership with the school. However, the union of parent and school has been described as one of selfinterest rather than faith based (Church Documents on Catholic Education, 2004, par. 156). This makes it difficult for the school to fulfil its role in a partnership of faith, teaching and learning. Regardless, Catholic schools are expected to maintain a Catholic identity.

Catholic and Non-Catholic school effectiveness has been measured and research findings concluded that schools in all sectors are similar in social class, instruction, resources and collegial relationships (Bryk & Frank, 1991; McLaughlin, 2000). Most schools, Catholic and Non-Catholic, are characterised by good discipline, academic success, spirit, a sense of community and warmth. Evidence suggests that the spiritual growth of students shows minimal improvement in a Catholic school, thus, the effectiveness of the Catholic school as a place that teaches beliefs and practices is questionable (Flynn,1993; Flynn & Mok, 2002; Gilchrest, 2000; Saker, 2004). However, research indicates that the contribution of the Catholic school to the academic achievement of students is significant, especially for those from communities with lower socio-economic status, and the ethos of

pastoral care is recognised in fostering student retention (Canavan, 1995; Flynn & Mok, 2002, Grace & O'Keefe, 2007; McLaughlin, 2000). Consequently, the Catholic identity of a school may be linked strongly to the pastoral concept, and this may be perceived as creating the difference between Catholic and Non-Catholic schools (Treston, 1998).

3.6.3 Internal Channel 1: School Culture

The cultural aspect of a school is suspended in a particular web of significance (Geertz, 1973) and when people come together, world-views amalgamate and create a certain type of culture (Beare, 2006; Deal & Peterson, 2009). Culture typically refers to the norms of behaviour that influence the way people work together, and it is argued that the culture of a school is revealed in the impression gained from the welcome, the interactions of people and the ambience of the facilities (Schein, 2004). Three levels of culture have been identified (Schien,1992). The first level is the visible artefacts, the second level is the espoused beliefs and values of the people who contribute to the culture and the third level is the invisible basic underlying assumptions that people have. These levels contribute to the organisational culture, the sub-culture and the micro-culture of a school (Schein,1992) and create an academic and social climate described as "the tangible, intangible and symbolic elements of organisational life" (Beare, Caldwell & Millikan, 1991, p. 173).

The strength and type of culture determines the behaviour of people in a school. The management of different school cultures and their impact on change has been explored (Handy, 1996; Schein, 2004) and it is suggested that, to be effective, school leadership must be aware of the different types of school culture and their cultural dynamics (Handy, 1996). There are cultures with circles of power and influence which value the individual and depend on networks of friendship. Other cultures are defined by roles, and promote predictability and stability. Some cultures can be based on tasks, the continual solving of problems and the influence of a particular person with expertise in a

specific area. In these cultures, the individual is seen as helping the organisation to achieve its purpose.

In contrast, the organisation may exist to help the individual achieve his/her purpose, and this generally results in many individual achievers loosely within a school (Handy, 1996). The cultures of power, role, task and people reflect the needs and constraints within a school and create dynamics that require different approaches to managing change. Sub-cultures may be rife with politics if teachers have concerns or worries that are not addressed, and such unrest may manifest into ploys of organisational misbehaviour (Vardi & Weitz, 2004). Conversely, constructive sub-cultures within schools are characterised by optimal social cohesion and social control that is open to and adapts to change (Hargreaves, 2008).

The imagery used to describe the uniqueness of school cultures creates a mental picture of how a place is perceived. Analogies such as "military, prison, factory, monastic, happy family and laissez-faire" (Beare, Caldwell & Millikan, 1991, p. 189) conjure up ideas of a certain type of school culture. There are negative and toxic cultures, positive and healthy cultures. Toxic cultures promote blame and inertia through hostile staff relationships and negative cultures resist change and lack a sense of purpose. Positive cultures are open to change, and foster harmony and optimistic interactions in the workplace (Peterson & Deal, 2002). The general characteristics of a healthy, positive school culture include a shared common purpose, good professional development approaches and the recognition and celebration of improvement (O'Mahony, Barnett & Matthews, 2006).

The culture of a school is also revealed at classroom level. Historically, two traditional types of classroom cultures have prevailed, namely, the individualised and the balkanised (Hargreaves, 2001). The individualised is characterised by teachers who choose to work alone, and the balkanised is when groups of teachers refuse to move forward. The structural model of

classes for both cultures is the progression of students from grade to grade. Lortie (1975) refers to this privacy of practice (Hargreaves, 2001) as egg crate and his study proved that there was dislocation of teaching practices when learning was delivered in this way. Such an approach manifests teacher isolation and encourages privatisation of practices in generated power bases that can reflect egocentric teaching approaches (Hargreaves, 2001). Cultures of individualism thwart the sharing of planning, ideas and resources, even though teachers are, by nature, sociable with colleagues (Hattie, 2003). The building of professional relationships in such individualistic cultures is fragile and moral support for risk-taking and experimentation is often stifled. There may be contrived collegiality, but this is more concerned with accountability and control. At the turn of the century, Hattie (2003) and Hargreaves and Fullan (1998) declared that isolation in classrooms still existed and there continued to be "not enough opportunity and not enough encouragement for teachers to work together, learn from each other, and improve their expertise" (Hargreaves & Fullan, 1998, p. 6).

The principal is seen as the key to changing the culture of school. At the beginning of any change, the principal must work with teachers to empower and encourage them. Positive and common descriptors of leadership include transformational. advocacy. strategic, educative and organisational (Leithwood, Louis, Anderson & Wahlstrom, 2004), but there is no one prescriptive way of leading change because different capacities are required for different functions (Lambert, 2007). When leadership builds strong relationships in the social context of the teaching community, a trusting lifegiving culture is promoted, and cohesive, supportive structures encourage participation in the comfort and safety of the school (Sergiovanni, 2000). Appropriate leadership gives teachers understanding and control around what is happening each day (Leithwood & Day, 2008). When those in leadership positions believe in teachers and students and give them responsibility, gratitude overrules indifference and inertia (Hronek, 2002). However, it is thought that leaders often underestimate the impact of the tangible and

intangible dimensions of the school culture in the change process, and generally overlook those (Wagner & Marsden-Copas, 2002). Beare, Caldwell and Millikan (1991) created a conceptual chart of the influential aspects of school culture that school leadership should consider (p. 176). This chart is provided in Figure 6.



Figure 6. Conceptual framework of school culture. Reprinted from Creating an Excellent School, p.176, by H. Beare, B. Caldwell and R. Millikan, 1991, London: Routledge.

No two school cultures are the same and no culture can be described as the best. However, research has shown that school cultures shape teacher

motivation, satisfaction and productivity, and profoundly influence the effectiveness of the learning environment (Hargreaves, 2008; Stoll, 2009; Stoll & Fink, 1996).

3.6.4 Internal Channel 2: Catholic Identity in Schools

State, independent and religious schools operate in different systems and these systems have the capacity to influence the culture of schools. State schools exist within the social paradigm of the culture of a nation while independent and religious schools exist in a faith dimension. Ecclesiastical and societal differences challenge school cultures and force them to continually evolve and redefine themselves (Stoll, 2003). This research was situated within a school that is influenced by the religious and faith dimensions of a Catholic learning environment.

Currently, Catholic schools enrol more than 20% of the students of Catholic and Non-Catholic denomination in Australia, offering parents a choice of education (Chesterton & Johnston, 1999). In the past, enrolments were primarily children of Catholic families, but today there are higher proportions of Non-Catholic students. This is an issue for the ethos of schools in the Catholic tradition when the identity of the parent group may not be consistent with the identity of the school. Preserving and enhancing the Catholic character becomes an ongoing challenge and impacts on the nature of the culture and climate, the delivery of a Religious Education curriculum and the liturgical life of the school (Boeve, 2006; Grace, 2003; Pollefeyt, 2011). It is argued that families are open to catechetical activity when they choose a school with a Catholic character, and those who focus on the quality of education or school location may not be as committed to the Catholic ethos (McLaughlin, 2000; O'Brien, 2007). The findings of a study on the decisions made by Catholic families on choice of school showed that the most highly valued aspects for parents were teacher quality, a learning environment that provided a high standard of academic instruction and pastoral care. Christian values were considered important, but whether the school was Catholic or Non-Catholic

was not the measure (Kennedy, Mulholland & Dorman, 2011). Consequently, different interpretations in the parent community about the purpose of the Catholic school may cause tension in maintaining a Catholic identity.

Recent research conducted in Victorian and South Australian Dioceses explored the distinctive nature of Catholic schools. Grounded in studies from the Catholic University Leuven in Belgium, the focus of the research was the religious landscape of Catholic schooling (Pollefeyt, 2011). The study indicates that all Catholic schools have an identity that is either explicit or implicit, according to the way they respond to the context of the contemporary world. (Boeve, 2006). The purpose of a Catholic school is to proclaim the kingdom so that students grow in a "personal, sacramental and communal relationship with Christ" (McLaughlin, 2000, p.111). However, evidence suggests that this is not the reality in many schools because there is a shallow synthesis of culture, faith and life within the trappings of the modern world (Dixon, 2005; Flynn, 1993).

Leadership in Catholic schools is considered to be values-led (Day, Harris & Hadfield, 2001) and it is suggested that education, theological understandings, knowledge, witness to the Gospel and emotional capital have become expanded aspects of the responsibility of the role (Duignan, Kelleher & Spry, 2003). Principals of Catholic schools are expected to have the same capacities as their government counterparts with the added dimension of faith leadership (Spry, 2004). As gatekeepers, they preserve the Catholic character by nurturing the faith development of their school community and cultivating a sense of belonging (Flynn & Mok, 2002; Grace 2003; Groome, 2002). Research shows it is often the life experience of a principal in the Catholic faith and Church teaching that forms his/her understanding of the social and cultural Catholic school environment (Lingard, Hayes, Mills, Christie & Wilson, 2003).

Many principals believe that their personal formation as a Catholic began in their childhood (Gronn, 2000). Consequently, the personal philosophies, beliefs, values and attitudes of a principal may influence the articulation of a school culture as part of the educational mission of the Church (Grace, 2003; Spry, 2004; Spry & Duignan, 2003). Professionally, a principal is expected to lead by example as the symbolic, spiritual and cultural leader, integrating the building of community with parish, parents, students and the wider community into the life of the school (Grace, 2003). The vision of a school operating within a Catholic tradition can be equated to the witness of the principal, and research indicates that often there is a lack of ongoing professional development in the expectations and demands of leading a school in a faith tradition (Duignan & Gurr, 2007).

Formation in faith tradition is a feature of a Catholic learning environment, but evidence exists to show that students may leave Catholic institutions with poor perceptions of their learning in Religious Education and disenchantment with the Catholic faith (Saker, 2006). In a recent study, only 5% felt Religious Education classes influenced their religious development while 14% attributed their development in religious matters to the Catholic school they attended (Saker, 2004). The beliefs, values and practices of 647 first and final year student teachers at Catholic Universities in Australia revealed that growth in faith understandings was questionable, although studies in theology and religion were completed (McLaughlin, 2000). These teachers will deliver the curriculum in Catholic schools. Thus, the perceived dis-engagement of these pre-service teachers and the ongoing formation of practicing teachers in the identity of a Catholic school is emphasised as an ongoing challenge for Catholic Education authorities.

Spiritual capital in a Catholic school may occur through osmosis, as principals draw on the wisdom of the religious orders that preceded them, or teachers absorb the spirituality of the members of teaching orders who work beside them (Grace, 2003; Groome, 2002; Schein, 2004). However, the next

generation of teachers and leaders in Catholic schools will have little to no experience of the way Catholic identity and culture were shaped and grounded in the lives of these foundational religious orders. Consequently, the faith formation and development of the spiritual capital of staff in Catholic schools is brought into question, and the need for strategies and structures to be put into place to grow these dimensions is highlighted (Tacey, 2004). Furthermore, the question of how the spiritual capital of teachers in a school that operates within the Catholic tradition impacts on the delivery of mandated curriculum initiatives is an added dimension to the implementation of mandated change. The impact (if any) of the religious life of a Catholic school on curriculum initiatives is highlighted.

3.6.5 Internal Channel 3: Curriculum in a Catholic School

It is supposed that an education in the Catholic tradition helps students discover their specific vocation and live responsibly in relationship with God and community (Ranson, 2006). Subsequently, there should be no division between secular and religious subjects, and an understanding of epistemology in a Catholic tradition is the basis of a curriculum characterised by rationality, holistic knowing and living, wisdom and life-long learning (De Souza, 2002; Treston, 2001). The aspiration of curriculum in a Catholic school is to reflect the synthesis of religion and culture with faith and life. Students are challenged to find meaning and value in their life through God. Catholic schools endeavour to pursue an integrated curriculum as they meet the demands of the federal and state authorities and it is believed that parents value this formal approach to the delivery of mandated syllabi (Griffiths, 1999). The informal curriculum exists within the religious literacy of a Catholic school (Joseph, 2011). Sometimes, what is not taught constitutes the most powerful teaching.

Catholic Education Office authorities throughout Australia have created a number of frameworks for curriculum development. One example is the Contemporary Learning Schema of the Archdiocese of Melbourne, which explains the approach to learning in their schools. Underpinned by extensive international and national research the schema represents findings from the 2006 to 2008 Contemporary Learning Research Schools Project and the Leading for Contemporary Learning Project (Catholic Education Office Melbourne, 2009). The schema is provided in Figure 7. It can be argued that this schema is a framework for curriculum in any school for any system. However, it is constructed under the overarching statement of "The Catholic School is part of the mission of the Church and is a sacred landscape where learning and teaching seeks the integration of faith, life and culture" (Catholic Education Office Melbourne, 2009, p. 1). This statement situates the model within the Catholic tradition. How this statement is lived through the teaching and learning experiences provided within the curriculum framework in a Catholic school is the question?

Supporting the Learner	Enabling the Learner	Engaging the Learner in the Contemporary World
POWERFUL TEAC	CHING POWER	RFUL LEARNING
POWERFUL TEAC Learning Opportunities that are: Rigorous and Relevant Rich in assessment Personalised Explicit and scaffolded Equitable Learning Environments that are: Connected to local and global networks	 Core knowledge, skills and understandings developed through: Reflecting and planning Thinking and working creatively Communicating and collaborating Exploring, experimenting and creating new knowledge Contemporary Literacies that involve: 	 Peveloping deep understandings about self, others and the world through: Exploring multiple perspectives Considering religious, social, cultural, historical, political and ethical influences Experiencing, analysing, Conceptualising, applying
 Collaborative Secure and safe Flexible Supportive of innovation Inquiry focused 	 Developing culturally relevant and valued literate practices Creating and interacting with print, non-print and multimodal texts 	Building Relationships through: • Connecting and learning with others within and beyond the classroom over time and space

Supporting the Learner	Enabling the Learner	Engaging the Learner in the Contemporary World		
	 Engaging critically and effectively in a multi-modal world Communicating appropriately in a range of social contexts 	Contributing to Community through: • Taking responsibility for self • Taking action that matters • Committing to service and justice • Developing partnerships • Active citizenship		
Contemporary Tools				
research, thinking, analysis, publishing, communication, collaboration and design				

Figure 7. A contemporary learning schema. Adapted from Contemporary Learning Research Schools Project and the Leading for Contemporary Learning Project, p.1.Catholic Education Office Melbourne, 2009.

The study of White (2004) seeks to answer the question of integrating faith, life and culture through the pedagogical approaches of teachers. Using the key learning area of Religious Education (RE) as an example, White (2004) formulated a theory on Catholic pedagogy. He examined the subject through the intersection of faith encounters, catechesis and pedagogical practices. His summation was that the catechetical model focuses on a faith encounter and the generation of information to make meaning for students. The pedagogical model takes this meaning to a deeper, personal understanding and learning. White (2004) explored this through inquiry, reflective thinking and brain-based learning.

Johnston (2001) agrees that deep knowledge and understanding occurs when students are personally involved in the task and he supports the notion that inquiry-based and reflective thinking are at the centre of better outcomes for students. The human brain searches for meaning and patterns, and holistic experiences lead to easier and quicker recall. Connected learning is selfdirected, has greater depth, results in higher levels of completion and fosters better attitudes. In contrast, when learning is defined by measurable assessment, learning for meaning does not exist (Burford, 2002). The learning spaces identified in the Contemporary Learning Schema support such research and promote inquiry and creativity to engage students in deep, powerful learning. However, it is for the teacher to make the connections and ground their pedagogy in faith to encourage students to find meaning, purpose and hope in their encounter with life in a culture imbued with the teachings of Jesus (White, 2004). It is through this lens of connection provided by teachers that the culture of the Catholic school has the capacity to influence the delivery of curriculum.

Religious Education (RE) is the ninth key learning area in Catholic schools. Superficially, it may look like all other subjects and, realistically, teachers may teach it in the same way. The challenge is to keep the "objective/qualitative" and the "subjective/qualitative" dichotomies in balance in relation to the word religion and the word education (Lovat, 2002, p. 17). Some believe incorporating the RE syllabus with an OBE emphasis on academic rigour, levels, bands and reporting processes led to a stifling of the Spirit, discouraging the freedom of the student to respond to God (Dwyer, 2002). The Religious Education syllabus of the Archdiocese of Brisbane provided an example of the way culture could be developed by making meaning through connected learning. It redesigned the way "religious educators go about their work in terms of productive pedagogies, drawing on the best contemporary educational research, particularly in areas of critical literacy and dispositional learning" (Barry, Elliott & Rush, 2003, p. 1). Religious literacy was promoted using the Four Resources Model of Luke and Freebody (1999), incorporating the elements of knowledge, skills, dispositions and feelings to develop students as investigators, designers, communicators and producers. The content referenced the Catechism of the Catholic Church (1994) under the strands of scripture, beliefs, celebration and prayer and morality with twelve

perspectives to encourage reflection on religion in contemporary society. This curriculum knowledge-based approach was a change from the previous lifecentred teaching that emphasised the formation of faith through shared reflection on personal experiences (Barry, Elliot & Rush, 2003; Hart, 2002). It was argued that the approach "relied more heavily upon contemporary educational practice in other curriculum areas than it did on established theories about religious education" (Ryan, 1997, p. 123). Using this syllabus, teachers may have promoted the catechetical model of faith experience and information rather than develop a deep personal connection to understanding and learning. Consequently, the importance of ensuring the connection between inquiry and faith is highlighted.

Research has shown that it is the theological and philosophical understandings of teachers in schools that shape the Catholic traditions of teaching and learning (Treston, 2000, 2001). When curriculum focuses on transformational outcomes with a constructive orientation to instruction, it challenges the culture of the school to place pedagogy at the core of the curriculum as the channel for faith encounter (White, 2004). Teachers may not be aware that every teaching and learning experience they offer is underpinned by their particular philosophies on anthropology, cosmology, epistemology and a 2000-year-old Catholic heritage. Thus, it is important for teachers to be well-grounded in philosophical and theological beliefs that are faithful to the ideals of the Gospel, so that they implement a curriculum that truly reflects a Catholic identity and culture.

Both studies of Treston (2001) and White (2004) have the potential to contribute to an understanding of the way the culture of a Catholic school could influence the approaches of teachers negotiating mandated curriculum changes. Treston (2001) focused on the formation of the person in the faith encounter and White (2004) studied the formation of the person through pedagogy. Henceforth, the amalgamation of the perspectives of Treston (2001) and White (2004) are presented in Figure 8. This analysis of the

findings of both researchers provides a combined platform on which to consider the synthesis of culture, faith and life in a Catholic school. This leads to the formulation of sub-question 3.

The influence of key learning area of Religious Education on Culture				
	is through			
Faith Encounter	Faith Encounter Generating (catech		Making meaning (pedagogy)	
	in teaching and	learning that is		
brain-based higher	order thinking i.e. inc	quiry-based, probl	em solving, reflective	
	An	d		
it is underpinned	it is underpinned by the philosophical and theological assumptions of the teacher			
↓ ↓	¥	¥		
Anthropology	Epistemology	Cosmology	Catholic Heritage	
beliefs about the	how we know and	beliefs about how	w what does the	
human person	the experience of	human beings	2000 year old	
	knowing in	are to live withir	n story say about a	
	learning and	the integrity of	vision of Catholic	
	teaching	creation	Education?	
the pedagogical approaches of teachers are grounded in these values, attitudes and beliefs				
which may influence the culture of the school and the way curriculum is delivered.				

Figure 8. Curriculum and culture. Adapted from Wisdom Schools: Seven Pillars of Wisdom for Catholic Schools, by K. Treston, 2001, and Pedagogy – The Missing Link in Religious Education: Implications of Brain-Based Learning Theory for the Development of a Pedagogical Framework for Religious Education, 2004, Unpublished doctoral thesis, ACU, Stratfield, Australia

3.7 Sub-question 3

In the past, the culture of the Catholic school was shaped by connections with Parish and Church tradition. However, high enrolments of Non-Catholics, disengagement with Church by Catholic families and the demise of the influence of religious orders are characteristic of the contemporary Catholic school culture. For many, understanding and practising the Catholic faith is grounded in childhood experiences and it is possible that the school will be the only face of Church for some. The identity of the Catholic school may be tenuous unless there is a clear, shared moral purpose articulated through Church teachings and an authentic Christian community. It is proposed that a Catholic pedagogy connecting the faith and knowledge dimensions of curriculum could enable students to make meaning of the Catholic heritage, and this pedagogy could help shape the culture of a school. Consequently, the third sub-question is concerned with the influence of the culture of the research school on the delivery of curriculum.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

3.8 Conclusion

In summary, the literature review in Chapter Three is conducted through three layers of change. These layers are the Change Processes Layer, the Change Pathways Layer and the Change Culture Layer. The theoretical framework is developed through a number of external and internal channels in each change layer. Three sub-questions emerged from the literature review to provide a platform for the collection of data for the study. The sub-questions are:

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

Having positioned the study within these layers of change, the design of the research is explained in Chapter Four.
CHAPTER 4: DESIGN OF THE RESEARCH

4.1 Introduction

The design of the research complements the literature review in the previous chapter and is a justifiable choice for exploring the way teachers negotiate mandated curriculum changes. It is the link between the conceptual framework of the study and the analysis of the data. The following graphic outlines the design of the research discussed in this chapter.

_	Design of the Research
Ç	
4.2	Theoretical Framework
	4.2.1 Epistemology: Constructionism
	4.2.2 Theoretical Perspective: Symbolic Interactionism
4.3	Research Methodology
	4.3.1 Case Study
4.4	Research Methods
	4.4.1 Survey
	4.4.2 Semi-structured interviews
	4.4.3 Researcher-generated documents
4.5	Data Analysis
	4.5.1 The constant comparative method
	4.5.2 The process of building theory from case study
4.6	Research Participants
4.7	Role of the Researcher
4.8	Limitations and Delimitations
4.9	Verification
4.10	Ethical Issues
4.11	The Design Summary

4.2 **Theoretical Framework**

The theoretical framework "is derived from the orientation or stance" that is brought to the study by the researcher (Creswell, 1998, p.45). The orientation of this study is the social and psychological contexts and concepts of teachers involved with the negotiation of mandated curriculum changes. Literature relevant to this study was explored through the four layers of context, processes, pathways and culture in the previous chapter. From a review of the literature, the following questions emerged:

Overarching question

How do teachers negotiate mandated curriculum changes?

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

These questions influenced the choice of the research design (Yin, 2009). This research is a qualitative study with the epistemology of constructionism. Creswell (2009) describes qualitative research in the following way.

Qualitative research begins with assumptions, a worldview, the possible use of a theoretical lens, and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem. (p. 37)

Or, in the words of Denzin and Lincoln (2005):

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field-notes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that 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)

Teachers in the study constructed their meanings in social situations through discussions or interactions with others. Thus, the researcher endeavoured to interpret these meanings by listening to teachers as they described how they perceived negotiating and implementing mandated curriculum changes through their work in a particular school setting. The aim was to understand the complex world of human behaviours and experiences through the perspectives of teachers involved with curriculum changes. Having worked in this school as an administrator, the researcher's interest in this area came from a personal involvement in the negotiation of mandated curriculum reforms. In order to pursue this new knowledge, a qualitative paradigm was the most appropriate for the study. The design of a qualitative study is emergent and flexible and the result is richly descriptive. The research design is outlined in Table 7.

Table 7

The Research Design

Theoretical Framework	
Epistemology	Constructionism
Theoretical Perspective	Symbolic Interaction (Interpretive)
Research Methodology	Case Study
Data Collection Methods	Survey Semi-structured Interviews Researcher-generated documents

This research was an inductive process in which the researcher was the primary instrument for data collection and analyses. The researcher spent time in the context selected for the study (Bogdan & Biklen, 2007; Merriam, 2009). The task involved the construction of meaning according to the subjectivity of the individual (the researcher) interacting with internal and

external contexts and participants (Denzin & Lincoln, 2008). The researcher understood that what had a common meaning for a particular group may have a specific meaning to one member of that group (Creswell, 2007).

4.2.1 Epistemology: Constructionism

When choosing a research design the researcher makes a claim about what knowledge is, and about the nature of the reality of that knowledge (ontology). Assumptions are made about how knowledge is gained and known (epistemology), the role of values and what values are in the knowledge (axiology). The process of writing about research (rhetoric) and the language and processes of researching and studying knowledge (methodology) constitutes a basic set of beliefs and assumptions that guides the inquiry (Creswell, 2009; Crotty, 1998).

The epistemological or philosophical assumption of this study is constructionism. The basis of constructionism is that truth is constructed rather than revealed (Schwandt, 2001). A "complexus of assumptions" is seen in the personal and professional understanding of teachers as they construct their world within their social settings and decide on what is relevant and meaningful in their daily life (Crotty, 1998, p. 66). People develop meanings through their interactions with others in social contexts and, over time, sophisticated constructions emerge. This validates the term social constructionism because it acknowledges the realities of the personal and subjective ways of teachers engaging with the world that they are interpreting (Creswell, 2003). It is through the interaction of the stance taken by the researcher and the teachers in the study that meanings are explained (Crotty, 1998). Thus, the epistemology of constructionism is appropriate for the conduct of this study.

4.2.2 Theoretical Perspective

The theoretical perspective of the study justifies and ensures the congruency of the methodology and the data gathering strategies (Crotty, 1998). It gives structure to the design, direction for the collection of the data and a platform for the analysis of that data (Creswell, 2003; Crotty, 1998). Symbolic interactionism is a theoretical perspective for looking at and interpreting the world. It assumes that the communications and actions of people express meaning (Denzin & Lincoln, 2007).

Blumer (1968) proposed the following three basic premises of the perspective.

Humans act toward things on the basis of the meanings they ascribe to those things;

The meaning of such things is derived from, or arises out of, the social interaction that one has with others and the society;

These meanings are handled in, and modified through, an interpretive process used by the person in dealing with things he/she encounters. (p. 2)

Therefore, an interpretivist approach enables the generation of meaning. It encourages the participants to examine and challenge the issues and structures that impact on them. Consequently, the choice of a symbolic interactionist theoretical perspective presented an opportunity for the researcher to interact with teachers in their natural setting, in their own language and on their own terms, to glean a clearer understanding of the issues, concerns and realities (Charon, 2001) that concerned their negotiation of mandated curriculum changes.

4.3 Research Methodology: Case Study

The focus of the research question in a study typically shapes the choice of methodology (Shavelson & Townes, 2002). This study asks the question *how* about the general circumstances of a contemporary phenomenon in a real-life

context, namely, the negotiation of mandated curriculum changes by teachers in a school setting. It expresses a desire to come to an in-depth understanding of a particular case to explain and describe the learning and behaviour of people (Yin, 2009). Consequently, the most appropriate methodology for this research is case study.

Case study has been part of social science studies for testing propositions in education for some years (Stake, 2005; Yin 2009). The approach has particularistic, descriptive and heuristic characteristics and is widely accepted as a methodology to explore events bounded by time and activity when a limited number of people are involved (Merriam, 2009; Stake, 2005; Wolcott, 2001). The approach has been criticised for a lack of trust in the credibility of the process, the biases of the researcher, the inability to generalise findings and the time-consuming nature of data analysis (Merriam, 2009). However, there are differences of opinion about this rationale. Flyvbjerg (2006) contests that context-dependent knowledge is more valuable than context-specific knowledge and he believes that formal generalisation is overvalued. Shields (2007) argued that the strength of case study is increased when it "includes paradoxes and acknowledges that there are no simple answers" (p.13). Therefore, the capacity of case study to "trace changes over time and relate these changes to previously enunciated theoretical propositions" (Burns, 2000, p. 473) can be seen as a major strength of the methodology. In this study, the researcher chose to engage in the process of building theory from case study research. This highly iterative approach is "tightly linked to data" and results in "novel, testable, and empirically valid" theory (Eisenhardt, 1989, p. 532) that also challenges the criticism of the inability to generalise findings from case study research.

The boundaries for this case study are the period of time between 1999 and 2009, and the mandated curriculum changes that were negotiated by a particular group of teachers in one school. This is an embedded, single case study offering an in-depth description of circumstances, community and

culture through the interpretation of data that deals with the beliefs and motives of people (Bogdan & Biklen, 2007). Thus, case study is an appropriate choice of methodology for the study.

4.4 Research Methods for Data Collection

Case study data collection is generally qualitative, but it is not limited to data from this tradition (Creswell, 2007; Yin, 2009). The choice of methods for data collection in this research includes both quantitative and qualitative approaches. When this choice is made, Miles and Huberman (1994) indicate that: "The question, then, is not whether the two sorts of data and associated methods can be linked during study design, but whether it should be done, how it will be done, and for what purposes" (p. 41). Similarly, Simons (2009) has this to say:

The determining factors in deciding whether to use qualitative or quantitative methods are whether they facilitate an understanding of the particular case, what kind of inference you can make from the data and how these are valued by different audiences for different purposes. (p. 5)

In this study, the combining of the quantitative and qualitative approaches focuses on the significance of enhancement that one tradition offers the other to maximise data interpretation. The separation of the different elements enables each to stay true to its paradigmatic and design requirements (Creswell, 2007). The data gathering strategies were guided by the research design and the techniques employed were a survey, semi-structured interview, and researcher-generated documents (Merriam, 2009). Using multiple methods of data collection to gather the information assisted with the validity and trustworthiness of the study (Yin, 2009). "Moreover, the combination of data types can be highly synergistic." (Eisenhardt, 1989, p. 538)

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4.4.1 Survey

A survey was designed as the first step in data collection. The purpose of the survey was to ascertain the broad opinions of teachers when responding to the OBE curriculum change in the research school. All teachers in the study negotiated this change in some way and the survey obtained the participants' broad perspectives of a common experience. The survey utilised was a small scale-survey because it was distributed to only 20 teacher participants (Smith & Gorard, 2005). There were two purposes in this, firstly to use the survey as a source for the cross referencing of other data collection strategies in the study, and secondly, to undertake a content analysis to assist in the formulation of the guiding questions for the interviews (Merriam, 2009; Yin, 2009). The type of survey utilised in this study was a closed approach, namely a survey with limited choices and set responses arranged in rank orders, using the Likert Scale (Punch, 2005). Closed surveys are recognised as one of the more structured quantitative techniques of data gathering that eliminate the risk of the researcher influencing the responses (Jansen, 2010). They have been used in the social sciences to collect data to enable all participants to receive the same questions presented in the same way.

Surveys have the capacity to reach a large population relatively cheaply and to get a high response rate (Babbie, 2010). When used as a research method, a survey adheres to a set structure and format, incorporating the three elements of the covering letter, the instructions and the main body. This ensures that there is no possibility of misunderstanding or misinterpreting the reason for the survey. The covering letter outlines the purpose of the study, encourages honest responses and guarantees anonymity and confidentiality for participants. The main body of the survey is concerned with the formatting and design of the survey questions (Silverman, 2005). The instructions clearly ask the participants can be assessed collectively to examine their shared beliefs and behaviours (Punch, 2005).

It was possible for the length, the design and the order of questions in the survey to impact on the success or otherwise of the instrument, but care was taken by the researcher to give clarity to the layout, format, length and ordering of questions. The commitment, interest and motivation of the respondent were considered. The survey was presented on two separate pages that were read from top to bottom, and the graphic presentation was consistent and easily navigated (Redline & Dillman, 2002). It took between eight to ten minutes to complete. The item choices were coded from one to five and the descriptors for the response scale were 1: strongly disagree, 2: disagree, 3: neither or not sure, 4: agree, 5: strongly agree (Likert, 1932). Respondents were thanked for their participation at the end of the survey and the completed responses were placed in a closed box to ensure anonymity.

Although every attempt was made to formulate the questions in an unambiguous way, there was a possibility that there could be a range of interpretations (Fink, 2003). In order to minimise this occurring, topics for questions were grouped in four sections. Each section related to the other and no personal or confidential questions were asked. A summary section gave the respondent an opportunity to reflect on curriculum change. The researcher avoided the approach of asking the participant to consider multiple issues in a single question. The goal was for participants to respond with the same understanding of the questions to get a more consistent response quality (Bradburn, Sudman & Wansink, 2004). A copy of the survey is located in Appendix E.

Teachers in the research school completed the survey at a staff meeting in October 2008, with the researcher present. Opportunity was given to reflect on the questions, but no discussion was held and no clarification was offered. There was a 100% return rate. Two teachers not connected with the study tested the survey for clarity of design and purpose before it was distributed. The data gathered in the survey enabled the researcher to understand in broad terms, teachers' perceptions about the change to the OBE approach to

education; the way teachers interpreted OBE; and how they perceived planning, teaching, assessing and reporting while using OBE. Findings from the survey became a guide for the development of questions utilised in the individual semi-structured interviews with teachers.

4.4.2 Semi-structured Interview

The semi-structured interviews were the primary retrospective data gathering strategy of the study in which participants recalled past lived experiences. The interviews were conducted in a conversational style and flexibility of dialogue, with a mix of prepared questions and less structured questions (Seidman, 2006; Silverman, 2005). It is thought that a conversational approach to an interview enables responses to be more natural, facilitating depth of data collection because the interviewee feels at ease (Gubrium & Holstein, 2003; King & Horrocks, 2010). This style of interview endeavoured to create a comfortable, relaxed environment characterised by an atmosphere of trust and rapport. In order to gain an authentic understanding of what the participants were contributing, it was necessary to allow them to control the conversation verbally, allowing themes and issues to emerge through discussion.

To gauge the suitability of the questions, an unrecorded trial interview was conducted in November 2008 with a teacher who was not involved in the study. This enabled the researcher to ascertain the duration of the interview process and ensure that there was a smooth flow to the sequencing of questions. Minor adjustments were made to the line of questioning from the trial interview, and the exercise highlighted the need to ensure the researcher did not ask leading questions.

Telephone interviewing was considered as a strategic option for initial or supplementary data gathering when it was difficult to schedule face-to-face interviews (Gubrium & Holstein, 2003). It was a good medium for promoting participant reflection and relaxation, as well as being cost effective. The

researcher used the telephone interviewing strategy in one instance, with a participant who was unable to attend a scheduled meeting.

Audiotaping was used to aid in the compilation of complete and accurate records of the interview (Gubrium & Holstein, 2003). Using audiotapes curtailed the distracting necessity of note taking during the interview process, but there was potential for the presence of the audiotape to limit the spontaneity and full participation of the interviewee. The researcher transcribed the recorded interviews verbatim and offered a copy to individual participants for his/her consideration. The participant had the option of making amendments before the researcher undertook the analysis of the transcripts, but no instances of this occurred.

To encourage participants to reflect on their experiences of negotiating mandated curriculum changes, the question line fluctuated between hypothetical and interpretive questions and the exploration of ideal situations or opposing views (Merriam, 1998, 2009). The role of the researcher was to listen, keeping the participant focused on the issues of the study, seeking clarification or validation as required (Silverman, 2005). Questioning followed a format developed by the researcher, but the verbalisation in the interview came from a line of inquiry that allowed teachers to elaborate their perceptions and explain their ideas. When it was necessary to follow up a comment or develop a significant line of thought, probing for clarification and examples was the strategy used (Merriam, 2009; Yin, 2009).

[Interviews] can inform us of what the person interviewed is prepared to say about a topic in the social context, time and place of that particular interview. We need to recognise that what is said will be co-constructed in that interview and will be limited by perception, memory, evasions, self-deception and more on the part of both the interviewer and the interviewee, but that it still can be of value. (Walford, 2001, p.95)

The aim of the interview process was to gather rich, descriptive data on the perspectives and experiences of the teacher participants. A copy of the interview questions is located in Appendix F.

The danger of a semi-structured interview is that some potential exists for the bias of the interviewee and the researcher to damage the data through poor recall or inarticulate recollection of the experiences (Corbin & Morse, 2003). In qualitative research, co-construction recognises bias. The reality is within the data, and techniques are used to minimise the influence. The researcher had an obligation to protect the integrity of the research data and endeavoured to ensure that the responses of the interviewee were not influenced by personal perspectives or thinking on the subject. To ensure no contamination of the data the researcher made no intentional departure from the interview guidelines, however, claiming that anything is totally unbiased may not reflect the reality. It was possible to re-contact participants for face-to-face verification if points for clarification were found in the transcribed interviewed data, but the researcher did not need to do this.

During the interviews, the researcher made every attempt to ensure statements made were unbiased and questions were not leading the interviewee. To illustrate this point, when Teacher 4 was speaking of what she felt was the ideal planning approach, it was important for the researcher to remain neutral about her perspective and illicit the reasoning behind the following comment.

Why don't they just give us what they want us to teach. Why do we have to take those waffly outcomes and work out what to do? We shouldn't have to. Just give us the work so we can just teach it (Teacher 4).

Consequently, asking Teacher 4 what was difficult about planning to OBE, rather than agreeing with her and moving onto another question, enabled the necessary probing of the concern to gather relevant data.

The interviews for the study were conducted over the period between November 2008 and June 2009. The primary goal was to elicit the views and experiences of the respondents in his/her own terms (Creswell, 2007). Respondents were asked to talk about specific situations and events in relation to mandated curriculum changes between 1999 and 2009. Without exception, participants were co-operative and positive about the interview process. As practitioners in the field of study, the participants confidently gave their views and opinions about negotiating mandated curriculum changes. Because the researcher had unlimited access to the research site, arranging times for the interviews to complement the school timetable and availability of the participants was not problematic. The duration of each interview was between one and one and a half hours and altogether, almost 34 hours of teacher interviews were recorded and transcribed.

The researcher was selective about the choice of which participant data to include in the study, so not all the data collected were used in the analyses. The cases were chosen from the data collections for theoretical, not statistical reasons, because the researcher engaged in the process of building theory from this case study research, which relies on theoretical sampling (Eisenhardt, 1989, Eisenhardt & Graebner, 2007).

Theoretical sampling simply means that cases are selected because they are particularly suitable for illuminating and extending relationships and logic among constructs....for the likelihood that they will offer theoretical insightsuch as revelation of an unusual phenomenon, replication, elimination of alternative explanations, and elaboration of the emergent theory. (Eisenhardt, 2007, p. 27)

Twenty-one interviews were conducted and 13 of these interviews were selected for the study. The interviews included classroom teachers, teachers in specialist roles and teachers in the roles of Principal, Assistant Principal and Education Officer. However, the data collected from the interviews of Principals, Assistant Principals and the Education Officer did not contribute to the story of change in the research school. In addition, some teacher interviews offered more data than others about negotiating and implementing mandated changes at the research site, therefore some teacher participant data were discarded.

4.4.3 Researcher-generated Documents

Researcher-generated documents are documents prepared by the researcher, or for the researcher, after the study has begun (Creswell, 1998). "The specific purpose for generating documents is to learn more about the situation, person or event being investigated" (Merriam, 2009, p. 149) and a wide range of documents, such as public records, personal documents and physical materials can be included in a study (Creswell, 1998; Yin, 2006). In this study, records and documents from the research school and personal documents generated by the researcher were used as a source of data collection.

The researcher-generated documents are divided into two groups. The first group is the documents generated by the researcher through reflective journaling and the second group is the school-based field-notes and historical curriculum documents that were generated by the researcher between 1999 and 2007. The researcher differentiates between the collection of these documents by referring to them as data-based (memos) and school-based (field-notes). These researcher-generated documents contributed to the process of building theory from this case study research.

The data-based researcher-generated documents were compiled through the strategy of reflective journaling, similar to the process of compiling memos as a running commentary about what is happening at the research site. This commentary involved both observation and analysis. The journaling of observations enabled the researcher to ask the question *why* and *what is happening here* about the topics, concepts and perspectives that emerged in the interviews. The analyses of the researcher-generated documents involved ongoing cross-referencing and deep, systematic analyses of the interview data. These analyses were recorded in booklets and involved a number of cross-case comparisons. One level of analysis was accomplished by grouping the participants according to teaching experience and year levels taught to enable the researcher to identify the patterns of teacher engagement with particular curriculum changes. Others included the analyses of data in pairs

and fours according to areas of teaching in the research school, to identify similarities and differences in approaches to mandated changes. Another analysis included the grouping of specialist teachers to compare their responses and perspectives. The flexibility of the approach in choosing the data groups allowed the researcher to add new insights to the data analyses.

The school-based researcher-generated documents constituted recounts of curriculum changes in the research school between 1999 and 2007. The researcher was able to reference valuable historical information on the journey of ongoing curriculum changes in the research school and the mining of data in these documents complemented the reflective journaling process. Documents included a post-graduate study of the change of school structures for the OBE: The Stage-Based Integrated Approach To Curriculum Implementation (EDLE610: Project A), conference presentations about implementing change in the research school, curriculum forums and reviews of the effectiveness of the OBE change, plus parent information sessions on the ongoing changes to planning, assessing and reporting. In addition, the researcher was able to access information booklets compiled for discussions with teachers and principals who visited the research school to discuss the implementation of curriculum changes during the school's involvement in the Curriculum 2000 pilot trial. This included school-based documents of teacher reflections about planning, assessing and reporting practices during the introduction of the OBE approach.

The researcher also had documents explaining the implementation of the Early Years Curriculum, the Essential Learnings and records of Consistency of Teacher Judgment involvement by teachers from the research school. Furthermore, documents included the action plans for the implementation of the Digital Revolution Education and the ongoing negotiation around reporting and report card changes as assessment transitioned from the achieved/not achieved paradigm of OBE to the five part reporting A, B, C, D, E requirement of the federal government. These documents were not used in isolation

because they were examined in a systematic manner and memoranda were sorted in response to the research questions. Mining these documents was a process of following leads and intuitively investigating insights (Creswell, 2007).

In summary, three data collection methods were employed in the research. These included the survey, the semi-structured interviews and researchergenerated documents. Once the data from the survey were gathered and analysed, broad understandings of teacher perceptions were realised. Questions were constructed in order to probe the issues and concerns in the semi-structured interviews. The third source of data used to support and investigate the emerging perspectives of participants was the researchergenerated documents, which offered both a reflective and a historical perspective of the negotiation of change at the research site. The research methods were justifiable because they reflected the interpretivist paradigm and the interactionist perspective embedded within the research design.

4.5 Data Analysis

Both quantitative and qualitative data were analysed in the study. The quantitative data in the study were analysed by computer software which reduced it to statistics to inform the line of inquiry of the qualitative phase. Calculations for frequency percentages were completed (Burns, 2000). As previously mentioned, the interval measurement scale used in this study is a five point Likert scale (Burns, 2000). Interpreting quantitative data relies on defining the dependent and independent variables of the data and understanding the differences between measurement scales (Punch, 2005).

In contrast, the analysis of the qualitative data was an iterative process of constant comparison from which concepts and themes emerged through careful examination and ongoing comparisons (Strauss & Corbin, 1998; Miles & Huberman, 1984; Wellington, 2000). Analysis of the qualitative data in the study was conducted using the constant comparative method (Glaser &

Strauss, 1967). Because the researcher undertook a process of building theory from case study research, the analysis of the data went beyond initial impressions. The evidence was viewed from multiple lenses of within-case analysis and cross-case pattern analysis searches through an iterative process that was linked to the data (Eisenhardt, 1989).

4.5.1 The Constant Comparative Method

Through the use of the constant comparative method, a directed content analysis approach was followed in this research (Glaser & Strauss, 1967; Wellington, 2000). Figure 9 illustrates the iterative and simultaneous flow of the data analysis undertaken in the study (McLaughlin, 2011).





https://www.slideserve.com/omer/qualitative_data_analysis.

The constant comparative method is an inductive coding process that results in the simultaneous comparison of all units of meaning (Glaser & Strauss, 1967). Data are reduced, organised, explained and verified through inductive and deductive analysis, as raw data were turned into findings. As data are coded, patterns begin to emerge. Pattern matching compares the obtained pattern from data analysis with the predicted pattern (Burns, 2000). Each emerging unit is compared to and coded with existing units and similar units. Constant comparison of the data begins after the first interview, looping forwards and backwards as it moves from the general to the specific (Creswell, 2007; Silverman, 2005). It is through the use of the constant comparative method that concepts are formed as similar concepts merge into one or no similar units of meaning are identified. Such an approach ensures an exhaustive and mutually exclusive coverage that is inclusive of all data (Wellington, 2000). Four themes with supporting aspects emerged from the constant comparison of the data of the topics discussed by teachers in this study. The list of topics which emerged in Iteration 1 is located in Appendix H, and the themes and the defined aspects are provided in Table 8.

Table 8.

Theme	Aspects
Capacity to Change	1. Peers and colleagues
	School processes and procedures
	System involvement
Teacher Capital	1. Choices and emotions
	2. Engagement
	3. Effectiveness
Learning Together	 Social communication and culture
	 System-based professional development opportunities
	3. Mentoring approaches
Shaping Culture	1. Society
	2. System beliefs and faith formation
	3. Religious life of the school

Themes and Aspects of the Study

The researcher focused on classifying and categorising data in order to make connections and meanings. The themes and their aspects explained the way teachers negotiated the Change Processes, the Change Pathways and the Change Culture layers examined in the literature review of the study. In summary, the constant comparative method is a process that enabled a systematic comparison of the text by the researcher, and imposed order on the raw data, identifying, generating and linking the key topics, issues, themes and concepts of the study (Boeije, 2002; Glaser, 1978).

4.5.2 The Process of Building Theory from Case Study Research

The process of building theory from case study is addressed by a number of researchers. This includes the work of Miles and Huberman (1984, 1994) on qualitative methods and the work of Yin (1981, 2009) which explores the design of case study research through replication logic, validity and reliability concerns. It also reflects the classical approach of Glaser & Strauss (1967) to grounded theory, which has a prescriptive approach to the continuous comparison of data and identifies emerging theoretical categories and types. Over time, other techniques have emerged in the process of building theory from case study research, including the use of a devil's advocate (Sutton & Callahan, 1987); triangulation applied to researchers (Pettigrew, 1988) and data types (Jick, 1979), plus the development of cross-case analysis methods (Bourgeois & Eisenhardt, 1988). These works have contributed to theory building from case study research, and a "roadmap for executing this type of research" (Eisenhardt, 1989, p. 533) is provided in Table 9.

Table 9

Process of Building	Theory from	Case Study Research
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Step	Activity	Reason
Getting started	Definition of research question Priori specification of constructs	Focuses efforts Provides better grounding of construct measures

Step	Activity	Reason
Selecting cases	Neither theory nor hypotheses Specified population Theoretical, not random sampling.	Retains theoretical flexibility Constrains extraneous variation and sharpens external validity Focuses efforts on theoretically useful cases i.e. those that replicate or extend theory.
Crafting instruments and protocols	Multiple data collection methods Quantitative and qualitative data combined Multiple investigators	Strengthens grounding of theory by triangulation of evidence Synergistic view of evidence Fosters divergent perspectives and strengthens grounding
Entering the field	Overlap data collection and analysis, including field- notes Flexible and opportunistic data collection methods	Speeds analyses and reveals helpful adjustments to data collection Allows investigators to take advantage of emergent themes and unique case features
Analysing data	Within-case analysis Cross-case pattern search using divergent techniques	Forces investigators to look beyond initial impressions and see evidence through multiple lenses
Shaping hypotheses	Iterative tabulation of evidence for each construct Replication, not sampling, logic across cases Search evidence for <i>why</i> behind relationships	Sharpens construct definition, validity, and measurability Confirms, extends and sharpens theory Builds internal validity
Enfolding literature	Comparison with conflicting literature Comparison with similar literature	Builds internal validity, raises theoretical level, and sharpens construct definitions Sharpens generalisability, improves construct definition, and raises theoretical level
Reaching closure	Theoretical saturation occurs	Ends process when marginal improvement becomes small

Reprinted from "Building Theories from Case Study Research" by K. Eisenhardt, 1989, *Academy of Management Review, Volume 14* (4), p. 533.

The research strategy of building theory in this study is used to come to a deeper understanding of the real-world context in which the negotiation of mandated curriculum change occurs for teachers at the research site. As

noted in Table 9, a number of activities are characteristics of the process of building theory from case study. Such theory building begins with and is shaped by a well-defined focus and a priori specification of constructs with the aim of systematic data collection (Mintzberg, 1979, p. 585). In this study, constructs were measured in the survey and the interview protocols. The researcher and the related constructs contributed to the grounding of the theory through triangulation. The focus shifted to theory building after the data collection of both quantitative and qualitative evidence. The researcher began with no consideration of building a theory and no hypotheses to test. The research problem was formulated and a literature review completed, but there were no identified "specific relationships between variables and theories" (Eisenhardt, 1989, p. 536).

A feature of building theory from case study is the overlapping of data analysis and data collection that occurs. The researcher accomplished this through reflective journaling entries, which were written commentaries similar to the compilation of field-notes from observation and analysis of what was happening at the research site. Through the curiosity of the researcher, the data were interrogated to probe the themes and concepts, asking the question "What does this mean?" Sources for this interrogation were the perceptions of teachers in the interview data, the topics these teachers identified as important to them and the historical data generated by the researcher at the research site between 1999 and 2007. As the theory developed, tables were used to summarise the line of inquiry. This blending of construct tables with text description contributed to the measurability of the evidence and the increase of the testability of the emerging theory (Gilbert, 2005; Zott & Huy, 2007). Examples of tables which substantiated and strengthened the emerging theory are located in Appendix I.

Within-case and cross-case analysis of data is integral to the process of building theory from case study. Within-case analysis focused on the individual cases, and cross-case compared the emergent data in different

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ways. Examples of the descriptive, within-case narrative write-ups are provided in Chapter Five, and these show how the unique patterns of individual cases emerged. In cross-case analysis, the emerging patterns highlighted the "within-group similarities and inter-group differences" (Eisenhardt, 1989, p. 540). In this study, the researcher selected pairs and fours of teachers (forced comparisons) to identify the similarities and differences between cases and generated data in relation to teacher demographics. This resulted in the emergence of new dimensions and processes that led to the development of a theory grounded in the types of approaches and practices teachers displayed in their management and implementation of curriculum changes. When the incremental learning from ongoing data analysis was minimal because the same patterns were emerging from the issues being addressed, theoretical saturation (Glaser & Strauss, 1967) was reached and closure was brought to the iteration process. The dimensions and processes that emerged in cross-case analysis in the building of the theory are shown in Table 10. The dimensions identified the different ways teachers approached changes, and the processes highlighted the thoughts and actions of teachers in the study as they engaged with curriculum change. The processes underpinned the dimensions and the differences identified by teachers contribute to the realities of the story of curriculum change.

Table 10

Dimensions and Processes of the Theory

Dimensions	Processes of the dimensions	
Interpreting	By filtering and auditing	
Adapting	By agreeing and manipulating	
Adopting	By accepting and practising	
Committing	By transferring and transforming	

This highly iterative process of the constant comparison of theory and data sharpened the constructs by redefining and building evidence. Such evidence measured and validated results in the shaping of hypotheses. When each case is tested in this way replication logic occurs, as opposed to the testing of the aggregate relationships in sampling logic (Yin, 1984, 2009). Consequently, hypotheses are shaped through the measuring of constructs and the verifying of relationships. The aim of the researcher was to find the underlying theoretical reasons for why the emergent relationships existed.

In the process of building theory from this case study research, it was necessary for the researcher to have a broad range of literature to compare similar and contradicting themes, concepts and dimensions. Such an approach is an opportunity to uncover deeper insights, which can sharpen the limits of generalisability (Mintzberg & McHugh, 1985). Ignoring any conflicting findings in this comparison may compromise confidence in the research. When the researcher observed and analysed the patterns of behaviour exhibited by teachers negotiating change and compared them with the enfolding literature, features of managing curriculum changes emerged to sharpen the theory. Tactics of linking the results to the literature enhanced the generalisability, the internal validity and the theoretical level of theory building for this case study.

It is acknowledged that theory building in case study has strengths and weaknesses (Eisenhardt, 1989, Eisenhardt & Graebner, 2007). The strengths are the generation of novel theory, the capacity to test the emergent theory with measurable constructs and hypotheses and the likelihood for the theory to be empirically valid. The theory building is not limited to the researchers' pre-conceptions because it is possible to measure and test the constructs of the emerging theory during the theory-building process. Thus, the resulting hypothesis was verifiable because of repeated verification and empirical validation that reflected the reality for teachers in the research. The weaknesses include a lack of simplicity in the construction of the theory and

the possibility that the theory may be narrow, resulting in an inability to raise the level of generality of the theory. Consequently, the result constitutes a "modest" theory about a "specific phenomena" (Eisenhardt, 1989, p. 547).

In summary, data were interrogated in this process of building theory from case study research. The aim of the researcher was to move the qualitative inquiry beyond the descriptive level of the first iteration into theory construction in a second level of iteration to raise the conceptual level of reasoning. A summary of these iterative processes, namely Iteration 1 and Iteration 2, is provided in Table 11.

Table 11

The Iterative Processes of the Study

Iteration	Explanation
Iteration 1	Themes and aspects identified using the constant comparative method. Case summary descriptive narratives are compiled. Analysis of the case summaries leads to the findings of the study (Yin, 1984).

Iteration 2 The iterative process of building theory from case study research involved theoretical sampling, theoretical saturation, overlapped coding, data collection and analysis, replication logic, concern for internal validity and the tabular display of evidence through replication logic, priori specification of constructs, participant specification, flexible instrumentation, cross-case analysis tactics, several uses of literature, testable hypotheses and theory which are generalisable across settings. Throughout the process, the researcher constantly compared theory and data and moved towards a theory (Eisenhardt, 1989).

4.6 Research Participants

Participants for the study included, and were limited to, the teachers in the research school. Twenty teachers in the research school completed the survey and 13 of these teachers were invited to participate in the semi-

structured interviews. The purpose of the survey was to collect data on the negotiation of the mandated curriculum change of OBE. The survey gleaned different perspectives of the curriculum change from 20 participants, although some perspectives were not reflective of the research school because participants had experienced the OBE change in different school cultures. The strength of the survey lay in the scope of teacher perspectives, rather than a large-scale number (Smith & Gorard, 2005).

The selection of participants for the interviews was influenced by the purpose of the research (King & Horrocks, 2010). The researcher determined the criteria for the participants to be interviewed knowing that the choices would affect the quality of the meta-inferences, the generalisation and the transfer of the findings. The first group of teachers selected for the interviews comprised eight classroom teachers, one from each primary year level from Prep to Year 7 in the research school. It was assumed that these classroom teachers possessed comprehensive knowledge of the way they had negotiated mandated curriculum changes and would provide pragmatic perspectives of the processes. The second group comprised five specialist teachers. The inclusion of specialist teachers in the data gathering process was based on the belief that they would have in-depth understandings and insight into the way changes affected their specialist areas of curriculum.

4.7 Role of the Researcher

No analysis is neutral because the research filters through a personal lens, which is specific to the moment. The background, insights, reflections, ideas and values of the researcher are important parts of the database and contribute to the validity and the ethical underpinnings of qualitative analysis. Therefore, there is a need to attend to the perspective of the researcher as well as the participants, and ensure that the personal viewpoint of the researcher does not exert influence on the study (Patton, 2002).

The researcher has been involved in education as a classroom teacher since 1970 in Queensland schools in State and Catholic systems, having taught all primary year levels and experienced the roles of classroom teacher, District Reliever, Assistant Principal Religious Education and Principal at the site of the research. Consequently, it is possible that the senior role of the researcher could influence the behaviour and manner of the participant teachers. However, a personal and professional relationship grounded in frank, honest communication and open, robust conversation existed between the researcher and the teacher participants. The researcher was actively involved in the delivery of curriculum in the school and constantly engaged with teachers as a facilitator, informer. coach, mentor and colleague (Patton, 2002). Consequently, the researcher felt that a relationship of mutual trust and respect was well established, and this had the capacity to contribute to the validity of the data.

4.8 Limitations and Delimitations

There are limitations and delimitations associated with the study. Limitations are outside the researcher's control and they include the possible weaknesses of case study, the reliability of the data collection and researcher bias. An acknowledged difficulty was the fact that the researcher worked closely with the teachers in the school and was involved in the decision making of the negotiation of curriculum changes. As an insider at the research site, the researcher had the capacity to compromise the research (Gillham, 2000). To limit the possibility of the researcher compromising the data collection and analysis, it was necessary to recognise personal biases and subjectivity. The challenge was to maintain the balance of relationship and distance with the study. To address this situation, the researcher accounted for the personal and professional multiple influences a topic had for her, and continually acknowledged the perspectives and experiences of the participants and the audience for the research (Gilgun, 2010).

The strategies of self-reflection, member checks and peer review contributed to limiting researcher bias. Participants had access to the transcriptions of their interviews and critical friends were employed to peer review the integrity of the research. The critical friends of the researcher were fellow educators who were not participants in the study. These three people were trusted colleagues who worked in education in different schools in the Diocese of the research study. Each took the time to understand the context of the work and posed questions about the direction and integrity of the research (Swaffield, 2004). The researcher engaged in professional dialogue with these colleagues to ensure a focus on the perspectives of the participants was maintained. At all times, the anonymity of the teacher participants was respected.

Delimitation was determined by the place of research and what was consciously included and excluded. It was the choices of the researcher that contributed to the delimitation of the study. As previously stated, the context for the research was a regional Catholic school with 20 teaching staff who participated in the survey, and 13 of these participants were purposively selected for the interview. This selection shaped the direction of the data collection, which included the decisions made by the researcher around questions and variables of interest (Creswell, 2007). The review of the literature reflected the choices of the researcher defined in the Change Processes, Change Pathways and Change Culture layers. Thus, the study was influenced by what the literature did not cover as well as what it did cover. Therefore, the delimitation of the study constrained the scope of the inquiry. In summary, the researcher negotiated the limitations and delimitations of the study and ensured that the research was conducted in an ethical manner to produce consistent and trustworthy knowledge (Denzin & Lincoln; 2008; Merriam, 2009).

4.9 Verification

The verification of analysed data is concerned with the rigour of the research. Quantitative and qualitative paradigms refer to this rigour as validity and trustworthiness. Subsequently, trustworthiness of the qualitative research of case study is addressed with respect to internal validity, reliability and external validity (Creswell, 2007; Merriam, 2009; Yin, 2009).

Internal validity "hinges on the meaning of reality" (Merriam, 1998, p. 201) and the assumption that "reality is holistic, multi-conceptual, and ever-changing: it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured as in quantitative research" (Merriam, 1998, p. 202). It ensures that a chain of evidence is established to enable any external observer to follow the process of data gathering from the research questions to the conclusions of the study (Merriam, 2009). This chain of evidence was created through the use of strategies that enhanced internal validity of the study. The strategies included triangulation, member checks, peer examination and the acknowledgement of researcher's biases. Researcher bias, member checks and peer examination were discussed previously.

The strategy of triangulation enabled a clearer and sharper understanding of the people and the setting (Burns, 2000; Stake, 2005). Triangulation is a "method of cross-checking data from multiple sources to search for regularities in the research data" (O'Donoghue & Punch, 2003, p. 78). The method offers a means of validation of the data through improved accuracy and enhancement of the completeness of the findings, thus reducing the possibility of error. Trustworthiness of the study is enhanced through the process of triangulation, explained as "the principle that viewing something from more than one viewpoint.....to get a better knowledge of it" (Denscombe, 2010, p. 348). It is acknowledged, however, that triangulation may not always yield exact and consistent replicas of data because individual awareness is not static (Merriam, 2009; Patton, 2002). The triangulation of the data of the survey, the semi-structured interviews and the researcher-generated documents provided depth of evidence to show the similarity of responses to particular issues in negotiating and implementing mandated curriculum changes. Following is an example of the use of triangulation from the data on professional development in the survey, the interview and the researchergenerated documents.

In Interpeting the OBE Approach section of the survey, 75% of teachers disagreed with the following statement: *Teachers engaged in adequate professional development to enable them to interpret and adapt to the changes associated with OBE.* A further 10% were not sure about receiving professional development that helped them. Thus, only 15% agreed that they did receive professional development that supported them in the OBE curriculum change. Consequently, this issue was pursued in the interviews.

The data from the interviews indicated that three of the classroom teachers felt that they had been supported with professional development opportunities and the two who were relatively new to the school had nothing to say about the issue. A further eight of the teachers in the research school indicated that they felt they had received little professional development that helped them to implement the OBE change. Consequently, the data from the survey supports the data from the interview, indicating that approximately 75% of teachers highlighted a lack of professional development for the OBE curriculum change.

Data about professional development in the researcher-generated documents itemised the types of professional development teachers received and the researcher investigated the specific professional development identified by teachers. The data showed that three teachers received individual help in planning to the OBE approach from a number of system personal, but the advice that was given was different. Another four spoke of a lack of common direction provided about planning and assessment strategies to implement OBE. Thus, the triangulation of the data across the three data collection sources validates the claim that, collectively, there was a lack of common understanding of the OBE change provided to teachers in the professional development received.

Reliability in qualitative research could be considered in terms of the "dependability or consistency" (Lincoln & Guba, 1985, p. 288) of the results obtained from the data. It does not hinge on replicating the study. Rather the focus is on "whether the results were consistent with the data collected" (Merriam, 1998, p. 206). In addition, the use of a combination of data techniques increases the reliability of the research because of the capacity of the strengths of one method to support the weaknesses of another (Merriam, 2009). The use of different data sources permits the researcher to present a more credible conclusion, strengthening the findings through the perspectives provided. Seeking the truth is not the objective and it is possible to complement findings by adding new insights (Merriam, 2009). The line of inquiry in this study was to gain an understanding of the participants' perceptions and an awareness of the impact of educational changes. However, reliability is often a challenge in a social science study because of the variables associated with changing human behaviours.

External validity deals with the generalisability of the results and is concerned with the findings of one study being applied to other situations. It is through the accurate examination and portrayal of the evidence collected that the overall quality of the case is augmented. The possibility of generalising from a single case can be viewed as a limitation, but rich thick description enables readers to determine how closely their situations match the research situations (Creswell, 2007). Thus, the validity issue evaluates how defensible the research is to the communities for whom the research is produced (Schwandt, 2001).

4.10 Ethical Issues

This research was guided by ethical principles that contributed to the trustworthiness of the research (Silverman, 2005). As previously mentioned, the researcher was involved with the participants on a professional basis. Therefore, it was important to ensure that all ethical considerations were adhered to and followed so that a high ethical standard was maintained

(Lincoln & Guba, 2000). Prior to any engagement with the data gathering instruments the participants were assured of the safeguards of the study. No harm came to the participants and they were informed of data publication, results and conclusions. The researcher did not judge or evaluate the participants in any way and pseudonyms ensured anonymity. Coding using chronological sequences was established to sort and align the interview data, and the researcher was careful to ensure that no identifying codes could be linked to the participants (Saldana, 2009). A copy of the letter to participants reflecting these ethical considerations is located in Appendix B and the Consent Form for participants is located in Appendix C.

Before data gathering commenced, the aims of the study were explained to the authorities and the research timetable and the proposed data-gathering techniques were presented. Professional standards relating to the collection, storage and dissemination of findings were considered and followed (Merriam, 2009). Storage for the information is in accordance with Diocesan and Australian Catholic University ethics documentation stipulations. A copy of the letter to the Director of the Diocese seeking permission to conduct the study is located in Appendix A, and the Ethics Clearance from the Australian Catholic University is located in Appendix D.

All data are on electronic files and in printed copy, and stored as outlined on the ethics approval document. After analysis, surveys, survey data, interview recordings, researcher-generated documents and transcribed and coded interview data were filed. The lists of conceptual labelling and the resultant dimensions generated were stored separately from the data (Denzin & Lincoln, 2008; Lincoln & Guba, 2000). If at any time there is a need to address any ethical dilemmas arising from the study, all collected data, including transcripts, notes, surveys and documentation, are securely protected and accessible. In summary, all considerations were taken into account to ensure that any ethical dilemmas that could surround the relationships between the researcher and the participants, the data collections and the distribution of the findings were addressed.

4.11 Conclusion: The Design Summary

The purpose of this chapter was to justify and describe the research design adopted by the researcher to investigate and explore the way teachers negotiate mandated curriculum changes in one Catholic primary school in Queensland, Australia. The school was involved in a number of significant mandated curriculum changes between 1999 and 2009. Consequently, the experiences of teachers in the study provided the opportunity for the researcher to explore the way these changes were negotiated and implemented. In conclusion, Table 12 provides an overview of the timeline for the research, and outlines the stages of the data collections and data analysis for the research process.

Table 12

Date	Timeline	Data collection	Data analysis
January 2006 to December 2006	Identify relevance, problem and purpose of the study. Complete Literature Review and develop research questions.	Dura concenten	Duta analysis
January 2007 to December 2007	Establish a research design.		
September 2007 to February 2008	Connect with a supervisor for the remainder of the study.		
March to September 2008	Complete the proposal seminar and receive approval.		
October	Ethics Clearance granted		

Overview of the Research

Date	Timeline	Data collection	Data analysis
2008	(Oct 2008 to June 2009) from ACU. Ethical Approval. Application to Catholic Education Office, Diocese of Toowoomba. Obtain approval from participants.		
October 2008	Preparation of the survey. Trialling and refining the draft survey.	Twenty participants completed the survey at a staff meeting. The survey collected data on the OBE curriculum change.	Data analysis begins. Quantitative data analysis of the survey data was completed using IBM SPSS: Version 16. Questions for the interviews were designed to probe issues that were highlighted as areas of concern in the survey.
November 2008 to June 2009	Semi-structured interview prompts were developed and a trial interview conducted with one non-participant.	Semi-structured interviews commence.	Data analysis begin with the transcript of the first interview. Topics, concepts, and tentative theme emerged.
July 2009 to November 2009	Transcripts of interviews completed.		The data are analysed using the constant comparative method. Themes and concepts are identified to develop the case summaries (Iteration 1)
September 2010 to May 2011			Within-case analysis results in the writing of case summary narratives for the 13 teacher participants. A cross-analysis of these case

Date	Timeline	Data collection	Data analysis
			summaries results in the findings of the research. Another level of analysis is undertaken to build theory from the case study research. Interrogation of the data occurs through the ongoing use of the constant comparative method and replication logic, iterative tabulation of evidence for each construct, overlapping data collection and theoretical sampling.
June 2011 to December 2011	Development of discussion, findings, conclusions and recommendations chapters.		Findings are discussed and data are aligned with the relevant empirical literature. The final analysis provides the conclusions and recommendations of the study.
January 2012 to February	Preparation of the thesis for submission.		

Having explained the design of the research for the study, the following chapter undertakes an analysis of the data of the survey, the interviews and the researcher-generated documents. Analyses of these data are undertaken at two levels, and the researcher refers to these as Iteration 1 and Iteration 2. The next chapter focuses on an explanation of Iteration 1 and culminates in providing the findings of the study that were generated through this first level of data analysis.

CHAPTER 5: ANALYSIS OF THE DATA: ITERATION 1

5.1 Introduction

This research study explores how teachers negotiate mandated curriculum changes in a particular Catholic school in Queensland, Australia between the years 1999 to 2009. The research is a qualitative study within the epistemology of constructionism, the basis of which is that truth is constructed, rather than revealed. The questions for the study emerged from the literature review presented in Chapter Three, and the methodology of case study was chosen by the researcher to investigate the research problem and fulfil the purpose outlined for the research. The data collection methods were a survey, semi-structured interviews and researcher-generated documents. The data are analysed in this chapter, as outlined below.

		Analysis of the Data: Iteration 1
Ç		ý
	5.2	Quantitative Data Analysis: The Survey
	5.3	Qualitative Data Analysis: The Interviews
	5.4	Qualitative Data Analysis: Researcher-generated documents
	5.5	Iteration One: Themes and Aspects of the Study
	5.6	Case Summary Narrative: Teacher 8 (T8), pseudonym Al
	5.7	Case Summary Narrative: Specialist 4 (S4), pseudonym Jo

To situate the data collection and the analyses of the data, a short summary of the context of the study is presented. In 1999, a curriculum change to OBE was mandated by the Catholic system in Queensland, Australia, and negotiation of the change occurred in the research school between 2000 and 2009. Other education systems focused on different approaches or maintained the status quo of curriculum delivery in their schools. The OBE philosophy of teachers as facilitators of learning and students as learners on individual journeys challenged the planning, teaching, assessing and reporting processes of many of the teachers at the research site, as most had previously negotiated curriculum through a traditional, objective based method.

To introduce the change, the Director of the Catholic Diocese of the research study invited schools to nominate to be a pilot school in a *Curriculum 2000* initiative. The research school accepted the offer to become a pilot school. Four possible models were made available for managing the curriculum change, and the research school chose one of the four to trial (Middleton, 2000). Towards the end of the trial in 2000, a report was submitted about the strengths and possible challenges of the model so that the other school communities in the Diocese could make an informed choice about the most suitable approach for their context. The report was published at system level for the reference of schools in November 2000.

The research school nominated to pilot the Stage-Based Integrated Model for the OBE curriculum change (Middleton, 2000). Using this model, teachers redesigned planning approaches to accommodate the two-year cycles of learning in the OBE syllabi. Classes were restructured into stages from Year 2 to Year 7, resulting in three stages of mixed year levels for learning. Between 1999 and 2009, teaching and learning in the research school was underpinned by the OBE curriculum change, and six cycles of learning were completed during this time. In 2008 and 2009, the Essential Learnings and Standards (ELS) curriculum change was introduced. All planning documents were audited to reflect the ELS (QSA, 2008). The introduction of the ELS was expected to address the perceived problems of the vagueness and lack of assessment rigour of the OBE curriculum.

Overall, teachers in the study negotiated and implemented up to 16 mandated curriculum changes between 1999 and 2009, as shown in the Table 2 timeline of the mandated curriculum changes in the research school. Initially, the researcher focused on the OBE change to gather data in the survey, primarily
because all teacher participants had negotiated this change in some way. Analysis of the survey data is now presented.

5.2 Quantitative Data Analysis: The Survey

As stated in the previous chapter, the survey was paper-based, with 20 teacher participants completing it during a staff meeting at the research school in October 2008. All surveys were placed in a sealed box to maintain confidentiality. A five-point Likert scale (Likert, 1932) with responses of strongly disagree, disagree, neither or not sure; agree and strongly agree was used on the multiple-choice component of the survey. The four sections of the survey were compiled under the headings The Change to the Mandated Change of the OBE Approach (7 items); Interpreting the Mandated OBE Approach (6 items): Planning, Teaching, Assessing and Reporting to the Mandated Change of OBE (10 items) and a Personal Reflection on mandated change (6 items). A copy of the survey is located in Appendix E.

Teachers provided demographic data including gender; age; years teaching (whole career and this school), and years (if any) in a leadership position. Once collected, the first task was to allocate a code to each survey to ensure anonymity of participants. Using the code, the data were entered into computer software for analysis, namely, IBM SPSS: Version 16 (IBM SPSS, 2008). Descriptive statistics were calculated to ascertain the percentage frequency for each item. These data assisted the researcher to develop a broad understanding of the perceptions of teachers implementing change, and assisted in compiling the questions about negotiating mandated curriculum changes for the semi-structured interview questions.

At the time of the study, seven of the 20 teachers who had completed the survey had experienced the OBE change in some way at the research school, and seven had experienced the change at other Catholic schools in the Diocese. Out of the remaining six, three were recent university graduates who had studied the OBE approach during their pre-service training, and three had

different experiences of what they considered to be an OBE approach in other Australian states. Consequently, the data gathered offered a wide range of teacher perceptions concerning the negotiation and implementation of the OBE mandated curriculum change. Following are the analyses of the sets of data from the survey.

5.2.1 Survey Results

The first part of the survey requested the participants to supply their demographic data. Analysis of this data showed that the majority of teachers at the school were female, 75% had more than six years' experience and 65% were older than 41 years. Generally, the staff consisted of experienced teachers. The data indicated that 40% of the participants had been at the school for six years or more and had worked together to implement the majority of the mandated curriculum changes since 2003.

The survey was divided into four sections, and each section focused on particular aspects of the OBE curriculum change. The first section dealt with the principles of the change to OBE, the second asked teachers to consider how they interpreted the change, the third focused on planning, teaching, assessing and reporting to the OBE change and the fourth section was a personal reflection on dealing with the change. The following tables provide the percentage frequency of responses for each of the sections in the survey.

Table 13

	Strongly Disagree	Disagree	Neither Not Sure	Agree	Strongly Agree
The change to the OBE approach					
 The move to the outcomes approach to education 		45	10	45	

Percentage Frequency of Responses for Mandated Change: OBE

		Strongly Disagree	Disagree	Neither Not Sure	Agree	Strongly Agree
	effectively meets the demands of the 21 st century.					
2.	The change to an outcomes approach has addressed the inequalities in education.	5	50	10	35	
3.	The outcome syllabuses (QSA & RE) reflect the work of the American W. G. Spady.			90	10	
4.	Spady's 4 principles of planning (clarity of focus, designing down, high expectation, expanded opportunity) must be used to successfully implement the outcomes approach.			80	20	
5.	A variety of teaching methodologies should be used to complement the outcomes approach.			35	65	
6.	Australia was wrong to adopt the change to an outcomes approach.	35		25	30	10

The data in Section One reveals that many of the teachers perceived they had a modest understanding of the mandated change (80% were not sure of the four principles of planning and 35% were not sure of the teaching methods that the change promoted). The perceptions of the group were divided about the choice to adopt the change (35% disagreed, 40% agreed and 25% were unsure of the suitability of the change) and there was a spread of opinion about the capacity of the model to address the needs of students (55% disagreed and 35% agreed). Overall, the frequency responses indicated that teachers in the research school were not supportive of the OBE curriculum changes. Thus, it was important to find out more about the issues surrounding the understandings of teachers about implementing the OBE mandated curriculum change and gauge teachers' perceptions more clearly.

Table 14

	Strongly Disagree	Disagree	Neither/Not Sure	Agree	Strongly Agree
Interpreting the OBE approach 1. Teachers have common understandings in their interpretations of the syllabuses.	25	65		10	
2. The QSA syllabuses clearly aligned planning, teaching, assessing and reporting.		40	15	45	
3. The KLA outcomes (strands, levels, core & discretionary outcomes) were well explained and easily	5	50	10	35	

Percentage Frequency of Responses for Interpreting Mandated Change: OBE

		Strongly Disagree	Disagree	Neither/Not Sure	Agree	Strongly Agree
	understood by teachers.					
4.	It is a simple process to plan to the KLA syllabus levels.		55	10	35	
5.	Teachers engaged in adequate professional development to enable them to interpret and adapt to the changes associated with outcomes.		75	10	15	
6.	Teachers have difficulty explaining and reporting outcomes to parents.	5	25	10	45	15

The percentage frequency of responses for interpreting the OBE curriculum change reveals a degree of dissension about the lack of direction given to teachers and a strong perception that teachers did not have common understandings about how to interpret the OBE syllabus documents (90%). There was a strong perception that the professional development received by teachers was not helpful and only 15% of teachers were of the opinion that the professional development they were offered enabled them to interpret and adapt to the changes associated with the OBE approach. Planning to implement the change was difficult for over 55% of the respondents. Reporting to parents was also a problem and the alignment of planning, assessing and reporting was unclear for 60% of the participants. Consequently, the ability to interpret the OBE approach was not perceived very favourably by teachers in

the research school and this indicated there was a need to find out more about these negative perceptions.

Table 15

Percentage Frequency of Responses for Planning, Teaching, Assessing, Reporting to Mandated Change: OBE

		Strongly Disagree	Disagree	Neither/ Not Sure	Agree	Strongly Agree
as re	anning, teaching, sessing and porting to OBE The change to outcomes improved the planning of teaching and learning experiences.	5	35	20	40	
2.	An integrated approach to planning is the most effective way to plan to outcomes.	5	15		55	25
3.	It is difficult to cover all the outcomes in all the syllabuses.	5	10		35	50
4.	Unless assessment informs teaching and learning it is pointless.	5	5		55	35
5.	The "achieved" and "not achieved" approach to measure student performance is flawed.				60	40

		Strongly Disagree	Disagree	Neither/ Not Sure	Agree	Strongly Agree
6.	Consistency of teacher judgment of student work is difficult to reach.		20		45	35
7.	Teaching in a Catholic school influences a teacher's understanding of OBE.		40	45	15	
8.	The outcomes approach nurtures the sacredness of the human person.		25	50	25	
9.	Schools provide a learning environment that develops a particular ethos independent of OBE.	5	5	20	50	20

The percentage frequency for Planning, Teaching, Assessing and Reporting to OBE indicates that teachers found it difficult to implement the syllabus (85%) and set standards to measure student achievement (100%). The majority of the teachers (80%) perceive this as a complex task. This form of mandated curriculum change was not seen as the answer to improving academic standards by over half of the teachers in the study (65%). Consequently, these data concerning the effect of curriculum changes on teacher practices required further exploration.

Teachers in the survey indicate that they did not connect the ethos of the school to their teaching and learning practices (70%). Forty-five per cent of teachers are not sure about what the ethos of the research school reflects, and 40% do not think the religious identity of the school influences the way they deliver the curriculum. Consequently, the perception of teachers on the way the ethos of the research school influenced the implementation of mandated curriculum changes was an area for further development.

Table 16

Percentage Frequency of Response for Personal Reflections about Mandated Change: OBE

	Strongly Disagree	Disagree	Neither/Not Sure	Agree	Strongly Agree
Personal Reflection					
 I understand the uniqueness of each of the nine key learning areas. 		10	5	70	15
2. I understand the need to effectively develop learning experiences that incorporate life- long learner attributes, content, knowledge and learner centred approaches				65	35
3. I have competently managed the impact of change at system and/or school and/or classroom level		10	25	50	15

		Strongly Disagree	Disagree	Neither/Not Sure	Agree	Strongly Agree
	to negotiate the outcomes approach.					
4.	I have a clear understanding of how to align planning, teaching, assessing and reporting processes to outcomes.		30	20	40	10
5.	I believe the outcomes approach narrows the curriculum, reducing its richness.		30	10	40	20
6.	I believe the features of a Catholic learning environment influence the implementation of an outcomes approach.		15	35	50	

The Personal Reflection section of the survey encourages teachers to reflect on mandated curriculum change. It shows that all the participants perceive they had engaged in some way with the OBE syllabi changes (100%), and the perceptions of the majority are that they understood the reform well enough to implement it (85%). Most teachers felt that they had adequately managed the change (65%), but there was an even 50% split of opinion on the influence of the particular culture of the learning environment on curriculum delivery. In summary, these data indicate that there is a disconnect between the philosophy that underpinned the mandated curriculum change of OBE and the pedagogical philosophies of teachers. These data indicate to the researcher that more needed to be known about the following:

- 1. Issues surrounding the understandings of teachers about mandated curriculum changes.
- Issues surrounding the way teachers manage curriculum change initiatives.
- 3. Issues surrounding the planning, assessing and reporting processes associated with curriculum changes.
- 4. Issues surrounding the effect of curriculum change on teacher practices.
- 5. Issues surrounding the influence of the culture of the learning environment of the research school on curriculum change.

Consequently, the analysis of the survey data provides the researcher with issues to probe in the semi-structured interviews. Teacher perceptions are identified in the percentage frequencies of the quantitative data, and the issues that emerged from the survey data provide a guideline for the construction of questions to further develop the line of inquiry for the study.

5.3 Qualitative Data Analysis: The Semi-structured Interviews

The participants invited to be interviewed by the researcher had completed the survey. This purposive selection included eight classroom teachers (one from each year level within the primary school) and five specialist teachers. The coding chosen to de-identify each participant was T for Teacher and S for Specialist Teacher. Codes for the teachers ranged from T1 to T8 and for Specialist teachers the codes went from S1 to S5.

Twelve of the selected participants were female, and one was male, which is reflective of the imbalance of gender in the teaching profession in primary

schools. Nine of these teachers had completed their tertiary studies at the same University, and the other four were from interstate or intrastate. Basic qualifications included Diplomas and Bachelors of Teaching. Six had undertaken post-graduate studies in their areas of interest and held either Graduate Diplomas or Masters. Of the 13 teachers, two had been teaching for less than five years and the rest had been teaching between 10 years and 35 years.

The interview began with a demographic snapshot of the teacher, and his/her teaching history. It took the six months between November 2008 and June 2009 for the researcher to meet with all the teacher participants and complete the interviews for the study. A copy of the line of inquiry that was followed in the interview is located in Appendix F and the timeline for the analysis of the retrospective interview data of the study is presented in Table 17.

Table 17

Interview	Timeline an	d Process
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Timeline	Interview Process
October, 2008	The interview questions were developed, taking into consideration the information in the survey.
November 2008	The interview was conducted with a non-participant of the study to trial the line of questioning developed.
December 2008 to June 2009	Interviews were conducted. The researcher had unlimited access to the research school and was able to arrange and conduct interviews with teachers at the time of their choice.
July 2009 to September 2009	Interviews were fully transcribed.
October, 2009 to February 2010	Coding of the interview transcripts distilled the data and identified themes and concepts. The constant comparative method was used.

In summary, the questions for the interviews sought to probe the issues that were raised in the survey data as areas for further exploration. This included the perceptions of teachers in their understanding and management of curriculum changes, approaches to planning, assessing and reporting, and the influence of the culture of a school that operated in the Catholic tradition. The purpose of the interview questions was to gather data to come to an understanding of the three sub-questions of the literature review. To show the line of questioning followed during an interview, a copy of one transcribed interview is located in Appendix G, and a broad review of the researcher's approach to gathering data for each sub-question follows.

To gather data to explore the first sub-question of the literature review, the participants were asked to speak to their experiences of mandated curriculum changes between 1999 and 2009, beginning with a discussion about the OBE change. Discussion about involvement with any curriculum changes at the research school and any other school was encouraged. The focus of the questioning was probing teacher understandings and management of change and change processes. This sought to answer sub-question 1, which was:

Sub-question 1

How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

The data collection for the second sub-question involved a discussion on the perceptions teachers had about implementing mandated curriculum changes. There was a focus on planning, assessing and reporting to mandated changes and conversation about the management of change at school was encouraged. This included any re-structuring or re-culturing initiatives. Discussion included the professional development support offered to help teachers implement the changes and the influences and impact of changes on teachers and their classroom practices. The questioning was broad to ensure teachers had every opportunity to speak about any mandated curriculum

changes they had negotiated. This sought to answer sub-question 2, which was:

Sub-question 2

How do teachers respond to the negotiation of mandated curriculum changes?

The interview questions to obtain data for the third sub-question focused on what teachers understood about implementing mandated changes within school cultures and learning environments. Because the study was undertaken in a school that operated within a particular religious tradition, namely Catholic Education, aspects of this question encouraged conversation about the religious life of the research school and the traditions, ethos, values and beliefs that contributed to the Catholic Identity of a school. Conversation centred on how this influenced the negotiation of the curriculum of the school. This sought to answer sub-question 3, which was:

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

The qualitative data of the interviews were analysed using the constant comparative method (Miles & Huberman, 1994; Wellington, 2000). As explained in the previous chapter, the constant comparative method is a simultaneous and inductive process of breaking down, comparing, conceptualising and categorising the raw data of the interviews through coding processes. This resulted in the emergence of themes and concepts, which reflected the perspectives of teachers about mandated curriculum changes.

5.4 Qualitative Data Analysis: Researcher-generated documents

An analysis of the data of the researcher-generated documents and the interview data was conducted. This approach was simultaneous and overlapping. Documents were compiled from observation and analysis of the interview data and the data generated by the researcher (refer to Table 18). These data were records of the curriculum changes undertaken at the research site between 1999 and 2007. Parallel analysis of these data contributed to the formulation of the themes and concepts of the research and the rich description of the case study. These documents encompassed a "first-person narrative that describes an individual's actions, experiences and beliefs" (Bogdan & Bilken, 2007, p.133).

The researcher-generated documents of reflective journaling compiled by the researcher in 2008 and 2009 were field-notes and observations which enabled deep interrogation of the interview data around the approaches of teachers to change, and offered an avenue of comparison with the historical school-based records of change at the research site. The analyses compared and interrogated teaching approaches, assumptions and philosophies. In this way, the researcher was able to identify emerging patterns of the way teachers negotiated mandated curriculum changes.

As previously explained, researcher-generated documents were compiled in 2008 and 2009 for pairs and groups of teachers, namely the Early Years (Prep and Year 1), Junior Years (Year 2 and Year 3), Middle Years (Year 4 and Year 5) and Senior Years (Year 6 and Year 7). More documents were generated for the Preparatory to Year 3 group and Year 4 to Year 7 group, as well as the specialist teachers group in the study. Further documents were generated for teachers according to age to compare the curriculum approaches of the 20 years to 30 years old group, the 31 years to 40 years, the 41 years to 50 years and the 51 years to 60 years. Analyses of the data explored years of teaching experience and the qualifications of teachers, as well as the different experiences of participants. These analyses of data

contributed to the process of building theory for this case study research. Examples of the different types of data–based and school-based researchergenerated documents are listed in Table 18, and located in Appendix I.

Table 18

Document Collections

Time-line	Document produced
October 2008 Survey Data Appendix 1: Example 1a	Survey Data: classification and connection of data
November 2008 to August 2009 Topic Data Appendix H	<i>Topic Data:</i> A table of topics was distilled from the data. Topics that were identified more than five times in the data were researched.
November 2008 to April 2009 Topic Data Appendix I Example 1b, 1c, 1d, 1e	<i>Topic Data:</i> As each interview was completed, a process of reflecting on the experiences of teachers under the topics was undertaken.
November 2008 to April 2009 Reflective Journaling Data Appendix I Example 2	<i>Reflective journaling</i> on assumptions of teachers and the empirical literature. Comparisons of the different perspectives of teachers and the many views they had about change issues and concerns. A copy of the reflective journaling is located in Appendix H.
April 2009 to December 2009 Group Data Appendix I Example 3	<i>Pairs Data:</i> Classroom teachers were paired according to the stages of classroom structure in the school i.e. Prep/Yr. 1; Yr.2/3; Yr. 4/5; Yr. 6/7. From the data, reflections on the similar and different experiences and responses of the teachers were compiled.
	<i>Group Data:</i> Teachers were grouped according to role, namely, the Specialist group; the Prep to Yr. 3 group; the Yr. 4 to Yr. 7 group. The comments of teachers were collated to look at the similarities and differences in the patterns of thinking and approaches.

Time-line	Document produced
September 2009 to January 2010 Teacher Data	Journaling was completed to compare the demographics of teachers, teaching experiences, ages, qualifications and pre-service training to compare the theoretical and philosophical assumptions that underpinned the teaching approaches of the participants of the study to see how this could impact on the way curriculum change was approached.
1999- 2007 School-based Data	School-based Data: This data had been generated by the researcher and was a record of the curriculum changes undertaken by teachers in the research school. It was historical data and observation data (field-notes) that contributed to <i>the story</i> of curriculum change.

5.5 Iteration 1: Themes and Aspects of the Study

The process of distilling the data to identify topics, themes and related aspects was referred to as Iteration 1 by the researcher. Iteration 1 began with an analysis of the interview data to identify the topics discussed by the participants (located in Appendix G). Through the use of the constant comparative method, the themes and aspects of the study emerged from the topics that teachers had identified in their discussions about negotiating mandated curriculum changes. Analysis of these topics resulted in the emergence of the four themes of the study, namely, Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. Identifying the aspects enabled the researcher to elaborate on and develop the themes throughout the study.

The inductive approach of Iteration 1 is the first level of analysis for the study, and a visual representation of the process is provided in Figure 10.



Figure 10. Iteration 1: the first level of data analysis.

The aspects emerged from the constructs of the themes and they guided the data analyses. The underlying purpose of the data analysis was to answer the questions of the study. Consequently, the four themes and their aspects were aligned with the sub-questions of the study. The importance of the themes and aspects is stressed, as they are used as organisers for the ensuring discussions of the case summaries towards the end of this chapter and are the framework for the discussions of the findings of the study in Chapter

Seven. The four themes, their underlying aspects, and their alignment with the questions of the study are presented in Figures 11, 12, 13 and 14.



Figure 11. Aspects of the theme: capacity to change.

Sub-question 1

How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?



Figure 12. Aspects of the theme: teacher capital.

Sub-question 2

How do teachers respond to the negotiation of mandated curriculum changes?



Figure 13. Aspects of the theme: learning together.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?



Figure 14. Aspects of the theme: shaping culture.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

Using the four themes and their underlying aspects as the organisers for the within-case analyses, the researcher formulated the discussions for the case summary narratives from the interview data and wrote a case summary for the

13 participants in the study. All case summary narratives sought to illuminate the perceptions of the participants, as well as provide the researcher with answers to the questions of the study. This process is the preliminary step to the process of building theory from case study, as it enables the researcher to gain familiarity with the data. Two examples of the development of the case summary narratives are provided, one for Teacher 8 (T8), pseudonym Al, and one for Specialist 4 (S4) pseudonym Jo.

The reason for the choice of these two voices to represent the voices of teachers in the study was their experiences of change in different school cultures, the difference in the number of years they had been teaching and the diversity in their different areas of teaching in the research school.

5.6 Case Summary: Teacher 8 (T8), pseudonym Al

Al was a university graduate with teaching experiences of multi-age and stage-based classes in rural and regional Catholic schools.

5.6.1 Capacity to Change

Al engaged in the implementation of the mandated curriculum changes of OBE, ELS, Religious Education, Inclusive Education, the DER and government accountability agendas. Although Al had been introduced to the OBE change at university, she did not remember studying the philosophy of the approach or examining the work of Spady. However, "you don't always take notice of things you should", and she admitted that it may have been part of her course, but she had not connected it to her teaching.

Having graduated from university at the turn of the century, AI had only ever experienced teaching to the OBE curriculum. The schools she relocated to were involved in implementing the mandate in some way. Her first experience of working with teachers involved in curriculum change was a positive one, and the attitude of these teachers to change contributed to her positive approach and her Capacity to Change. From what I picked up, they felt comfortable with it. They thought it would align things and make it easier making them integrated. They were happy to take it on. No real problems. They were fairly positive.

When AI relocated to another school, she saw reluctance in the teaching body towards change. This affected the capacity of the group to change. There was some resistance in the school, and this restricted her capacity to move forward with the change. She commented on the negativity she observed and indicated this could have been because there appeared to be a lack of understanding from some teachers about how to manage the change.

There was a big difference of attitude and I think it came more from teachers who had been there a long time teaching the one thing. They were worried about change and didn't understand how to do it properly.

These data demonstrates the influence of the attitudes of colleagues on the capacity of AI to engage with change, and highlights the confusion that can exist for teachers confronted with mandated curriculum changes.

5.6.2 Teacher Capital

Al experienced a number of different planning and delivery approaches in her schools of employment. She had planned integrated learning programs using English as a host area, and she had planned aggregated programs. The alignment of planning "challenged" her and she commented on her lack of expertise and her confusion in preparing school-based documents for system accreditation in her first years of teaching. She indicated that she felt she did not have the expertise or understanding to do it. In planning matters, the feedback she received from different system personal was inconsistent. It frustrated her and she struggled to "make sense" of what she was expected to do. Al thought there would be much more time for her to grow and develop her teaching practices and skills to meet the needs of her students if planning and assessing approaches were more "prescriptive".

Al described herself as an "Outcomes teacher" and believed her teaching approaches were influenced by the mandate. She believed her teaching practices had become more effective and improved over the years and commented that she endeavoured to "stay abreast" of change. She thought her teaching practices reflected the philosophy of the OBE, because she focused on the individual learning journey of the student (Spady, 1994) and attempted to meet the needs of her students. Her current involvement in the auditing of her OBE teaching plans to align with the content of the ELS was not causing her "too many problems". Al was optimistic about changes and open to them. This data demonstrates the engagement of Al with change, and highlights how change promoted her Teacher Capital.

Al thought the theory of change did not always happen in her practices. The OBE expectation to plan before and after learning levels to meet the needs of individual students was "too hard" and "time consuming". Working with students with learning difficulties and disabilities required program modification to meet accountability requirements and often these students were unable to meet stipulated curriculum outcomes, so T8 "ignored" the planning recommendations. This data demonstrates the way mandated curriculum changes can be manipulated, ignored or modified by a teacher to suit the needs of the student.

Assessment was a "grey area" for AI and she had difficulty equating the two distinctly different paradigms of government testing and school-based testing. Having prepared students for national tests, she was not supportive of the agenda. She thought it put unnecessary pressure on students, and parents put too much emphasis on the results.

We spend all this time, we adapt assessment tasks, we adapt the way we teach children, we cover outcomes and then things come out in tests that children don't comprehend or that you can't modify for them, so you get a result that makes them feel like they are failing. "Student A" works hard, he'd probably achieve 99% of that test if you gave him a week to do it and explained what the question meant. The kids think they have to get so much written in twenty-five minutes and all they've learnt goes out the window because they try and rush it through. If they are poor in reading, then the maths questions are going to be difficult, I hate the Year 3, 5, 7 tests with a passion.

Al did not believe the tests were a true indication of the learning of her students. She invested time in building the self-esteem of students, but government tests labelled some as academic failures when they did not do well. This frustrated and saddened Al, and eroded her confidence and her Teacher Capital. She indicated that her focus was the learning journey of each student and she built on student success, but her moral purpose was thwarted by the changes and demands of government accountability measures. These data demonstrate the confusion and frustration experienced by Al as she attempted to cope with conflicting educational paradigms.

5.6.3 Learning Together

Al accepted curriculum changes, but she thought that there was a need for teachers to have a common understanding about how to implement them. She felt there had not been enough prescriptive information provided to her about the curriculum changes she had experienced, and she felt she had been left to interpret many of the nuances of change herself. Al learnt much of what she knew through informal social communication with other teachers, and she admitted that it was possible that what they shared was not always wellgrounded in the intent of curriculum changes. This was reinforced by her experiences at different schools. Al observed that some teachers had trialled different approaches to curriculum changes "without understanding them". These data demonstrate how different interpretations of change may occur.

Al highlighted the need for modelling and reviewing what was expected in the curriculum change process, and highlighted her need for ongoing support. Al received introductory support from outside consultants and system education officers, however, she saw little value in this as she did not receive any feedback after the first session. She was told "what to do, but not how to do it".

Al felt that she learnt through "trial and error" and she thought this was how most teachers came to understand curriculum changes. This data demonstrates the importance of feedback in the adult learning process.

Al noted that there was an opportunity for teachers to learn from peers and colleagues during the inter-school Consistency of Teacher Judgement Day held each October. However, Al thought the benefit of the day was lost because there was no common approach or understanding of what teachers were asked to do. Although information was dispersed about the tasks that needed to be completed, when Al arrived at the day, there were many different interpretations of what was expected, and a broad range of what was presented.

I don't think anyone wants to say to another teacher that what they have done doesn't justify the outcomes, because no-one wants to put others in that position. An example of that was the maths investigation last year. We didn't feel one met the outcome, but others thought it was brilliant, and neither of us wanted to say what we thought. I don't think it was what we were looking for, but you didn't want to make someone feel inadequate. So I don't know if there is any benefit at all.

Because AI either did not wish to be seen to criticise her peers or did not wish to be criticised herself, no professional conversation was held and little professional learning eventuated. She thought professional etiquette prevented her from discussing what she perceived as shortcomings of the work of her peers. It was difficult to engage in professional conversations with a *no blame* approach without a trusting relationship. This data demonstrates the reluctance and lack of confidence that prevents teachers engaging in robust professional discussions.

Al valued the expertise of her colleagues and believed teacher collaboration helped her manage change. She "learnt from others", and thought that the informal mentoring and coaching she received from her colleagues and peers improved her teaching practices. She was aware of the influence of staff, and she noted that if they were not prepared to collaborate in the adapting and adopting of changes, then it was likely the school would not manage change well. This highlights the importance of teacher mentoring in teacher learning.

In retrospect, AI highlighted the influence of colleagues and peers in interpreting curriculum changes. She felt she was left to herself to implement the changes after professional development sessions, and thought that it was possible that changes may have been interpreted incorrectly. It was difficult to engage in professional conversations with colleagues from other schools when they had no common understandings or trusting relationships. The value of teacher mentoring was recognised. Overall, AI thought it was the attitudes of teachers that were one of the greatest influences on the success of change.

5.6.4 Shaping Culture

As a teacher in a Catholic school, Al was aware of the influence of the Catholic tradition on the learning environments of schools in the Diocese. She experienced "the difference" during a university practicum in a small, rural Catholic school. It was because of this that she had chosen to work in the Catholic system. The "difference" between the learning environment of a Catholic school and the learning environment of other schools was explained by Al as "the warmth and acceptance" of the people. This demonstrates that Al associated "the difference" in the Catholic learning environment with the behaviours and relationships of the people in the school.

Al thought the curriculum in the research school was taught through Catholic traditions, but she admitted that it was "difficult" to promote Catholic traditions when "you don't necessarily have a class full of Catholics". The changes in family dynamics, the multi-cultural influences and the inclusion of other faiths in the school population were subtly eroding the traditional view of what constituted a Catholic school. Although student participation in Mass celebrations was part of school life, Al wondered about the value of it. "They go to Mass and participate in Mass, but I don't know that they always understand what it means to them in the everyday." This demonstrates that

celebrations of the Catholic tradition may not connect with the day-to-day living of the school community, and highlights the need for evangelisation, which is the purpose of Catholic Education. In the light of such data, the role of the teacher in evangelisation in a Catholic school is brought into question.

Al believed it was important to promote a Catholic culture based on Church teachings. She thought this made "a Catholic school Catholic" and provided students with an opportunity to grow in their faith. Al commented that "school was a place where God was the centre of teaching and learning". The values of the Gospel were reflected in the celebrations of the community and "the way the stories of Jesus were connected to the life experiences of the students".

We teach them to accept others through Jesus' work. It is reflected in how we relate to each other. I think, then, they start to see the connection. I think it is not just taught in a religion unit, it is taught through behaviour. It's taught in everything we do here. Our fundraising, our prayers for families....it's in everything. That's the Gospel Values, that's the culture.

Al reflected a worldview of care and compassion for others and she thought the social justice activities promoted in the school gave this a focus for the students. Encouraging students to believe they had the capacity to make a difference in the world was important. These data demonstrate that Al understood the need to connect the teaching and learning in a Catholic school to the values of the Gospel and the messages of Jesus.

The teaching of Religious Education was part of the Catholic tradition for Al, and she thought it gave the students opportunities to engage with different theologies and new age creation thinking. Al believed that integrating the religious life of the school with the academic learning was a necessary focus in any Catholic school and she indicated that this was how she approached the teaching of the curriculum. Overall, AI described the learning environment of the research school as "different". The difference was reflected in the relationships of the people in the community. She recognised the influence of society on the school and felt that she had a responsibility to integrate the religious life of the school with teaching and learning experiences. Her awareness of her commitment to faith formation within the religious life of the school was reflected in the example and witness she gave to the students in her care. AI believed that her role as a teacher was a ministry that called her to be a witness to Gospel values to students. This data indicates that it is possible for the faith formation of a teacher to contribute to Shaping Culture in a school.

In summary, AI was open to curriculum changes, keen to learn and grow, happy to collaborate and work as part of a team, and aware of her obligation to contribute positively to the delivery of curriculum within the religious life of a school operating from the Catholic tradition. She was aware that she was called to live the story of Jesus in the school.

5.7 Case Summary Narrative: Specialist 4 (S4), pseudonym Jo

Jo graduated in the 1970s, and experienced the teaching of all year levels within a number of systems, including multi-age, composite and year-based approaches. Having moved to a specialist area from classroom teaching, she thought that the scope of her role across the school resulted in her wearing "too many hats" and she felt she was "not doing anything well enough".

5.7.1 Capacity to Change

Jo indicated that in many cases she had relied heavily on the interpretations of her peers and colleagues to negotiate curriculum changes. It was her primary source of finding out "what to do". "Mostly, I learnt from my colleagues, we worked things out and just did it." She did not feel that there had been much support given to schools in the management of change when curriculum reforms were introduced. When Jo moved into her specialist role, she felt that her engagement with the content of curriculum was shaped more by the learning needs of students than by curriculum expectations, and ongoing changes "did not affect her" a great deal. Her focus was working with teachers in implementing basic literacy and numeracy programs, "and that never changes". Jo explained that demands of her area included working with teacher aides, meeting with parents and submitting documentation to validate the receipt of government funding. Her perception was that government legislation and accountability demands for financial support dominated her workload, but the financial support was "getting less and less". This data demonstrates that the Capacity of Jo to Change was linked to the context of her role.

5.7.2 Teacher Capital

Jo indicated that change was challenging for her. As a senior teacher, she was expected to explain curriculum changes to others, but she found this difficult. She tried a variety of strategies to manage curriculum changes in her planning approaches. She re-organised and re-wrote some of her own units, gathered units from other schools, or matched what she had to programs purchased by school leadership. She thought there was "an answer out there that could be given to you" so that her time and energy did not have to go into designing and planning units of work. Rather, she wanted what was to be taught so she could spend her time on preparing how she was going to present this to her students. This data demonstrates the choices teachers make about managing change that and shows how different strategies can be used to adapt to a change.

Jo voiced frustration at the expectation for teachers to be curriculum designers, producing quality documents that required depth of skill and knowledge about sequenced alignment and assessment and for her, planning scope and sequences for the curriculum at school level was "very difficult". Assessment had a tendency to be "hit and miss" because there seemed to be a lack of alignment. She wondered at the effectiveness of her planning to OBE

and she thought that it may have lacked quality because she worried that she did not have the capacity to do what was expected. When she worked with her colleagues on putting together a literacy plan she indicated that "we had no idea what we were doing" and when it was put forward for accreditation, it was "disastrous".

They must be terrible now if we look at them. We got this off this school and that off that school. When we saw the sticky notes on the program we knew we were in trouble. They did accredit it though, but why, when we didn't know what we were doing. There's somebody out there who could have done that for us, just as a job.

The data demonstrates the frustration Jo felt in relation to the planning process.

Jo had wide exposure as a parent and a teacher to the information sharing sessions about the mandated OBE, but she indicated that she had found the change "confusing". She thought that this could be attributed in some way to the fact that "the people trying to explain it hadn't worked with the changes". Consequently, it was difficult to develop Teacher Capital in schools when the direction of the curriculum changes lacked clarity at system level. Regardless of the difficulties she had experienced, S4 did not think that the mandated curriculum changes were a "tragedy".

The changes haven't failed. They probably could have been fine-tuned a little better. With outcomes, we probably had far too many. They were probably far too waffly and vague. But I still like the whole idea of the change. Maybe they needed to be more specific, concrete, easier to get your head around. But that's what you had and you didn't actually question it, did you?

These data show that Jo was optimistic and open to change, even though she found it difficult.

The greatest upset for Jo with curriculum changes she had experienced was the impact of the government mandated Year 3, 5, 7 tests. She lamented the affect the tests had on the confidence of the students she taught. She spent her time endeavouring to individualise education to meet each child's need, and she believed the testing successfully undid all she believed in. To Jo, the effectiveness of her teaching was reflected in "any success", be it social, academic or behavioural. For Jo, the government expectation that each child would succeed academically was not a reality and it was "like saying that no child will live in poverty".

Overall, Jo made certain choices about how she negotiated mandated curriculum changes. She was frustrated because she felt that there was no clarity of direction given to her about where the changes would take her, so she relied on the interpretations of her peers. She struggled with the conflicting paradigms of government testing agendas and the notion that educating students was an individual learning journey. What she saw as success was not what the government saw as success.

5.7.3 Learning Together

Jo was of the opinion that teachers did not receive enough professional development in planning for mandated curriculum changes. She had been involved in cluster days with other schools, which were a "good learning experience, but not very helpful". Her feeling was that it was only after she had started working with curriculum changes "for a while" that she began to make sense of them. The professional development she received did not seem to help her practices. "It simply gave me the background." She felt much was left to teachers to interpret what they needed to do, and, for her, this was done through the informal social networks of collaboration at school level.

We were all pretty naïve and inexperienced in using it. I think the biggest challenge was getting your head around it. We felt very inadequate but we didn't do it as badly as we probably felt we were doing it. Sometimes it's just better to get in and do it to the best of your ability and then look at it at the end of the day and say yes, we did that well but something else not well.

This data demonstrates that professional development sessions can be of no benefit to some teachers, and they have more confidence in the counsel and advice of each other to make sense of curriculum changes.

Jo spoke of her engagement with the Consistency of Teacher Judgement Day, in which she moderated student work samples to set standards with peers from other schools. "We were not good at it" and "did not know what we were doing". She indicated that she and her colleagues had no common understanding of what was required, and there were different interpretations about how to approach the task. She felt as if she was "clutching at straws" throughout the process and she did not think she had benefited from the opportunity to learn from others. This data demonstrates that there may be an assumption about the competence of teachers to participate in these learning processes. It highlights the importance of ensuring that all those involved in the implementation of curriculum changes are well informed about what is required.

Overall, Jo indicated that she learnt more from social interaction with her colleagues than she did at organised professional development sessions. There was a sense of being lost in how to manage curriculum changes because Jo felt she lacked information and direction about what was expected.

5.7.4 Shaping Culture

The impact of society on the research school was highlighted by Jo and she believed the socio-economic standing of families was having more and more impact on the role of teachers. Some parents had unreal expectations of schools and were at times demanding and intolerant of the fact that the school was a social institution and a "mini-society" which was the meeting place of mixed attitudes and beliefs. Having experienced a number of school cultures in different systems, Jo indicated that she had a "degree of comparison" of different school cultures. She believed that each school culture was unique, but, in particular, she "loved the spirit that you get in a Catholic school". She commented on the importance of the learning environment and the way the research school had a "different feel", which she attributed to the Catholic ethos. University students on practicum had commented to her about this difference. From her perspective as a parent and a teacher, she was convinced that Catholic schools reflected Church tradition and Gospel Values.

I think it's just all connected, isn't it. It's what we believe in. That's where we're getting our beliefs, from the Gospel Values, so I think it does impact really significantly in our schools.

These data demonstrate the connection between the culture of a Catholic school and the Gospel Values.

Jo had a Catholic family background and her memory of growing up within the Catholic tradition was one of "obedience". Explaining that there were always certain ways the Church expected her to behave, she thought some of the church teachings were "wrong", but she "did not dare ever criticise". In her opinion, there was a "lot of hypocrisy" in the past. She thought that today's Catholics made choices about what they believed in and she did not see the "old Catholic ways" in young Catholic teachers. However, she felt they had a spirit that contributed to the Catholic culture and, in their own ways, she thought they were committed to nurturing Catholic values and traditions through personal witness and commitment to the message of the Gospel. For Jo curriculum changes in the research school were delivered in a culture based on respect, integrity and compassion.

I think it comes down to each individual being true to themselves and to their Catholic beliefs. Not every staff member is Catholic, but when you become a staff member you commit to the ethos, so if we're all true to ourselves, then it should certainly nurture an authentic environment. Thus, these data demonstrate the influence of family and Church tradition on the faith formation of the individual.

Jo believed that any curriculum changes in Catholic schools were implemented within the context of evangelisation, because there were so many Non-Catholic students enrolled. She struggled when she had to deal with situations that challenged her beliefs on inclusivity and the dignity of the human person. She commented on a recent dilemma she had dealt with when a parent had wanted a child "expelled".

I felt like saying, "You don't know the wonderful lessons your child would have learnt." People say that child doesn't belong in the school, but they belong in society, and we're part of society. In life, there are all sorts of people and if you don't have them in the school then it's not life. Parents forget about the positives.

This data demonstrates how the values and beliefs of the individual teacher have the capacity to shape the learning environment of the school.

Overall, Jo highlighted the positive attitude of the teacher as a key to successful change. Her faith formation and her behaviours, values and beliefs had been shaped within a Catholic tradition in her family unit. She firmly believed that the "difference" she saw in a Catholic school was the living of the Gospel values by teachers in the school learning environment.

In summary, Jo did not think that mandated curriculum changes affected the work she did with her students, however, she acknowledged that government legislative and accountability measures impacted on her role. She was open to changes and she saw the positive in it. Jo was convinced that Church tradition had an ongoing influence on the Catholic culture and identity of the learning environment of the research school.

5.8 Case Summary Findings

Case summaries similar to the narratives for AI and Jo were compiled for each of the 13 interviews of the study. The narratives were descriptive and they presented the interview data under the themes and aspects of the research. As previously stated, the themes and their aspects aligned with the subquestions of the study. Thus, the findings of the case summaries contributed to exploring the questions of the research. The following findings emerged from Iteration 1, which constituted the process of distilling the data and the compilation of the 13 case summary narratives.

Finding One

Teachers in the research school understood and managed mandated curriculum changes according to their attitude, knowledge and capacity to change.

Finding Two

Teachers in the research school responded to the negotiation of mandated changes according to their personal and professional choices.

Finding Three

The social culture of the school underpinned the professional learning of teachers negotiating curriculum changes.

Finding Four

The faith tradition of the research school had the potential to influence the learning culture, which, in turn, had the potential to influence the way teachers negotiated mandated curriculum changes.

A discussion of these findings is presented in Chapter Seven

5.9 Conclusion

In this chapter, the analysis of the data in Iteration 1 was explained. This included the analysis and interrogation of the survey data, the interview data and the researcher-generated documents through the constant comparative method. Consequently, the themes and aspects of the study emerged. These themes and aspects were the organisers for the case summary narratives of the interviews of the 13 teacher participants.

Because the researcher felt that there was further opportunity to continue the exploration of the data through the themes and their aspects, another level of analysis was undertaken. This is referred to as Iteration 2. This iteration constitutes the process of building theory from case study research. Subsequently, Chapter Six explains the deep analysis of the data that results in theory construction, and the major finding that further illuminates the way teachers negotiate mandated curriculum changes.

CHAPTER 6: ANALYSIS OF THE DATA: ITERATION 2

6.1 Introduction

In the previous chapter, the initial results of the analysis of the data were presented. The themes and aspects that emerged were the result of the interrogation of the data in Iteration 1 of the research. This iterative process was conducted through the constant comparative method (Glaser & Strauss, 1967; Wellington, 2000). The researcher intuitively felt that there was opportunity to continue the interrogation and analysis of the themes to build a theory from the current case study research. The process drew upon tactics from a number of researchers. These tactics include theoretical sampling, theoretical saturation, overlapped coding of data collection and analysis (Glaser & Strauss, 1967) and case study design, replication logic and concern for internal validity (Yin, 1984, 2009). Additional tactics constitute the tools of the tabular display of evidence (Miles & Huberman, 1984) and priori specification of constructs, participant specification, flexible instrumentation and cross-case analysis strategies. Several approaches to the use of literature in the development of a testable hypotheses and theory enables generalisation across settings (Eisenhardt, 1989, Eisenhardt & Graebner, 2007). This process of building theory from case study research constituted a second layer of analysis in the study, and the researcher referred to this as Iteration 2. The structure of the current chapter is shown in the graphic below.

Analysis of the Data: Iteration 2	
Ģ	ý
6.2	Development of the Dimensions
6.3	Development of the Processes
6.4	The Types, Hypothesis and Theory
6.5	The Major Finding of the Study

Figure 15 situates Iteration 2 in the development of the study. This figure was introduced in Chapter One. It begins with the Literature Review (Chapter Two
and Chapter Three) and moves from the Design of the Research (Chapter Four) to the Analysis of the Data: Iteration 1 (Chapter Five). The second level of analysis referred to as Iteration 2 by the researcher, is provided in this chapter.

Chapter 2	and Chapter 3: LAY	ERS OF THE LITER	ATURE REVIEW
	Change Processes	Change Pathways	
Questions of the	e study were developed	d from the review of the ulum change.	e literature surrounding
	Currice	dum change.	
Ø	Chapter 4: DESIG	SN OF THE RESEAR	CH
Epistemole Construction	ogy The	oretical Perspective nteractionism (Interpre	Research
Ş			
0		COLLECTION METH	
Survey	Inte	erviews Re	searcher-generated documents
6			
Ŷ	Chapter 5: DATA A	NALYSIS: ITERATI	ON 1
Theme 1 Capacity to Cha	•		Culture
A Asp	ects for each of the abo	wa thamas amargad in	Itoration 1
		sve themes enlerged i	
<u> </u>	Chapter 6: DATA A	NALYSIS: ITERATIO	ON 2
Dimension	Chapter 6: DATA A Dimension	NALYSIS: ITERATIO	ON 2 Dimension
<u> </u>	Chapter 6: DATA A	NALYSIS: ITERATIO	ON 2
Dimension Interpreting	Chapter 6: DATA A Dimension Adapting (core)	NALYSIS: ITERATIOn Dimension Adopting	ON 2 Dimension Committing
Dimension Interpreting Processes	Chapter 6: DATA A Dimension Adapting (core) Processes	NALYSIS: ITERATIOn Dimension Adopting Processes	ON 2 Dimension Committing Processes
Dimension Interpreting Processes	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating	NALYSIS: ITERATIOn Dimension Adopting Processes	ON 2 Dimension Committing Processes
Dimension Interpreting Processes	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapt	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising er 6: TYPES	ON 2 Dimension Committing Processes
Dimension Interpreting Processes Filtering Auditing	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapt n Keepers Cu	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising or 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming
Dimension Interpreting Processes Filtering Auditing Curriculun	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapter 6	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising er 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming
Dimension Interpreting Processes Filtering Auditing Curriculun	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapter n Keepers Cu Chapter 6 in the study selective	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising of 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming Curriculum Changers dated curriculum
Dimension Interpreting Processes Filtering Auditing Curriculun	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapter n Keepers Cu Chapter 6 in the study selective	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising er 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming Curriculum Changers dated curriculum
Dimension Interpreting Processes Filtering Auditing Curriculun	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapter n Keepers Cu Chapter 6 in the study selective changes, acco	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising of 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming Curriculum Changers dated curriculum
Dimension Interpreting Processes Filtering Auditing Curriculun	Chapter 6: DATA A Dimension Adapting (core) Processes Agreeing Manipulating Chapter on Keepers Cu Chapter 6 in the study selective changes, acco Chapter	NALYSIS: ITERATION Dimension Adopting Processes Accepting Practising er 6: TYPES rriculum Shapers	ON 2 Dimension Committing Processes Transferring Transforming Curriculum Changers dated curriculum

Figure 15. Development of the study.

6.2 Development of the Dimensions

The researcher undertook a deep interrogation of the data of the case summaries through within-case and cross-case analysis. With the continued use of the constant comparative method, another layer of coding organised, explained and verified the data (Glaser & Strauss, 1967; Wellington, 2000). From the themes identified in Iteration 1, a deductive and inductive systematic comparison and refinement of the data occurred in Iteration 2 (Eisenhardt, 1989, Eisenhardt & Graebner, 2007). This layer of interrogation revealed that teachers in the study made choices about engaging with mandated curriculum changes in different ways and with varying levels of commitment. From this deeper level of analysis, dimensions emerged to describe the way teachers negotiated mandated changes. The dimensions were *Interpreting, Adapting, Adapting, Adopting* and *Committing*.

The first dimension to emerge was *Interpreting*. At the beginning of curriculum change, most teachers were concerned with what the changes meant for them. The data indicated that teachers interpreted changes in two ways, either through their own observations or through the explanations of their peers. The second dimension was *Adapting*. It was apparent that the majority of teachers chose to approach curriculum changes in this way. Planning was adapted to reflect curriculum changes, and teachers would purchase pre-planned programs, adapt the curriculum to what they had or adapt what they had to the curriculum. *Adapting* emerged as the core dimension of the study.

Adapting was identified as the core dimension for the reason of its frequency of occurrence in the themes of Capacity to Change, Teacher Capital, Learning Together and Shaping Culture of the research. The core dimension was the primary and favoured approach of teachers as they engaged in the negotiation of mandated curriculum changes. It was apparent from the data that all teachers in the study engaged in *Adapting* behaviours as they made meaning of curriculum changes, gravitating towards the dimension because of the constraints of time and expertise. They often chose to remain in *Adapting* until they were comfortable with curriculum changes and philosophies.

Teachers could move from *Interpreting* to *Adapting* to *Adopting* to *Committing* as they engaged with a particular change, or they operated in different dimensions simultaneously. The data indicated that teachers in the study progressed from shallow and surface level to deep and rigorous connections with curriculum changes. Henceforth, deeper engagement and immersion with the changes depended on the choices teachers made about their understanding, management and response to mandated changes. Figure 16 represents this concept of moving from shallow to deep engagement with curriculum changes.



Figure 16. Shallow to deep engagement with curriculum changes.

As teachers became more comfortable with curriculum changes, the data showed that they moved into the dimension of *Adopting*. This third dimension highlighted deeper engagement with change, and it was the conduit to the *Committing* dimension. *Committing* described an authentic engagement with curriculum change, with a focus on the effectiveness of teaching and learning to improve the outcomes of students. The four dimensions were indicative of

the thought processes, actions and responses of teachers as they negotiated mandated curriculum changes. The following examples of the analysis of the case summary data to identify the processes of engagement shown by teachers in the four themes of the study are provided for AI and Jo.

The way AI and Jo dealt with curriculum changes explains the way the dimensions emerged from the data. The data showed that AI was generally accepting of change and she adapted and adopted it according to the interpretations of her peers, while Jo interpreted change through the influence of her colleagues and her own understandings. Capacity to Change was reflected in the attitudes of both teachers, and the data reflect the *Interpreting* and *Adapting* dimensions.

The Teacher Capital of both AI and Jo was promoted through engagement with change according to their knowledge, understandings and skills. Jo was of the opinion that a prescriptive approach to planning for mandated change would benefit her, and she adapted to change using strategies that reflected this belief. She purchased pre-planned units and "begged and borrowed' learning programs from other sources. AI struggled with planning for curriculum changes and relied on the expertise of her colleagues. Consequently, the development of the Teacher Capital of AI and Jo depended on the depth of their engagement with curriculum changes. The data showed that their engagement reflected the *Interpreting* and *Adapting* dimensions.

In the theme Learning Together, the data of AI and Jo indicated that both teachers came to understand curriculum changes through informal social interaction with colleagues in the safety of the learning environment of the research school. This was their area of greatest confidence. Both were of the opinion that the professional development they received did not meet their needs, and they had some difficulty in engaging in professional conversations about what constituted best practice with peers external to the research school. Jo worried that she did not have enough depth of knowledge about

implementing changes in some cases and AI noted that she was influenced by the interpretations of her peers. Thus, *Interpreting* was the dimension reflected in the data in Learning Together for both teachers.

The theme of Shaping Culture focused on the characteristics of the learning environment of the research school, namely, a school in the Catholic tradition. Al and Jo were both of the opinion that the school reflected a particular identity that was shaped by Catholic ethos. Examples of the dimensions of *Adapting* and *Adopting* were seen in the data through the use of the words "leading by example" (S4) and "witness" (T8). Relationships and pastoral care were identified as integral to the teaching in a Catholic school, and Al was of the opinion that the Catholic faith was connected to the life of the school through the curriculum offered. Working within a Catholic learning environment was the choice of both. Jo reflected the dimension of *Committing* to living the values of the Gospel in the research school in her dealings with students.

Although the researcher used the data from the interviews with Al and Jo as examples, the iterative process of examining the data through the four themes of the research was used to analyse all the data from the interviews of the 13 participants to establish the dimensions of the study. Exploring the dimensions in this way was the first step in building the theory of the research. The next step was the deeper interrogation of the data to identify the underlying processes of the dimensions. Consequently, analysis of the data under the dimensions of *Interpreting, Adapting, Adopting* and *Committing* resulted in the emergence of two processes for each dimension to describe the way teachers engaged with mandated curriculum changes. A copy of the process followed by the researcher to analyse the data to identify the four dimensions is provided for Al and Jo in the researcher-generated document located in Appendix J: Example 1. This document shows how the dimensions emerged from the themes and aspects of Capacity to Change, Teacher Capital, Learning Together and Shaping Culture.

6.3 Development of the Processes

Throughout Iteration 2, the researcher constantly compared theory and data and moved towards a theory. It is through the constant comparison of data and constructs that this occurs, until "a single, well-defined construct" emerges (Eisenhardt, 1989, p. 41). In Iteration 2, the dimensions of *Interpreting, Adapting, Adopting* and *Committing* emerged, and the processes that teachers engaged with under each of the dimensions became apparent. It was possible to identify the way teachers in the study approached mandated curriculum changes from the interview data, according to the perspectives and experiences they discussed. Consequently, the processes that teachers engaged in as they came to understand, manage and respond to mandated curriculum changes emerged through the ongoing refinement of the dimensions. Table 19 presents these processes.

Table 19

	Dimensions	and	Processes
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Dimension	Human Dimension	Processes
Interpreting	Resistance	Filtering and Auditing
Adapting	Compliance	Manipulating and Agreeing
Adopting	Confidence	Accepting and Practising
Committing	Creativity	Transferring and Transforming

With reference to the data of AI and Jo, it can be shown how the processes emerged from the within-case comparisons. In the theme of Capacity to Change, AI engaged in the processes of agreeing, accepting and practising in her approaches when she discussed the way she dealt with curriculum change.

From what I picked up no real problems they were fairly positive, from my point of view anyway. They helped me, so it was good. When I changed schools I saw people reluctant to move forward ... a bit of a different attitude, and I found it very frustrating (AI)

Al agreed with her colleagues and was open to being helped, she was accepting of the norms of change in one school, and she was prepared to practise the change. Consequently, Al exhibited Capacity to Change. Similarly, Jo accepted and practised curriculum changes, even though she did not agree with some of them.

Government testing is like comparing apples with oranges. On one hand we are being pushed to individualise education, meet each child's needs, modify and scaffold everything, and they turn around and test, and it has nothing to do with what you're even teaching in most cases. Just ridiculous, but we have to do it.

Consequently, the data reveals the processes engaged in by AI and Jo as they negotiated and complied with curriculum changes by agreeing (Dimension: *Adapting*), accepting and practising (Dimension: *Adopting*).

The data in Teacher Capital was analysed in a similar way. Al indicated that she engaged in the processes of filtering and auditing curriculum changes through the understanding of her peers. Eventually, she reflected the processes of accepting and practising the change, which promoted her Teacher Capital.

We heard that we were the first school to put units together to be accredited, so we gave it a go, worked together. You know, because that was how it was, so we just did it (Al)

While Jo believed she was open to agreeing with curriculum changes in her classroom role, filtering and auditing her understandings through the interpretations of her peers, she indicated that she did not truly engage with the changes in her specialist role.

Change doesn't affect me a great deal because I'm working on such basic things. For me, the main emphasis is teaching the children to read. When people say to me have they got comprehension, well, you can't be concerned about that until they can actually read.... (Jo)

Consequently, the data reveals that the engagement of AI and Jo reflected the processes of filtering and auditing (Dimension: *Interpreting*), as well as some engagement with the process of agreeing (Dimension: *Adopting*) as they complied with curriculum changes.

The analysis of data for AI and Jo in relation to the theme of Learning Together has similar results in the Teacher Capital dimension. AI relied on filtering and auditing curriculum changes through informal conversation with her peers within the learning environment of the school, as did Jo. Both felt that the professional development they received to promote Learning Together was not helpful, and both engaged in the process of agreeing once they had established mental models of what changes meant for them. Although Jo grounded some of her understanding on her prior knowledge of curriculum change, AI was unable to do this because she had only ever experienced teaching through one model, namely OBE.

We had people come out to help us....there was a big difference in understanding about what was required by them. One felt we were on the right track and another one thought what we did was wrong. We integrated units under the same theme. In reality, we all planned to our level. (Al)

When we were planning school scope and sequences we had no idea. It was all so new. We used to plan at school level and then share with other schools. None of us knew a lot about the new planning...there was a fair bit of collaboration... the more people who can bring information and work together, the better. (Jo)

Consequently, the data show that AI and Jo engaged in the processes of filtering and auditing (Dimension: *Interpreting*) information and relied on the understanding and knowledge of those they worked with to manage change.

In the theme of Shaping Culture, the data showed that the processes AI and Jo engaged with were agreeing, accepting and practising. AI was accepting of the norms of the culture of the religious life of the school, and she agreed with and practised the traditions that contributed to the Catholic identity of the learning environment.

When we teach them to accept others and Jesus' work, it reflects how we relate to each other. I think, then, they start to see the connection....The culture is in what we teach them in the classroom. How it relates to their everyday life. It's not just taught in religion, it's taught in our behaviour. It's taught in everything we do here. (T8)

Jo was convinced that the Catholic tradition influenced the culture of the school, and she engaged in the processes of accepting and practising the aspects of school life that promoted this tradition. There was some indication of the process of transferring the teachings of the Church in the commitment she showed to living the values of the Gospel.

I think culture impacts hugely on the school, very much so.... When you become a staff member you commit to the ethos. We get our beliefs from the Gospel Values, so I think it impacts really significantly. (Jo)

Consequently, the data shows that AI and Jo engaged in the processes of accepting and practising (Dimension: *Adopting*), as well as transferring (Dimension: *Committing*) within the theme of Shaping Culture.

Although Al and Jo were used as examples to ground the emergence of the eight processes under the four dimensions of the study, within-case analyses of the data of all 13 participants was conducted in this way. In summary, the thoughts and actions of the teachers in the dimensions of *Interpreting, Adapting, Adopting* and *Committing* were reflected through the processes of the dimensions. A copy of the depth of analysis of the data to identify the dimensions and processes engaged in by Al and Jo in their negotiation of curriculum change is provided in the researcher-generated document in Appendix J: Example 2.

6.4 The Types, Hypothesis and Theory

From the deep analysis of the four dimensions and the eight processes which described the actions of teachers involved with curriculum changes, three typologies or types of approaches emerged. It was possible to classify teachers in the study within these types, according to the approaches they exhibited as they made their choices about negotiating changes. The three types that emerged were Curriculum Keepers, Curriculum Shapers and Curriculum Changers. The connection of the dimensions and processes to the types is provided in Table 20.

Table 20

Emerging Types

Dimensions	Processes	Types	Key Characteristic
Interpreting	Filtering & Auditing	Curriculum Keepers	Resisted change
Adapting	Manipulating & Agreeing	Curriculum Shapers	Fair engagement with change
Adopting	Accepting & Practising	Curriculum Shapers	Good engagement with change
Committing	Transferring & Transforming	Curriculum Changers	Implemented change

Curriculum Keepers made choices about engaging with curriculum by *Interpreting* changes through the processes of filtering and auditing. Curriculum Shapers made choices about engaging with curriculum by *Adapting* and *Adopting* changes through the processes of manipulating and agreeing, accepting and practising. Curriculum Changers made choices about engaging with curriculum changes by *Committing* through the processes of transferring and transforming. A synthesis of the dimensions and processes

for the types characterised as Curriculum Keepers, Curriculum Shapers and Curriculum Changers is provided in Figures 17, 18 and 19.



Figure 17. Characteristics of curriculum keepers.



Figure 18. Characteristics of curriculum shapers.



Figure 19. Characteristics of curriculum changers.

With reference to the preceding figures, the following provides an explanation of the way the types emerged from the dimensions and processes of the study. Once again, the data from the interviews of AI and Jo are used.

Data shows that AI exhibited approaches to curriculum changes that were reflective of the dimensions of *Interpreting*, *Adapting* and *Adopting*. She engaged in the processes of agreeing, accepting and practising in her Capacity to Change; filtering, auditing, accepting and practising to promote the growth of her Teacher Capital; filtering, auditing and agreeing in Learning Together and agreeing, accepting and practising in the way she contributed to Shaping Culture. Consequently, the way AI negotiates mandated curriculum changes reflects the types of Curriculum Keepers and Curriculum Shapers.

Similarly, data shows that Jo exhibited approaches to curriculum changes that reflect the dimensions of *Interpreting, Adapting, Adopting* and *Committing*. She engages in filtering, auditing and agreeing in her Capacity to Change, Teacher Capital and Learning Together, and reflects the processes of accepting, practising and, to a lesser degree, transferring, in Shaping Culture. Consequently, the way Jo negotiates mandated curriculum changes reflects the types of Curriculum Keepers and Curriculum Shapers. In addition,

because Jo commits to transferring the message of the Gospel into the religious life of the school, she reflects the type of Curriculum Changers in the Shaping Culture theme.

As has been the case in the analysis of the dimensions and the processes, the data of the 13 interviews were examined to identify the types of approaches and practices of all teachers negotiating curriculum changes in the study. An example of the results of this cross-case analysis is provided for selected topics in Figure 20.

Key: Curriculum Keepers = CK Curriculum Shapers = CS Curriculum Changers = CC

Participants	T1	T2	T 3	T 4	T5	T 6	T7	T 8	S 1	S2	S 3	S 4	S5
Topics													
Q1: How do teacl								ge pro	ocess	es ass	sociat	ed wit	th
the negotiation o				culun		nges?)			1	1		
Outcome Based	CS	CK	CS	CK	CK	CK	CS	CS	CS	CK	CK	CK	
Education				CS	CS	CS		CC		CS	CS	CS	
Religious	CK	CS	CK	CC	CK	CS	CS	CS	CK	CK	CS	CS	CS
Education	CS		CS		CS	CS			CS	CS	CC	CC	CC
Essential	CS	CK	CS	CK	CK	CK	CS	CS	CS	CS	CS	CK	
Learnings				CS	CS	CS	CC					CS	
Early Years	CC	CK	CK	CK					CS	CS	CS	СК	
Curriculum												CS	
Digital Education	CC	CK	CS	CK	CK	CK	CC	CS	CC	CC	CS	CS	
Revolution													
Government		CK	CK	CK	CK	CK	CK	CK			CK	CK	
Accountability													
Managing	CC	CK	CS	CK	CK	CK	CC	CS	CS	CS	CK	CS	CC
change													
Q2: How do teac	hers	respo	nd to	the ne	egotia	ation o	of mai	ndated	d chai	nges?			
Planning and	CS	CK	CK	CK	CK	CK	CS	CK	CS	CS	CK	CK	CS
Assessing	CC		CS		CS	CS	CC	CS			CS	CS	CC
Reporting	CS	CK	CK	CK	CK	CK	CS	CK	CS	CS	CK	CK	
			CS		CS	CS		CS			CS		
Teaching	CS	CK	CK	CK	CK	CK	CC	CS	CS	CS	CS	CS	
-	CC		CS	CS	CS								
Q 3: How does the culture of a school influence the way teachers negotiate mandated													
curriculum chang	ges?							-		-			
Catholic Culture	CS	CS	CS	CC	CS	CS	CK	CS	CS	CS	CS	CS	CS
							CS	CC			CC	CC	CC
Religious Life of	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CS
the School	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CC

Figure 20. Types.

In summary, the building of theory emerged through within-case and crosscase analyses. Connecting the data of the types to the topics in the interview data to the questions of the research enabled the researcher to identify the way teachers negotiate mandated curriculum changes. Consequently, the analysis of the data in Iteration 2 contributed to answering the questions of the study.

The process followed by the researcher to identify the curriculum types is provided in Table 20.

Table 20

Identifying the types

Linking dimensions and processes to the types	Types
Capacity to Change AI (T8) and Jo (S4)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Al <i>adapts</i> (dimension) to change, following the example of her peers. She <i>agrees</i> (process) with what they tell her. Al <i>adopts</i> (dimension) the norms of the school and <i>accepts & practices</i> (process) what is in place. Jo <i>adopts</i> (dimension) mandated changes. She <i>accepts</i> (process) what she is given to do. She <i>adopts</i> (dimension) and <i>accepts and practices</i> (process) government expectations. She <i>adapts</i> (dimension) curriculum change, but it does not change what she teaches.	Curriculum Shaper Curriculum Shaper
leaches.	
Teacher Capital AI (T8) and Jo (S4)	
Al <i>interprets</i> (dimension) curriculum change, <i>filtering</i> (process) it through the understanding of peers. She <i>audits</i> (dimension) what she does to meet the needs of students. She <i>adopts</i> (dimension) government	Curriculum Keeper
expectations, and <i>accepts and practices</i> (process) the mandates.	Curriculum Shaper
Jo <i>adapts</i> (dimension) curriculum change by <i>agreeing</i> (process) to the mandate, although she felt she lacked understanding. She <i>interpreted</i> (dimension) the benefits of change by <i>filtering</i> (process) her understandings through her prior knowledge. She <i>adapted</i> (dimension) to	Curriculum Shaper

	-
Linking dimensions and processes to the types	Types
ongoing change, agreeing (process) with it, even though	Curriculum
she was not truly affected by it in her role.	Keeper
Learning Together AI (T8) and Jo (S4)	
Al <i>interprets</i> (dimension) and <i>adapts</i> (dimension)	Curriculum
according to the advice of her peers, <i>filtering</i> and	Keeper
	Keepei
auditing (process) what she is told through her prior	Curriquiture
knowledge and <i>agreeing</i> (process) to it. She <i>filters</i>	Curriculum
(process) professional conversations through her personal	Shaper
values.	
· · · · · · · · · · · ·	
Jo <i>interprets</i> (dimension) her learning about curriculum	Curriculum
change through experiences. She <i>filters</i> and <i>audits</i>	Keeper
(process) opinions through an unsuccessful attempt at	
curriculum design in a school. She learnt about changes	
by <i>interpreting</i> (dimension) it through the knowledge of	
her peers, filtering and auditing (process) her prior	
knowledge and experience.	
Shaping Culture AI (T8) and Jo (S4)	
Al <i>adapts</i> (dimension) to the culture of a school by	Curriculum
agreeing (process). She adopts (dimension) the norms	Shaper
	Shaper
of the environment and was <i>accepting</i> (process) of the	
religious life of the school, <i>practising</i> (process) and	
promoting it through her behaviour and connecting it to	
curriculum.	
Jo <i>adopts</i> (dimension) the culture of the school. She is	Curriculum
obedient to the Catholic traditions and <i>adopts</i>	Shaper
	Shaper
(dimension) it, and she accepts and practices (process)	
the norms of the school. She <i>adopts</i> (dimension) the	0
behavioural and relational aspects and is <i>committed</i>	Curriculum
(dimension) to her personal values of acceptance and	Changer
inclusion.	

Consequently, the following hypothesis emerged from the process of building theory from this case study research. The shaping of the hypothesis involved the measuring of the constructs of the study and the verification of relationships (Eisenhardt & Graebner, 2007). The hypothesis was grounded in

the data and the process undertaken by the researcher in Iteration 2. The hypothesis for this research study was:

The Hypothesis

Teachers in the study selectively engaged with mandated curriculum changes, according to their choices.

Consequently, the inquiry moved beyond a descriptive study into theory construction through the conceptual level of reasoning in Iteration 2. A theory emerged from this deeper level of interrogation of the data (Glaser, 2003). The theory was:

The Selective Engagement Theory.

The Selective Engagement Theory described the way teachers negotiated mandated curriculum changes in the research study. This theory underpinned the major finding of the research.

6.5 The Major Finding of the Study

A major finding emerged from the interrogation of the data in Iteration 2.

The Major Finding

The major finding of the study was that teachers in the research school chose to negotiate mandated curriculum changes as Curriculum Keepers, Curriculum Shapers and Curriculum Changers, according to their depth of engagement with the changes.

The major finding contributes to answering the overarching question of the study, which was:

Overarching question

How do teachers negotiate mandated curriculum changes?

A discussion of this major finding is presented in the following chapter.

6.6 Conclusion

In summary, the researcher interrogated the data through two levels of iteration. Iteration 1 was explained in the previous chapter and it involved coding to develop the topics, themes and aspects of the study. In the current chapter, Iteration 2 was explained as the process of building theory from case study research. The interrogation of the themes of the data resulted in the development of dimensions, processes and types that reflected the way teachers choose to engage with the negotiation of mandated curriculum change. From this, a hypothesis was shaped and a theory constructed, leading to the major finding of the study. Having described the analyses of the data through Iteration 1 and Iteration 2, the focus of Chapter Six.

CHAPTER 7: DISCUSSION OF FINDINGS

7.1 Introduction

In this chapter the findings of the study are discussed. The findings resulted from the analyses of the data as explained in Iteration 1 in Chapter Five and Iteration 2 in Chapter Six. The analyses were conducted through the case summaries of the 13 participants in the research study and the process of building theory from case study research. Four findings emerged from Iteration 1 and a major finding emerged from Iteration 2.

Throughout the study, the four themes of Capacity to Change, Teacher Capital, Learning Together and Shaping Culture were used as the organisers for the within-case summary narratives and the construction of theory. The researcher has chosen to continue to use the four themes to organise the discussion of findings in this chapter. The discussion of findings seeks to answer the questions of the study, which are:

Overarching question

How do teachers negotiate mandated curriculum changes?

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

The following graphic provides an outline for the ensuing discussion.

Discussion of Findings
<u> </u>
7.2 Discussion of Finding 1: Capacity to Change
7.3 Discussion of Finding 2: Teacher Capital
7.4 Discussion of Finding 3: Learning Together
7.5 Discussion of Finding 4: Shaping Culture
7.6 Discussion of Major Finding: The Selective Engagement Theory
7.7 Summary of Findings

7.2 Discussion of Finding 1: Capacity to Change

The first finding of the study was concerned with the knowledge, understanding and expertise of the teachers in the research to manage change. The finding aligns with sub-question 1 of the research study and the theme and aspects of Capacity to Change. The aspects of the themes are used to organise the discussions of the findings.

Sub-question 1

How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Finding 1

Teachers in the research school understood and managed mandated curriculum changes according to their attitude, knowledge and capacity to change.

The first finding of the study was concerned with the capacity of the teachers to understand and manage mandated curriculum changes. The ensuing discussion of the finding is organised under the theme Capacity to Change and the aspects that underpin the theme. For ease of discussion, participants are referenced as per the code attached to their data, namely T1 through to T8 for Teachers or S1 through to S5 for Specialists.



Figure 21. Aspects of capacity to change.

7.2.1 Aspect 1: Peers and Colleagues

The capacity of people to change was a recurrent theme in the literature concerning organisational change theories (Corner, 2000; Fisher, 2004; Kotter & Rathgeber, 2006). These theories identify the human element as the core of performance in workplaces, and highlight how the perspective of the individual dictates the success or failure of an enterprise (Argyris & Schon, 1996; Hammer & Stanton, 1995: Mulford & Silins, 2003). Participant S2 supported this, for she believed it was the attitudes of her peers and colleagues that influenced her perspective of managing changes. For her, it came "down to a commitment, a willingness to change self and others". Participant T6 agreed with this sentiment.

The success of change in schools actually depended on the school itself and the attitudes displayed within that particular school. We were open to it and accepting of it, so we moved forward with it, but if you had teachers who weren't open to it, I don't think it would have progressed as well. (T6)

Participant T5 explained the way teachers in a school formed their own support group to manage changes.

I left School A and moved to School B at the beginning of 2001. That's probably when the Outcomes change really started to come in. I had a

taste of it, but I found School B had not worked with it. They hadn't had much to do with it at all. No one showed us how to plan It was mainly left to the school to do it....Left to us, so basically, we took the syllabuses and worked from there. I think everyone was flying a little bit blind....It was very open with a very broad interpretation. (T5)

The influence of the principal in promoting and developing the capacity of teachers to deal with change was mentioned. "When leadership is involved and energetic, it makes a difference" (S5). Appropriate leadership gives teachers confidence and control over what is happening (Hallinger & Heck, 2009; Leithwood & Day, 2008). However, the effectiveness of the principal in leading changes depended on the attitude and support of teachers to engage with the change. Participant T8 gave an example of this.

The year I came there, they had a change of Principal. I don't think the curriculum was particularly strong at the time of the changeover of leadership. So the new person had to work hard to build that up. But, because he changed it all again, people were reluctant to work for him, so it led to a lot of negativity. (T8)

The data indicated that negativity grew in the research school when changes were "dumped" (T3) on teachers, and they were left to manage changes in their own ways (S3, T6, T8). There was little attention paid to identifying the capacity of the individual to deal with curriculum changes, so they implemented changes through their own interpretations. As Participant T1 commented, "we just did it". This supports the claim that teachers are the key to educational change (Katzenmeyer & Moller, 2001). Both the literature and the data demonstrate that the human element is the core of any change, and both highlight the importance of the attitude of the person involved.

All curriculum changes have underlying philosophies and frameworks. If teachers lack a common understanding of this, it is possible for them to be misguided, misinformed or share shallow understandings of the processes and procedures associated with a change (Fullan, 2006; O'Mahony, Barnett & Matthews, 2006). According to the survey data, it was possible for teachers to interpret curriculum changes in a number of ways. They could interpret it

through the understandings of their peers, they could engage with it to come to a personal understanding or they could attend professional development sessions to gather information about what was expected. Consequently, teachers tended to integrate the variety of understandings they were exposed to. However, it was evident that different understandings of changes evolved when teachers were "left to their own devices" (T6).

Often, teachers in the study came to understand what was required for curriculum changes from each other. They relied on peers and colleagues to help them interpret and manage the changes. It was recognised that peers and colleagues were not always a reliable source of information (T4). As Participant S4 explained, because she was a senior teacher in the school, it was assumed that she had expertise in the delivery of curriculum changes. She was "put in a position" where she was "trying to explain it to another teacher" and had "no idea really". In addition, teachers questioned the benefit of professional development sessions because the data indicated that they could receive different messages from different presenters (T6). Consequently, teachers in the study had a number of differing interpretations about the implementation of the same curriculum changes.

7.2.2 Aspect 2: School Processes and Procedures

Teachers in the research school had dissimilar experiences of the processes and procedures associated with the management of curriculum changes. Some had experienced system involvement (T4, T8), some had negotiated change collaboratively and some had dealt with it individually. Some felt they had managed change well and some found it challenging (S3, S4). Throughout her teaching career, Participant T2 had experienced and adapted to a number of changes, and she had relied heavily on the personal in a school to interpret what she was expected to do.

In School A, there were four levels with four teachers who really did their own thing. In School B I did team teaching with straight year levels. We did a lot of group work and some whole group sessions. In School C nobody planned on their own for anything, we had teams. We planned on a two-week basis. You would see how it would go with the children and see which way it led you and then you'd build on the next two weeks. A lot of it was inquiry based teaching, personalised to our own class and level. Everything was collective and there was nothing you did on your own I have taught a lot of different ways (T2)

These data demonstrate that there is an assumption that teachers will understand and manage curriculum changes effectively and successfully, and adapt changes with resilience and flexibility. However, this may not always be the case. Participant T2 indicated she was "very unsure of what to do" when she was employed at the research school and expected to implement the OBE curriculum changes. She worried that she would "not do it the right way" because there were so many changes to the way she planned, and "so many outcomes to cover" (T2). The data demonstrates that the worries of curriculum changes are stressful for teachers, and may impact on their confidence in delivering effective classroom practices.

Curriculum changes, such as OBE, prompted teachers to adopt different approaches. Some changes required a total reassessment of pedagogical thinking, as was the case in the implementation of the Early Years Curriculum which required teachers to re-assess their teaching techniques through the negotiated play-based lens. With the Digital Education Revolution, the expectation was for teachers to become competent users of computers within a short time-frame. There was a requirement to have some technical knowledge to solve hardware problems, as well as the ability to demonstrate creativity and expertise in the delivery of e-learning lessons (T4). In the Inclusive Education arena, it was thought that teachers would automatically have the knowledge and expertise to deal with the psychological, medical, social, emotional and behavioural needs of identified students. Pressure was put on teachers to be effective managers of these students, but the research showed that preparation to manage the changes in classroom dynamics and curriculum reorganisation was almost non-existent at the onset of the change (S3, T4, T6, T7). It took some time for system structures to be put into place to

up-skill teachers so that they could come to terms with how they were to negotiate this change.

The theory was that teachers in the study were expected to be "instant experts" (S3) of curriculum changes, but the reality was that this did not occur. In addition to professional expectations, teachers dealt with the personal aspects of change processes in different ways and the research showed that some were more resilient and accepting of change than others. The demand for teachers to be personally and professionally proficient to manage curriculum changes highlights the need for change management approaches that provide clarity of direction. The literature on the Seven Steps of Change (Matthews, O'Mahony & Barnett, 2006) identifies a change process that takes teachers through two decision gates of commitment to change (Kotter, 1996) namely, one at the beginning and one towards the end of an initiative. The first decision gate is concerned with the dimension of *adopting* the change, and the second is concerned with the dimension of *transferring* the change by implementing it. The confusion of some teachers in coping with change was an indication that they had not been supported to move through these decision gates and, consequently, they defaulted to what they knew and chose to maintain the status quo.

Thus, the assumption was that all teachers had the knowledge and expertise to deliver educational changes, but this was not always the case. The Capacity to Change to deliver teaching and learning programs that reflected mandated curriculum changes was grounded in the depth of knowledge and understanding that teachers had about such changes. These data demonstrate the need to ensure changes are well planned, well managed and well supported so that teachers are kept well-informed. This should bolster teacher self-confidence in their capacity to manage ongoing curriculum changes.

7.2.3 Aspect 3: System Involvement

Although teachers in the research school had the opportunity to engage in professional development provided at system level to negotiate curriculum changes, the data indicated that teachers did not always find this supportive. Participant T4 explained that the system approach was one of being "told what to do" but not "how to do it" (T4). This pattern of introducing changes was identified by other teachers (S3, S4, T3, T6, T8). The teachers in the study were often simultaneously engaged in multiple change paradigms at any one time, and they were expected to sustain these changes at a local level after some initial system involvement. Although the literature states that successful change requires a change management plan (Fullan, 2003; Kotter, 2003; Matthews, O'Mahony & Barnett, 2006; Schein, 2004) there was no indication from teachers that this was in place at either system or school level. Few were aware of the Five Year School Development Plan and designated system strategies that were used to formulate Annual Action Plans at the research site (S4, S5). Curriculum changes "always seemed to have a short-term focus. We didn't really look ahead too much" (T5). Consequently, it was possible that the effectiveness and success of mandated curriculum changes could rely more on the brilliance of the individual teacher or the principal than a partnership of change management at school and system level (Fullan, 2003). This finding from the research study demonstrates the need to have a clear and common vision for change at all levels (Crowther, 2011).

In summary, the data highlighted the importance of the attitude of the person towards curriculum changes, and there was some indication that teachers could misinterpret changes through shared misinformation. In this study it was found that there were expectations to engage with change at system and principal level, and assumptions that all teachers had the knowledge and expertise to manage and adapt to change. However, teachers indicated in the interviews that they became worried about how to deal with the operational management of curriculum changes, and they were concerned that the restructuring of planning for such changes had the potential to erode the time required to focus on pedagogical approaches to improve student outcomes.

Consequently, examination of the data from the interviews showed that teachers needed an explicit and common vision and clarity of direction for planned change at both system and school levels. Teachers also emphasised their need for assistance and support with planning learning programs and managing "new" (T4) curriculum changes that challenged existing practices.

7.3 Finding 2: Teacher Capital

The second finding of the study was concerned with teacher responses and choices that contributed to the growth of Teacher Capital through the negotiation of mandated curriculum changes. The finding aligns with subquestion 2 of the research study and the theme and aspects of Teacher Capital, as shown in Figure 22.

The aspects of the theme are the organisers for the discussion of the finding.

Sub-question 2

How do teachers respond to the negotiation of mandated curriculum changes?

Finding 2

Teachers in the research school responded to the negotiation of mandated curriculum changes according to their personal and professional choices.



Figure 22. Aspects of teacher capital.

7.3.1 Aspect 1: Choices and Emotions

When teachers face curriculum changes, they speculate about what is going to happen and what it means for them, their colleagues and their school (Day, 2007; Goleman, 2001; Hall & Hord, 2006; Sergiovanni, 2000). The responses and choices of teachers were the conduit for the depth of Teacher Capital in the research school. Teachers dealt with their perceptions, emotions, feelings and needs as they responded to curriculum changes, and their choices reflected these needs. The state of mind of teachers promoted or discouraged creativity, inquiry and the building of personal resources (Frederickson, 2006). A choice to move forward promoted the ongoing growth of Teacher Capital by enhancing capability and building capacity. However, Participant T5 gave an example of the way fear and resistance to change could stifle such growth.

I know at School B you had the Grade Four teacher and he'd go and plan by himself, no communication with other teachers. He found it difficult when someone younger came along and told him what he had to teach. He could not handle that. A few older teachers were scared of change. They did not embrace it. They did not understand. Change was scary. They did not really want to stretch." (T5)

With each curriculum change, teachers in the study were expected to make choices about discarding past patterns of practice. Positive emotions fostered psychological resilience and helped people cope, while negative emotions narrowed perspectives through fear, resulting in withdrawal, resistance or avoidance (Goleman, 2005; Senge, 2008). Consequently, teachers endeavoured to establish practices to reduce their concerns of uncertainty and stress and give changes some meaning (Schein, 2004). Some resisted, some complied and some were excited (Bridges, 1995). Others were uncomfortable (Conner, 1992), confused (T5, T6), stressed (T1, T3, T4) or anxious (S3, S4). Different teachers made different choices about curriculum changes. These data demonstrate how the choices of teachers influence their responses to change.

The worries teachers had about curriculum changes reflected the literature on the Stages of Concern of the Concerns-Based Adoption Model (Champion, 2003; Hall & Hord, 2006; Loucks-Horsley, 1996). These stages are self-concern, concern with the task and concern with the impact of the changes. Because teachers in the study were dealing with a number of curriculum changes simultaneously, it was possible for them to have self-concerns about one change, yet be concerned about task or impact with another. This was apparent in the concerns teachers had about the Digital Education Revolution, and the struggles they encountered with the changes for Inclusive Education when the modification of planning to align with Individual Education Plans was introduced (Researcher-generated documents, historical school-based data, S4, T4, T5). The growth of Teacher Capital was reflective of the responses and choices made by teachers, according to their personal stages of concern.

The data on the way teachers in the study approached the planning process for curriculum changes for OBE are used in Table 22 to show the progression of the stages of concern from self, to task to impact. These data are indications of the way Teacher Capital grows through teacher choices and responses to change. Data from the interviews of the teacher participants about engagement with the OBE curriculum planning changes has been included in the table. The finding reflects the theory of the Concerns Based Adoption Model proposed by Champion (2003) and Hall and Hord (2006). Table 22

Stages of Concern	Reflected in	Planning Approaches
		- <u> </u>

Concept	Stage of Concern	Teacher Concerns from the data
Self	Knowledge (I know enough about what is expected in planning)	"We begged, borrowed and stole units." (S4)
Self	Motivation (I need to plan according to the syllabus expectations)	"I liked doing integrated units on a topic and putting it all into a themeso it was good." (T8)
Self	Awareness (I understand the expectations of the planning changes)	"Teachers used to create the unit and then try and fit the outcomes into the unit" (T5)
Task	Engagement (Collaborate with colleagues to plan student learning)	"Conferring with peers is really a big positive thing. Everyone gets on well and everyone feels they contribute and they're listened to." (T3)
Impact	Effectiveness (The needs of students are being met in planning programs.)	"Every second Thursday it was individualisation time, modifications, adjust the program for our own children individually. Personalised to your own class and their own level." (T2)
Impact	Effectiveness (Evidence indicates that the planning programs I teach improve student outcomes?)	"Teaching depends on the nature of your cohort and what you need to do to get the best out of the students" (T4).
Impact	Effectiveness (How can this planning be improved?)	"It's the process. What can you do now? What else can we include?" (T7)

Teachers operating in the personal, self-concern stage often viewed planning changes through an emotional lens and found it difficult. When the concern shifted from self to task, Teacher Capital increased, as teachers in the study began to step back from their personal worries and engage with planning requirements on a more professional level. Consequently, these data demonstrate the influence of the concerns and responses of teachers on the way they approached the negotiation of mandated curriculum changes.

7.3.2 Aspect 2: Engagement

When teachers in the study spoke of the way they responded to mandated curriculum changes, they focussed on their engagement with the content of the syllabi to teaching and learning programs. Although there was a general assumption that all teachers had the expertise and knowledge required for designing quality learning programs (T2, T8), this was not always the case in the research school. Participant T7 was aware of the difficulties some teachers experienced when they engaged with planning programs.

Designing curriculum is actually a very academic process and if you are not inclined to do it or you are not able to do it, then it doesn't happen well. When you look at units on-line that different people have written they are not always good, they are not great activities and they don't align with assessment well. There is different terminology and different understandings. (T7)

Consequently, teachers in the study made choices about planning to compensate for their lack of Teacher Capital in this area. Participant S4 gave an example.

None of us really knew a lot about planning, the way we tried to get our hands on every unit of work we could. But that's OK, because somebody who is better in that area had planned these things and you weren't too stupid to know what was good out of a unit. We felt very inadequate, but we probably didn't do it as badly as we felt we were. (S4)

There were differing opinions on how the planning of programs for curriculum changes could be approached. Participant T5 was of the opinion that teacher engagement with curriculum design was a difficult task that required system support.

What they should be doing is saying here's the scope and sequence for the whole Diocese. Here's your scope and sequence, here's your term breakdown, here's a couple of sample lessons so you can go and do it, instead of us trying to develop everything. Give it to us and show us. Give us an example for Term 1 to take back to teach. If they give us some examples of how to write a unit up properly, show how it is done, how it all fits, that would make it easier. (T5)

Many teachers in the study were frustrated with the amount of time spent on curriculum design to the detriment of curriculum implementation. Some felt that there was a loss of focus on engagement with "actual teaching" (S3, T4, T5). Time spent planning programs affected the overall quality and depth of the delivery of lessons and Participant T4 commented that there was "no time left" to develop their pedagogical approaches. Although curriculum changes had the capacity to develop Teacher Capital by challenging teachers to become curriculum designers as well as curriculum implementers, the success of this in the research school was uncertain.

Consequently, the research indicates that teachers require support and direction in planning if they are to respond to the changes that syllabus documents propose, because the feeling was that time spent planning should not be to the detriment of developing pedagogical practices for classroom teaching. This demonstrates the need to engage teachers in classroom practices that respond to the intent of mandated curriculum changes, rather than have them consumed with the demands of designing learning programs.

7.3.3 Aspect 3: Effectiveness

A key consideration when examining Teacher Capital is how to gauge effectiveness. It is possible to align the Seven Steps of Change (Matthews, O'Mahony & Barnett, 2006) to measure the effectiveness of mandated curriculum changes. The Seven Steps of Change provide a sequence for the change process, and identifies what happens when one of the steps is missed or neglected. Using the way teachers negotiated OBE at the research site as an example, the change process for teachers is mapped against an adapted version of the Seven Steps of Change (Matthews, O'Mahony & Barnett, 2006) in Table 23. The reference for the timeline of OBE in the research school is data from researcher-generated documents.

Table 23

The Seven Steps of Change and OBE

Steps	OBE in the research school	If the step is missing
Step 1 Pressure for change	OBE was mandated by the system as from the year 2000	Does not matter where the pressure for change comes from, because pressure to change does not affect the success or failure of change
Step 2 Clear, shared vision	The vision of the system was to implement the change in schools within the Diocese. The vision of the research school was to be "a good school".	If vision is ignored, change will have a quick start, but it will go nowhere.
Step 3 Capacity for change	Between 1999 and 2004, teachers in the research school engaged in the detail of implementing the OBE change under the Stage-Based Model. The research school had nominated to be a pilot school for this particular approach to the change. The capacity of the teachers to change was developed internally. "We made the problems and we solved the problems" (S3)	If this step is ignored, anxiety and frustration surface. If teachers do not have the knowledge, skills and understanding to negotiate the change, it will not continue.
Step 4 Actionable first steps	The first steps of change were identified with the consultant Mike Middleton (2000) and a strategic implementation plan for	If this step is ignored, there is no plan and the efforts to manage change will be haphazard. There will be many false starts.

Steps	OBE in the research school 1999 and 2000 was created.	If the step is missing
Step 5 Model the way	Financial support of \$2000 a year was given to pilot schools to release teachers to plan the change (1999, 2000). The research school was expected to produce a report at the end of 2000 to explain the strengths and weaknesses of the Stage-Based Integrated Model. The management of the curriculum initiative was internal. It was left to the teachers in the research school. They modelled the way for each other.	If this step is ignored and there is no ongoing support for the change, teachers become cynical and distrustful of systems.
Step 6 Reinforce and solidify	The teachers in the research school had taken on the ownership of the Stage-Based Model at the beginning of the change, and they re-cultured the school through re- organisation and re- establishment of a number of norms e.g. collaborative, team-based approaches to planning, whole school scope and sequences to deliver the curriculum, re-structure of classes from year-based to stage-based. Continued practices embedded the processes and procedures associated with the changes. If something did not work well, teachers re-	If this step is ignored, change will not be embedded and teachers will return to their ways, going back to what they know will work.

Steps	OBE in the research school	If the step is missing
	assessed it and changed the approaches immediately as a group.	
Step 7 Evaluate and improve	Between 1999 and 2005 the teachers in the research school were fully committed to the OBE Stage-Based approach. From 2006 on, teacher relocations influenced the integrity of the original approach, and there was some danger of decline in the strength of some approaches. However, with the new group of teachers came another curriculum change, and the cycle of the Seven Steps of change began again.	If this step is ignored, teachers will become sceptical and there is a danger of stagnation and decline.

Teachers in the study discussed the contribution of mandated curriculum changes to the growth of pedagogical classroom practices. Some teachers thought the changes had influenced their teaching approaches in a positive way (S2, T3, T6) and some thought they had made little difference (S3, S4, T2, T4). Participant S2 highlighted the way the OBE curriculum changes reshaped her approaches.

The change in focus in teaching and learning is that it is student centred. From where I started it is quite different. It is not this is me out here and this is what you are going to do, and sit there quietly to do it. It's changed and kids have changed. (S2)

Participant T4 did not think curriculum reforms had either improved or changed her teaching while Participant S4 indicated that her teaching might have changed "a little bit, but I don't think it ever really changes much".

Participant T6 felt that she was more a "facilitator" of information, while Participant T8 thought that facilitating an inquiry-based approach was "difficult" if students could not read and comprehend well. "You actually have to teach kids what to do. You just can't give them the activity and let them go". These data demonstrate that there may be a lot of activity around curriculum changes, but whether or not this has impact on the effectiveness of teaching practices is questionable.

Teachers in the study questioned the effectiveness of government-testing agendas. Such agendas had the capacity to promote teaching to the test (Nespor, 2002). The feeling of teachers in the study was that there was a need to "prepare kids" (T8) so they "had a chance to pass" (T6). The tests promoted the traditional model of teaching facts and figures through rote learning and memorisation, so that students had the knowledge, skills and understandings to manage the tests (S3, T4). Policy-makers advocate the use of data analysis of government tests to identify the needs of students and design programs to address these needs, but teachers do not use data well (Pettit, 2010; Schildkamp & Kuiper, 2009). Teachers in the research school involved in the government testing focused more on the preparation of students than the data analysis of the tests (T4, T6, T8). Those teachers who were not involved in the testing showed very little interest in it (T1, T2, T5) and this included teachers from Preparatory Year, Year 1, Year 2, Year 4 and Year 6.

When discussing the government mandated testing agendas, teachers in the study emphasised that the achievement of students was relative to the academic ability of the cohorts being tested. Judging the effectiveness, or ineffectiveness, of teaching and teacher performance according to the results of students was seen as "unfair" (T8) and "unjust" (T4). Policy-makers have made teachers responsible for the social, emotional, cultural, physical, intellectual and academic learning journey of students. However, governments focus on a point-in-time test that measures student success in terms of

literacy and numeracy standards (Harrington, 2008). The reality for teachers was the general perception that parents, systems, governments, the media and the wider community judged their performance as a teacher on the achievement of students in these tests. Thus, these data demonstrate how government accountability agendas have the potential to influence the pedagogical practices of teachers.

In summary, teachers in the study negotiated mandated curriculum changes through their personal and professional responses and choices to changes. Emotional reactions reflect the concerns teachers had about changes in relation to themselves, the tasks that they were engaging with and the effectiveness of the impact of such tasks. Sometimes the concerns teachers had about negotiating the demands of curriculum changes impacted on their teaching practices. In addition, the effectiveness of the accountability changes of government testing was questioned and the tension between the academic and holistic education of students was highlighted.

7.4 Discussion of Finding 3: Learning Together

The third finding of the study was concerned with professional development for and the professional learning of teachers. The finding aligns with subquestion 3 of the research study and the theme and aspects of Learning Together as shown in Figure 23. The aspects of the theme are used to organise a discussion on the finding.

Sub –question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum change?

Finding 3

The social culture of the school underpinned the professional learning of teachers negotiating curriculum changes.


Figure 23. Aspects of learning together.

7.4.1 Aspect 1: Social Communication and Culture

The social aspects of the research school were suspended in a particular web of significance in which teachers came together and created a certain type of culture (Beare, 2006; Deal & Peterson, 2009). Social cohesion and social control existed in the research school (Hargreaves, 2008), present in the collegiality of teachers as they helped each other come to understand curriculum changes and in staff practices that reinforced the norms of day to day living. These norms were described as "the way we do things around here" (S2).

Analysis of the data revealed that teachers promoted a culture of social communication as they interpreted curriculum changes through their interactions with peers within the learning environment of the research school (S3, T2, T3, T4, T6, T7). Learning from peers in the comfort and social safety of the school was the preferred way of professional sharing for teachers. Social control existed in the spheres of influence of the teachers in the school and the psychological and social support staff gave each other as they engaged with curriculum changes (Beare, Caldwell & Millikan, 1991). This environment influenced the interactions and ambience of the workplace (Schein, 2004) and the motivation, satisfaction and productivity of what happened in the research school (Hargreaves, 2008; Stoll, 2009). It has been

suggested that the power of the social learning that occurs in the uniqueness of the school culture has been overlooked by many and, possibly, has been underestimated (Wagner & Marsden-Copas, 2002). This data demonstrates that the effect of the social aspects of the school culture on the learning of teachers may be a hidden agenda and an untapped resource in the research school.

7.4.2 Aspect 2: System-based Professional Development

Traditionally, the professional learning of teachers in the research study was promoted through professional development opportunities, generally provided at system level (S2, T2, T6, T8). At these sessions, information was shared to keep teachers abreast of change by addressing what they did not know. Such dissemination of information promoted uniformity, consumption, memorisation and replication (Sergiovanni, 1996). However, it is suggested that only 20% of what teachers learn through professional development is applied in classrooms (Joyce & Showers, 2002). Joyce and Showers (2002) showed that the professional development of teachers often did not change their teaching approaches. The data in the research study supported this claim. Participant T8 commented on the lack of common understandings she was given in professional development sessions and Participant T4 explained that she received very little follow up to consolidate what she was told. Participant S2 was appreciative of the energy and activity around the professional development offered at system level, but she noted that the responsibility of implementation was left to teachers, and often little happened.

We had key learning area consultants that would come around and do their little spiel at the school or we'd go off somewhere and bring it back to the school. There were Principal packages and CDs, overheads and all that kind of stuff. When the documents were on the shelf, not much face to-face training happened. We did the initial in-services. Professional development, we got that. We didn't get the time for reflection, but then you never get to do that. So, when you're introducing something new, you go and you do the PD, and then you have to take responsibility for it yourself, coming back to school and reflecting on it and applying it. (S2) Professional development was offered to teachers in the study in a number of ways. These included system personnel coming into the school, one teacher attending professional development sessions and sharing the information with the rest of the staff or clusters of schools attending system-facilitated workshops (Researcher-generated documents, historical school-based data, S2, T4). As adult learners, teachers learn best when thought is connected to action, decision-making and reflective thinking (Ehrich, 2011; Kolb, 2005). It is important to clarify expectations and guide teachers in professional learning that promotes dialogue and peer feedback (Villa, Thousand & Nevin, 2008). However, teachers in the study indicated that professional development experiences were generally sessions of a "lecture-style sharing of information" (T1) and involved no feedback sessions. As Participant T4 explained, "Very good ideas, but they go nowhere". Thus, the data demonstrates that professional development did not always result in professional learning for teachers in the study.

Although teachers were given the opportunity to be involved in inter-school professional development sessions, they felt professional conversation on such days lacked depth, and there was often contrived interaction (S3, S4, T3, T4, T7, T8). Most were reluctant to discuss the work of their peers for fear of being seen as critical, and some lacked confidence to put forward their ideas and opinions. "Often it's best to say nothing because you don't want to look stupid and you don't want to make anyone else look stupid" (S3). The professional etiquette of teachers appears to have an unwritten code of noninterference in the work of other teachers (Campbell, 2005; Gardiner, Tom & Wilson 2000). The system facilitated Teacher Judgment and Moderation Days were an example of this. These sessions involved inter-school clusters that met for collaborative discussions. Teachers in the interviews indicated their reluctance to enter into robust professional conversations as they were fearful of being seen to criticise the work of their peers. This professional etiquette and code of non-interference thwarted the professional learning of teachers. Consequently, these data demonstrate the need to develop the skill of

professional dialogue in teachers to promote professional conversations that go beyond the comfort of the school environment.

7.4.3 Aspect 3: Mentoring Approaches

The most successful professional development occurs in context, when teachers converse with other teachers about the content of their teaching and learning in the classroom (Avalos, 2011). Different modes of mentoring encapsulate this idea of teacher collaboration through coaching and networking approaches. Mentoring is based on relationships of shared power, where teachers work in equal partnerships, or on sponsorship, when a more experienced teacher brings about positive career gains for another (Ehrich, 2008). Teachers in the study indicated that both of these models were used as informal professional learning strategies in the research school (T1, T6) when they helped each other analyse what they could do and how they would do it. This approach created collaborative working partnerships for themselves and others (Conzemius & O'Neill, 2001). The data indicates that this was the perspectives of Participants S1, S2, T7 and T8.

Informal mentoring was the favoured way for teachers in the research school to make meaning of curriculum changes. As a community of peers, teachers improve their pedagogy through reflection and feedback as they engage in social conversations (McLaughlin & Talbert, 2006). Informal professional development approaches can include a five-minute talk in the staff room or hallway or chance meetings with year level colleagues (Senge, 2008). Formal meetings are also avenues of professional learning when they are scheduled and structured around best practice in the school. Findings from the interviews revealed that teachers who returned from periods of leave attended induction sessions to assist them to become familiar with changes to curriculum. The corporate knowledge of the staff was the conduit for educating contract, graduate and relief teachers and up-skilling teachers returning to full-time or part-time work after extended leave (T3, T6, T7). In theory, this was possible if there was depth of knowledge and understanding of the curriculum changes in

the school. It had some success when there was stability of staff and effective models of mentoring, coaching and networking in place (Ehrich, 2011). In reality, however, teachers in the research school relocated quite often, and some staff could be unco-operative and resistant to working with new members (T5). Thus, the perceptions revealed by teachers in the interviews demonstrate how the effectiveness of mentoring approaches relies heavily on the quality of the informal social networks and relationships among teachers.

Teachers in the research study commented on the strength of their professional learning as a community (S1, S2, S3, S4, T4, T8). Professional learning communities can generate knowledge, craft new norms of practice and sustain participants in their efforts to manage curriculum changes (Mitchell & Sackney, 2009). A number of teacher interviewees believed a collegial and collaborative group environment existed in the research school (S2, S3, S4, T3, T4, T8). Much restructuring and reviewing of school processes and procedures to accommodate curriculum changes occurred through decision-making based on shared wisdom (T3, T4, T5, S2). However, the success of the implementation of curriculum changes required more than unity of a professional community. Although there was a climate of trust, mutual respect, shared power and a no blame approach to managing curriculum changes in the research school (Crowther, Andrews, Dawson & Lewis, 2001), this culture did not seem to extend to the classroom practices of teachers. Privatisation of practice and maintenance of the traditions of classroom practices existed. The reality was that there was breadth of professional development in the research school that generally transferred into professional learning for the teachers collectively, but whether this influenced the classroom instruction of teachers in the research school was uncertain.

In summary, the social culture of the research school had a significant influence on the professional learning of teachers. Much professional learning occurred informally within the comfort of the school learning environment rather than through formal system facilitated professional development opportunities. There was strength of mentoring in the research school, grounded in informal social networking and relationships (S3, S4, T4 T8). Teachers in the study indicated that they had difficulty entering into deep professional conversations without a safety net of social reassurance (T7, T8). Professional development did not always transfer into professional learning that influenced classroom practices. Although not formally recognised, the internal social culture of the school learning environment influenced and promoted depth of professional learning for teachers.

7.5 Discussion of Finding 4: Shaping Culture

The fourth finding of the study concerned the potential of the Catholic culture of the research school to influence the way teachers negotiate mandated curriculum changes. The values and beliefs of a school community may either uphold or erode established cultural norms as teachers balance the religious life of the school with the dualities and tensions of the contemporary world (Bate, 2005; Carr-Greg, 2004; Hoy & Miskel, 2001). The behaviours of teachers have the potential to create cultural differences in schools (Deal & Kennedy, 2009, Deal & Peterson, 2003; Schein, 2004). Because the study was undertaken in a school operating within a particular faith tradition, the potential influence of this Catholic culture was a consideration for the research. Finding 4 also aligned with sub-question 3 of the research study and the theme and aspects of Shaping Culture, as shown in Figure 24. The aspects of the theme are used as the organisers for the discussion of findings.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum change?

Finding 4

The faith tradition of the research school had the potential to influence the learning culture, which, in turn, had the potential to influence the way teachers negotiate mandated curriculum changes.



Figure 24. Aspects of shaping culture.

7.5.1 Aspect 1: Society

The research school operated within the social, cultural, economic, governmental and ecclesial pressures and tensions of contemporary society. Ecclesial and societal differences challenge school culture (Stoll, 2003). Between 1999 and 2009, teachers in the study were confronted with at least sixteen significant mandated curriculum government and system changes. Governments advocated success for all and introduced a number of accountability measures (Wu, 2011), and systems promoted mandated curriculum changes with a philosophy of improving student outcomes (ACARA, 2010; QSCC, 2002; QSA, 2004, 206, 2008).

Participant S3 referred to the research school as "a mini society" (T3). She noted that the attitudes and beliefs of contemporary digital natives appeared more challenging and demanding than students she had taught in past decades. The demands of governments and parents expanded her teaching role, and she felt she was expected to be "a doctor, a nurse, a psychologist and a teacher" (T3). Participant S3 supported this perception.

We are expected to teach things that used to be a parent's domain. We have many things put on our plate. We have health education, exercise, sex education, protective behaviours and social skills. Then we cop flack in the media for not teaching them how to read and write, when so much time comes out of our curriculum. Culturally, there's a lot more to teach now as well, because more and more our schools are multi-cultural places. (S3)

The partnership of school and parents seems to have changed. Parents are "putting more and more onto schools" (S4). Some blame schools for problems that they should address and, generally, there is an increasing lack of respect for the profession of the teacher and the dignity of the human person (Carr-Greq, 2004). Teachers in the study commented on the increasing amount of individual self-interest and lack of consideration for social justice and the common good by a percentage of the school community (S3, S5, T6). The danger for the research school is the potential to absorb and perpetuate a pragmatic, competitive, consumerist and materialist ethos within a privatisation mask (McLaughlin, 2000). There is conflict when parents claim certain values, yet their actions indicate that what is claimed is not truly valued by themselves or their children. An example of this disjuncture is reflected in parent perceptions of the competition versus participation tension that surrounds the policy for sport in the research school, and the focus for some is on winning rather than putting in the best possible effort (S3, T8). Although the majority of parents say they support the notion of participation, many put pressure on children to excel at sporting events. A percentage of parents are insistent that their children receive recognition and acclamation for succeeding in sporting activities outside the school community, and they actively promote winning at all costs.

Participant S4 noted that parents have become more judgmental and increasingly exhibit a lack tolerance and understanding in coping and dealing

with the misbehaviours of their children and the peers of their children. "They are in denial, they become defensive and they lose sight of why we are here. Some are very ready to blame" (S3). "They just say they can't do anything about their kid's behaviour and walk away" (T4). "They blame the other kids and will not accept that their child is responsible for any part of the situation" (T1). Participant S4 dealt with this dilemma when she was pressured to "expel" a student who did not measure up to the behavioural expectations of a small group of parents.

People say the child doesn't belong in the school. But they belong in society, and we're part of society.... In life, there are all sorts of people and if you don't have them in schools, then you're not preparing children for life. (S4)

These data demonstrate the tension that exists for teachers between ecclesial, governmental and societal values, and show how the values-base of a school community impacts on the culture of a school.

7.5.2 Aspect 2: System Beliefs and Faith Formation

The research school operates within the Catholic tradition and Church teachings, which emphasise an inextricable link between the culture of the school and the teachings of the Church (Congregation for Catholic Education, 1998). Teachers in the study were aware of the need to operate in the Catholic tradition within the school context. However, many commented on the fact that the church was going through a lot of change, and they wondered what this would mean for the research school (S3, S4, S5, T2, T3, T6). With the increasing decline of the teaching religious, and the dis-engagement of parents with Church, teachers in the study felt that the research school was becoming representative of "the face of God" (Treston, 1998, p. 70) to families and students. There was an awareness of the need to be examples of "witness" (S5) to the students in their care.

The Jesus we teach about will be the one the kids end up with because they're not learning it at home. The Bishop is right, we are the face of Jesus to the children so whether we're trying to be or not, that's what they are seeing. We have to be very careful what we teach and what we say. (S3)

These data demonstrate that teachers in the study were aware of, and influenced in some way, by the faith tradition of the church within the context of the research school.

Most teachers in the study equated system beliefs and faith formation with the practices of worship, prayer and living the message of Jesus (S3, S4, S5, T2, T3, T4, T5, T6, T8). Some had grown up "with the nuns and the Christian brothers teaching" (T5) and they had an understanding of the way the religious presence influenced the culture of a school (S3, T2, T5). They had learnt "the Catholic way" (T2) of prayer, worship, ritual and tradition by osmosis (Groome, 2002). As Participant S5 said in her discussion about the teaching religious, "We knew they loved God". Generally, knowledge and understanding of Church tradition and faith formation for teachers in the research school occurred through system-based professional development opportunities. Some of the teachers in the study indicated that they felt their understandings of Catholic traditions were not as deep as they could be (T1, T7). Participant S5 gave an example of a theological misunderstanding of one of her colleagues, and how it was possible for misinformation to be unknowingly shared.

I had somebody working with the first communicants and she told them that Jesus sat at the table and had the bread and he did not want to eat it all for himself, so he shared it because he was nice. So she missed the whole breaking of the bread, which is when your little sister comes and says, "Will you read to me?" and you do, even though you don't want to. You know, she knew Jesus broke bread, but she did not know why. (S5)

The notion of Church as tradition within system beliefs was prevalent in the conversation of teachers at the research school. Participant S3 felt it was difficult to maintain "the authenticity of our Catholic learning environment" when Non-Catholic teachers were employed. Her concern was that "we will

have people who don't know anything about who or what we are" (S3). Participants S3 and S5 commented on the overall lack of church attendance by the younger generation of Catholic teachers. Participant T6 felt that church attendance was a mandatory part of teaching in a Catholic school and Participant S5 noted that those who did not attend church often did not have a sense of "meeting God in community" (S5). However, Participant S4 commented that even though a percentage of teachers did not attend Church and demonstrate "old Catholic ways", she still thought they nurtured the "spirit" of Catholic Education in their words and actions. Although lay teachers in the study brought different values and understandings of the Catholic faith to the culture of the research school, Participant S4 believed there was general "witness" to Catholic identity.

Many of the teachers in the study indicated that their faith formation began in childhood and had been shaped by the practices of family (S3, S4, S5, T2, T5, T6). This supports the study of Groome (2000). Most participants had attended Catholic primary or secondary schools and carried their perceptions of Catholic tradition into adulthood. Over half of the participants had attended schools with teaching religious personnel (Cresp, 2005; Grace, 2003) and there were comments about the way these people had brought the educational mission of the Church to life (T2, T5, S3). Many teachers were of the opinion that faith should start with the family (S3, S4, S5, T3, T4, T5, T6), but their observation of the school community was that, increasingly, many parents were passing this responsibility back to the school (S3, S4, S5).

Participants S3 and T4 indicated that it was very hard to teach spirituality to students. There was a feeling that the spiritual capital in the research school had been in the wisdom of the religious order, and how lay teachers could carry this forward within the changing context of Church traditions was questioned (S3, S5). When speaking of faith formation and spirituality, teachers in the study commented on the evangelising role of the school (S4, S5) and the need for teachers to understand that they played a part in helping

their school community to "walk with God" (S4). Thus, these data demonstrate the importance of the faith formation of teachers if they are to promote the Catholic identity and culture of any Catholic school.

7.5.3 Aspect 3: Religious Life of the School

The religious life of a Catholic school underpins a curriculum that is characterised by rationality, holistic knowing and living, wisdom and life-long learning (DeSouza, 2002, McLaughlin, 2000; Treston, 2001). When parents chose the research school for their children, there was an assumption that they were open to catechetical activity within a Catholic culture (O'Brien, 2007). Teachers in the study recognised this, and most commented that the religious life of the school made a difference to the learning environment (S3, S4, S5, T1, T2, T3, T4, T5, T6, T7, T8). This difference was explained by some as the behaviours and relationships of people (S3, S4, T3, T4, T6, T8). The data indicated that the values-base in the research school promoted the building of life-giving relationships through respect and compassion. It was "not the same" as teaching the Values Education Program mandated by the Federal Government (T5). As T5 commented, "We didn't need to teach the Values Program because we have the Gospel Values" (T5).

Participants commented that a Catholic school was different from schools in other systems. Some had taught in other states and other systems and felt they had a degree of comparison (S2, S3, S4, T4, T7, T8). Some explained that the values of the Gospel connected the subjects that were taught in the research school, and influenced the delivery of the curriculum (T3, T5, T6, T8).

Our whole way of school life reflects the values. We bring it into our day with the kids whether we realise it or not. We teach the facts in the QSA syllabi, but we do more than that. We teach the whole child and Christian values too. It's not just the facts, it's everything. (T3)

Most teachers described teaching the subject of Religious Education as a visible difference (S3, S4, T1, T2, T3, T4, T5, T6). It was possible for teachers to make meaning of the messages of Jesus through pedagogical practices (White, 2004), and most of the teachers in the study commented on the potential to do this in teaching and learning programs. They thought that there was a need to ensure that their planning reflected and connected to religious teachings. The indication was that it was "about the way you plan, the way you link a lesson into the Catholic teachings" (T1).

If you are teaching about the environment, you can tell kids that they are stewards of creation and that they need to look after God's world. It links together. You can connect it. (T4)

When I am teaching kids Maths I tell them that they are doing God's work when they are doing the best they can.... I tell them that their work is a gift to God too.... Sometimes they just look at me and don't know what I mean. (T5)

It's easy to link the awe and wonder of creation into what you do with little kids. They are very open to it. They see it in lots of things. Rainbows and butterflies.... (T1)

Other teachers in the study believed the difference was bound to Church tradition and a commitment to living the message of Jesus by inviting students to think through issues, accept personal responsibility for their choices and be inclusive of their neighbours (O'Brien, 2007).

I think the Catholic school has a wonderful opportunity to share the story of Jesus. For some of those kids, it's their only experience of community. In today's climate, the students are not getting the Church traditions at home and there is no church connection, not like we had. We've got a lot of kids who would be otherwise ignorant without us. I don't mean of just faith, but ignorant of the Christian story (S5)

Participant S5 explained that the distinctiveness of the curriculum of a Catholic school was in the grounding of the stories of Jesus and the nurturing of a prayer life. She believed "the connection" came "when we teach them to accept others and Jesus' work" (S5).

If by the end of Grade Seven we haven't taught them to pray, we've failed them. Students need to know how to pray, pray before lessons, pray in a sacred space set up in the playground. The task of a primary school is to get the children to know the stories of Jesus. Secondary is to get them to understand the stories. To go into the human experience they need to know the Jesus story. (S5)

Still other teachers in the study believed that the difference in the research school was the lived example of the people in the school (S3, S4, S5, T4, T8). They placed strong emphasis on sharing the message of Jesus through word and action and "the witness" of what they did (S3).

It is the way we conduct ourselves. I feel the children are taught respect and care for others, to value others and their opinions through us. So to me, those values, whether you are teaching English, Maths, Religion, Integrated Unit, to have that as the way that we conduct ourselves is the difference between being in a Catholic school or not. (T3)

Hence, these data demonstrate that the difference teachers identified in the research school was the Catholic culture grounded in behaviours that reflected the values of the Gospel. It also demonstrates that the culture of the research school had the potential to influence the negotiation of curriculum changes, depending on the way teachers connected their pedagogical practices to Catholic teachings.

In summary, Finding Four was discussed through the faith tradition of the research school, identifying the potential of the Catholic learning culture to influence the way teachers negotiate mandated curriculum changes. The tensions between the ecclesial and societal values of the school culture were highlighted, as was the difference between a culture shaped by the teaching religious of the past and a culture shaped by lay teachers of the present. The faith formation and the differences that teachers saw in the research school were examined within the context of the Catholic culture and Catholic Church tradition.

7.6 Summary of Findings from Iteration 1

In summary, the four findings of the study were discussed under the themes and aspects of the themes that emerged in Iteration 1 of the data analysis. The themes were Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. These findings aligned with the three sub-questions of the literature review. The discussion illuminated the way teachers in the study understood, managed and responded to mandated curriculum changes. It also highlighted the potential influence of the Catholic culture of the research school on the implementation of mandated curriculum changes. Having discussed the sub-questions of the study, the following section offers a discussion on the major finding from Iteration 2. The major finding emerged from the data analysis in the process of building theory from this case study, as described in the previous chapter.

7.7 Discussion of the Major Finding of the Research

The major finding claims that teachers exhibit certain characteristics when they engage with curriculum changes, and these characteristics reflect the types of Curriculum Keepers, Curriculum Shapers and Curriculum Changers. These types emerged in Iteration 2 of the data analysis. Curriculum Keepers were concerned with self and what change meant for them, Curriculum Shapers focussed on task and what had to be done, and Curriculum Changers considered how the impact of the implementation of the changes would enhance and improve the outcomes of their students. Teachers may be Curriculum Keepers in one change, Curriculum Shapers in another and Curriculum Changers in yet another, depending on their depth of engagement with the change. The types were reflected in the personal and professional responses and choices of teachers, which determined their selective engagement with curriculum changes. Consequently, the major finding is discussed under the three types of approaches to change that emerged in the construction of The Selective Engagement Theory. The major finding aligned with the overarching question of the research study.

Overarching Question

How do teachers negotiate mandated curriculum changes?

The Major Finding

Teachers in the research school negotiated mandated curriculum changes as Curriculum Keepers, Curriculum Shapers and Curriculum Changers, according to their depth of engagement with the changes.

7.7.1 Type 1: Curriculum Keepers

The Curriculum Keepers in the research study selectively engaged with change by *Interpreting* it through the processes of filtering and auditing what they knew. They grounded their teaching in what they believed were successful and comfortable past practices, because they had "done things the same way for a long time and did not wish to change" (T5). The processes of the selective engagement of the Curriculum Keepers type are identified in Figure 25.



Figure 25. Processes of the selective engagement of curriculum keepers.

In this study, the data shows that Curriculum Keepers were generally resistant to change, either outwardly or inwardly, for a number of reasons (Conner, 2000; Mulford & Silins, 2003; Fisher, 2005). They may have lacked knowledge and understanding of the change, which made them unsure of what to teach (T2, T5, T8), or they were circumspect about "letting go of good practices" (T6). Some were unreceptive, filtering their understandings through personal experiences, and believed, "in time, the change will go full circle" (T3).

The age and experience of the teacher in the study did not determine the type, although many of the teachers who graduated between 1970 and 1990 had a Curriculum Keepers' perspective (S2, S3, S4, S5, T2, T4, T6). Curriculum Keepers indicated that reforms did not change their teaching practices and they were often sceptical about curriculum changes. They had a sense of isolation in dealing with changes and did not readily share concerns or worries. These teachers felt protected by the privatisation of their practices. Consequently, Curriculum Keepers retained what worked for them without closely examining or reviewing their practices and they either passively ignored changes or actively criticised them.

Curriculum Keepers were advocates of standardisation, prescriptive approaches and generic reporting methods with common report cards across the system. They believed that curriculum design should be completed at a central level and given to them to implement to ensure quality control of planning and assessment (S3, T3, T6). "Why don't they just give us what they want?" (T5). Accountability measures tended to promote the Curriculum Keepers' attitude of the maintenance of the status quo, because they focussed on short-term rote learning teaching strategies to pass a point-intime test. Most Curriculum Keepers preferred to be left alone, and they did not engage in dialogue about their teaching practices. Many did not share their ideas and practices with other teachers. "We know what we are doing" (T4) was their mantra and, although there was compliance with what was expected, there was passive resistance to "red-tape" (S4).

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Some Curriculum Keepers engaged in debates about changes and were vocal about the difficulties that changes caused at classroom level. They believed their frustrations and concerns were "ignored" at system level (T4), and felt that those who were not in the classroom were "out of touch with our reality" (T5).

Do people really listen to our feedback? We give them feedback in terms of what you know is working and not working, but nothing changes. I think that's the most frustrating part for teachers. You're asked for feedback, you give your feedback, but nothing changes. Do they really know what we do? (T5)

When Curriculum Keepers relocated from school to school, they gauged their new learning environment by filtering and auditing their perceptions of the norms of the school through their lens of experience. In the context of Catholic identity, Curriculum Keepers quietly celebrated the Catholic traditions within the religious life of the research school (S1, S2). Curriculum Keepers "did not question what they were asked to do" (S4). Their understanding of the research school culture was filtered through their personal experiences of family and Church within Christian, but not necessarily Catholic, practices.

Many of the teachers in the study were Curriculum Keepers at the onset of mandated curriculum changes. Some remained in this mindset and chose to have nothing to do with the changes if they could, while others grew into Curriculum Shapers through their ongoing exposure to the changes. Thus, these data demonstrate that the selective engagement of Curriculum Keepers with mandated curriculum changes was somewhat shallow and narrow, and characterised by resistance.

7.7.2 Type 2: Curriculum Shapers

The Curriculum Shapers in the research study selectively engaged with change by *Adapting* it through the processes of manipulating and agreeing, and *Adopting* it through the processes of accepting and practising. *Adapting* was the core dimension because it was the primary and favoured process of

the negotiation of curriculum changes by a number of teachers in the research school. Curriculum Shapers were generally compliant as they manipulated and agreed with, accepted and practised curriculum changes in some way. The processes of the selective engagement of the Curriculum Shaper are provided in Figure 26.



Figure 26. Processes of the selective engagement of curriculum shapers.

Teachers in the research school operated within the Curriculum Shapers type as they became more comfortable with curriculum changes. Understandings of changes were influenced by the perceptions and interpretations of colleagues, and changes were adapted according to informal discussions and the sharing of approaches (S2, S4, T2, T5, T6, T8). Different experiences of the same change were reported, highlighting a lack of common understanding, the sharing of misinformation and differences in interpretation. The engagement of teachers with curriculum changes depended on their attitude and energy. Some Curriculum Keepers transitioned to Curriculum Shapers through ongoing exposure to changes as they adapted and adopted different practices and approaches. Such changes were often relative to the opportunities teachers were given at local school levels to engage with curriculum changes. Teachers were Curriculum Shapers when they "ignored what did not suit them" (T4) and chose to manipulate the syllabus content in some way to deliver it. They worked out "the easiest way to do things" as they "made the problems and fixed them" (S3). Curriculum Shapers went from *Adapting* to *Adopting* when their teaching programs began to reflect and connect with aspects of the intent of a change. Some thought reform changed their teaching (S2, T3, T5, T6, T7) and some thought it didn't (S3, S4, T4, T2). It was possible for Curriculum Shapers to put a lot of activity and energy into *Adapting* and *Adopting* changes through re-organisation and re-structure in schools and classrooms. They engaged with and promoted the visible signs of change at school level, but this may have had little impact on improving student learning (Degenhardt & Duignan, 2010) and there was no certainty in the study that these changes infiltrated into classroom practices.

As teachers in a Catholic school, Curriculum Shapers recognised and quietly promoted the Catholic identity of the school. They commented on the need to be "role-models" (T6), "witnesses" (S3) and "examples" (T4) to the students they taught and were aware that the school was becoming "the Church for most of our kids" (S5) in the changing context of the contemporary society. The attitudes and beliefs of Curriculum Shapers were grounded in the Christian values of the Gospel and the articulation of the Jesus story. They equated this to behaviours of care, concern and compassion for students (S2, S3, S4, S5, T2, T3, T4, T5, T6, T8). Curriculum Shapers felt that the Catholic traditions "should influence all we *teach*, otherwise we are not a Catholic school" (T2) and it was the Catholic identity that Curriculum Shapers identified as the difference in the learning environment of the research school (T1, T2, T3, T6, T7). Consequently, Curriculum Shapers thought the culture of a school had the potential to influence curriculum changes.

Therefore, the data demonstrates that the selective engagement of Curriculum Shapers with mandated curriculum changes was characterised by compliance. Teachers in the study engaged with many aspects of curriculum changes by agreeing with and manipulating the philosophy and content without deep consideration. With improved understanding, the changes were accepted. Thus, the engagement of the Curriculum Shapers with curriculum increased and improved as teachers in the study moved from *Adapting* to *Adopting* the change.

7.7.3 Type 3: Curriculum Changers

Curriculum Changers in the research study selectively engaged with change by *Committing* through the processes of transferring and transforming. They were the risk-takers, accepting and open to the challenge of curriculum change. Such teachers showed commitment to the moral purpose of improving student outcomes (Fullan, 2009), maintaining that pedagogy was "the simple most important thing in a child's life" (T4). They were not consumed with the idea of change, they simply focussed on teaching. Figure 27 identifies the processes of selective engagement of the Curriculum Changers.



Figure 27. Processes of selective engagement of curriculum changers.

Curriculum Changers generally operated in their growth or learning zones and embraced the challenges of change. They were "very self-sufficient" (T4) and reflected on and evaluated practices, so that they did not "put too much time into the wrong things [that don't] help our kids or our teaching" (S3). Curriculum Changers exhibited a willingness to learn and grow and were "excited" (T4) about changes. They had a vision of change that was long-term, immediate and short-term. Optimistic, positive and energetic about future possibilities, they were "glass half-full" (S3) about changes. They recognised the advantages of change and made statement like "the Outcomes change was good really. It was probably a big advance in education. It changed our thinking and put a focus on the individual learning journey of our kids" (S4).

Curriculum Changers were generally the energy behind curriculum initiatives in the research school and they were always prepared to "go the extra mile" (S5) when it came to professional learning and extra-curricular commitments. The study showed that Curriculum Changers engaged in robust professional dialogue to ensure they were well informed about all the aspects of any changes they were expected to implement (T4). They transferred changes into their planning programs and felt that they were generally successful in implementing these changes. These teachers were able to discuss the influence change had on their classroom practices, and they spoke with authority and confidence about educational initiatives (T7). Curriculum Changers were willing to share their knowledge and they showed resilience in coping with ongoing change. Their selective engagement with curriculum changes was grounded in deep understandings and efficient management. Accordingly, Curriculum Changers responded to change with resilience and enthusiasm.

Curriculum Changers valued the opportunity to be teacher leaders in their areas of expertise and passion (Harris, 2007; Hattie, 2012; Mulford, 2007; Timperley, 2005). This approach to multi-level leadership in the research school was highlighted as a strength of the research school by most teachers in the study (S1, S2, S3, S4; T3, T4, T7, T8). Supported and shared leadership (Crowther, 2009) promoted depth of engagement with curriculum changes. As teacher leaders, Curriculum Changers undertook leading roles in drama, sport, e-learning and curriculum design. However, there was little

evidence in the research to indicate that these roles influenced the classroom practices of teachers. Teachers in the study could be Curriculum Changers in their collaborative approaches at school level, but it was possible that some tension remained between the theory and the reality of the privatisation and isolation of classroom practices and the philosophies of shared and distributed leadership approaches (Fullan. 2009; Lortie, 1979).

Curriculum Changers believed they were "the face of God" (S3) to students in their ministry in the research school and they took every opportunity to participate in personal and professional ongoing faith formation. They emphasised the culture of the school was manifested in the living of Gospel values within the school community (S1, S3, S4, S5, T1, T3, T4, T6, T8) and believed it was possible to connect secular and religious subjects in their planning approaches (S3, S4, S5, T1, T3, T4, T5). Curriculum Changers endeavoured to build ongoing, life-giving relationships in a friendly, warm and welcoming environment (De Souza, 2002; Flynn, 1993; O'Brien, 2007; Treston, 2001), and they were confident that the identity of a Catholic school was reflected in the delivery of a curriculum within Catholic traditions (S3, S4, S5, T3, T4, T5, T7, T8).

In summary, the selective engagement of Curriculum Keepers, Curriculum Shapers and Curriculum Changers reflected a continuum of the depth of the understanding, management, responses and choices of the teachers in the study as they negotiated mandated curriculum changes. Consequently, the major finding contributes significantly to providing an answer to the overarching question, substantiating the claim that teachers negotiate mandated curriculum changes of Curriculum Keepers, Curriculum Shapers and Curriculum Changers.

7.8 Conclusion

A discussion of the five findings of the research was reported in this chapter. Four findings were addressed through the themes and aspects of Capacity to Change, Teacher Capital, Learning Together and Shaping Culture. In addition, the major finding of the study was discussed through The Selective Engagement Theory. The appropriateness of the Theory was supported by the discussion of the dimensions and processes underpinning the types of approaches that reflected the way teachers negotiate mandated curriculum changes. These types were Curriculum Keepers, Curriculum Shapers and Curriculum Changers. Having discussed the four findings and one major finding of the research, the conclusions and recommendations of the study are presented in Chapter 8.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The purpose of this chapter is to present the conclusions and recommendations of the study. In the previous chapter, a discussion of the findings of the research was presented. The conclusions and recommendations are aligned with the discussion and emanate from the findings of the research study. The following graphic provides an outline for the conclusions and recommendations that are presented in this chapter.

Conclusions and Recommendations			
8.2	Purpose of the Study		
8.3	Research Design		
8.4	Research Questions and Conclusions for Sub-questions 1,2,3		
8.5	Conclusion for the Overarching Question of the Study		
8.6	Contribution to New Knowledge		
8.7	Contribution to Practice		
8.8	Contribution to Policy		
8.9	Recommendations		

8.2 Purpose of the Study

The purpose of the study was to explore the way teachers negotiate mandated curriculum changes. The research indicated that changes were negotiated according to the way teachers understood, managed and responded to change demands at personal and professional levels. The research study was located in a particular school culture that existed within the Catholic tradition. The possibility that the school culture influenced the delivery of curriculum changes was a consideration for this study.

8.3 Research Design

The choice of the research design for the study was grounded in the theoretical framework of the study and the questions that emerged from the literature review. The research design is outlined in Table 24.

Table 24

The	Research	Design

Theoretical Framework			
Epistemology	Constructionism		
Theoretical Perspective	Symbolic Interactionism (Interpretive)		
Research Methodology	Case Study		
Data Collection Methods	Survey Semi-structured Interviews		
	Researcher-generated documents		

The researcher conducted a qualitative study within the epistemology of constructionism to explore the research questions. The basis of constructionism is that truth is constructed rather than revealed (Creswell, 2009; Schwandt, 2001). Symbolic Interactionism was the theoretical perspective, and this perspective is viewed through an interpretivist lens. The experiences of teachers in the research study defined their reality and they acted according to their definitions as they decided what was meaningful to them (Crotty, 1998; Patton, 2002).

The methodology for the research was case study. Case study is a unique story that expresses a desire to come to an understanding of a particular case to explain the learning and behaviour of people (Yin, 2009). The chosen research methods reflected the interactivist perspective of the interpretivist paradigm and both quantitative and qualitative data were collected. The data gathering strategies included a survey of 20 participants, semi-structured interviews of 13 of these participants, and researcher-generated documents.

The research was conducted in a co-educational, Preparatory to Year Seven Catholic primary school in Queensland, Australia. An aim of the case study was to authentically represent the perspectives of the teachers at the research site and give them a voice in relation to the way they negotiated mandated curriculum changes.

A limitation of case study is that it is considered unsuitable for scientific generalisation (Merriam, 2009), however, this study reflects the claim of Eisenhardt and Graebner (2007). Their claim states that when the process of building theory from case study "fully exploits the available evidence in terms of possible nuances and alternative interpretations....the resulting theory is often more parsimonious and also more robust and generalisable" (Eisenhardt & Graebner, 2007, p. 30). Another limitation is that the researcher was an insider and held a senior position at the study site. This meant that the researcher needed to be fully aware of the possibility of personal biases compromising the data collection and analysis, and take appropriate steps to ensure this did not occur. Therefore, it was important for the researcher to listen actively to the participants and seek their feedback on the accuracy of the transcripts of their interviews. The researcher engaged in conversations with critical friends to help maintain the integrity of the research. In addition, the use of three data collection techniques (teacher survey, teacher interviews and researcher-generated documents) minimised the possibility for bias, and the strategy of triangulation was used to cross-check the data from the three sources to search for and validate regularities and irregularities. Overall the strategies of self-reflection, triangulation of the data and seeking feedback for accuracy of the interview transcripts from participants helped maintain high ethical standards for the study (Gilgun, 2010).

8.4 Research Questions Addressed

The purpose of the research was to explore the way teachers negotiate mandated curriculum changes and the word "negotiate" is defined as to "arrange or bring about the desired result" (Sykes, 1982, p. 678). The study

sought to come to an understanding of the purpose by exploring the overarching question that emerged from the literature in Chapter Two and the sub-questions that emerged from the review of a broad range of literature about change and educational change in Chapter Three. The questions were:

Overarching question

How do teachers negotiate mandated curriculum changes?

Sub-questions

Sub-question 1: How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Sub-question 2: How do teachers respond to the negotiation of mandated curriculum changes?

Sub-question 3: How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

The data collections and analyses undertaken by the researcher were framed by these questions, and the findings of the research emerged from two levels of data analysis, namely Iteration 1 and Iteration 2. In Iteration 1, the constant comparative method was used to develop the four themes of Capacity to Change, Teacher Capital, Learning Together and Shaping Culture and their underlying aspects. These themes were used as the organisers for the case summary narratives of the 13 interviews, as well as the organisers for the discussions of the findings.

Iteration 2 constituted the continued interrogation of the data in order to build a theory from this case study research. The process of building theory from case study draws on the research of a number of theorists. It uses the strategies of theoretical sampling, theoretical saturation, overlapped coding, data collection and analysis (Glaser & Strauss, 1967), as well as case study design, replication logic and concern for internal validity (Yin, 1984). In addition, the tools of tabular display of evidence (Miles & Huberman, 1984) are employed, plus priori specification of constructs, participant specification, flexible instrumentation, cross-case analysis tactics and several uses of literature to develop testable hypotheses and theory to support more generalisation across settings (Eisenhardt, 1989). The process is highly iterative, and four dimensions of the way teachers negotiate mandated curriculum changes emerged. The four dimensions were Interpreting, Adapting, Adopting and Committing, and they were underpinned by eight processes. These processes contributed to the generation of three types of approaches engaged in by teachers as they negotiate curriculum changes. The types were Curriculum Keepers, Curriculum Shapers and Curriculum Changers. The theory building resulted in the shaping of a hypothesis and the construction of The Selective Engagement Theory. Four findings emerged from Iteration 1 and one finding emerged from Iteration 2. Thus, the following conclusions and recommendations are drawn from the findings, and the recommendations seek to answer the research questions.

8.4.1 Conclusion for Sub-question 1

Looking at Sub-question One, the concern was the way teachers came to understand a curriculum change, and how they managed the change processes.

Sub-question 1

How do teachers understand and manage the change processes associated with the negotiation of mandated curriculum changes?

Finding 1:

Teachers in the research school understood and managed mandated curriculum changes according to their attitude, knowledge and capacity to change.

The first issue was the different understandings teachers had about curriculum changes. Most of the teachers indicated that they were generally left to interpret curriculum changes in the isolation of the learning environment of a school. Teachers in the research school acknowledged that they came to personal and professional understandings about the management of the processes of mandated curriculum changes in two ways. The first was through the interpretation of their peers and the second was through engagement with the content of the syllabus documents. Although it was possible for the interpretation of peers to be unreliable and result in "the blind leading the blind" (T5), this social sharing of information was the principle way teachers in the research school came to understand and develop their Capacity to Change. Accordingly, it was possible for teachers to be misguided and share shallow understandings if they did not have a deep knowledge of the proposed curriculum change. The data showed that it was possible for teachers to interpret the same curriculum change in a number of ways.

The second issue relates to the attitudes of teachers involved with curriculum changes. Attitudes dictated the choices and responses teachers had to change in the research school and these underpinned the acceptance or rejection of change initiatives. Positive attitudes were open to change and negative attitudes resisted it.

The third issue was the planning and management of curriculum changes. Teachers in the study indicated that they were not aware of any long-term change management plans associated with the curriculum changes they were asked to implement. The changes arrived in the school and there was an assumption that teachers would easily adopt them. However, this was not the case. Some coped with change better than others and some were more resilient because of the depth of their emotional intelligence and capacity to manage changes. It was found that teachers managed curriculum changes at a personal and a professional level with varying degrees of success and engagement. The study indicated that, at the onset of change, many of the teacher participants did not feel empowered to manage mandated curriculum changes.

The fourth issue relates to the clarity of direction for change at system level. Teachers explained that a clear and common vision for curriculum changes was not communicated to them. Yet, teachers had a strong belief that the system had a responsibility and a role in ensuring the coherence of communication about mandated curriculum changes. The importance of consistent messages and system support in developing the capacity of teachers to change was highlighted. Teachers in the research school contended with multiple change paradigms at any one time, but they went from day to day with little clarity of direction about where the change would take them, their school and their students. Hence, the changes "just happened" (S3) to them, and they were often confused, frustrated and worried about ongoing and changing curriculum demands.

The fifth issue was the focus of curriculum changes. Teachers in the study felt that they were often consumed with the pressures of coming to terms with the planning, assessing and reporting frameworks of curriculum changes to the detriment of their teaching practices. The time taken to prepare planning documents eroded the time they needed to focus on the preparation and delivery of teaching and learning activities. There was a feeling by some teachers in the study that the emphasis of teaching seemed to shift from teaching to the management of red-tape and curriculum documentation, resulting in a blurring of the boundaries of their moral purpose to improve student outcomes.

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Conclusion 1

Consequently, it is concluded that the primary way teachers in the research school understood mandated curriculum changes was through the interpretations of their peers and colleagues. These interpretations may have been well grounded or misinformed. Regardless, they shaped the form of curriculum changes in the research school. Teachers in the study managed curriculum changes according to their attitudes. Those with positive attitudes engaged with the curriculum change, those with negative attitudes resisted the change. Finally, the effectiveness and success of the engagement of teachers in the study with curriculum changes was relative to their Capacity to Change. This included their personal resilience and professional expertise in implementing mandated curriculum changes.

8.4.2 Conclusion for Sub-question 2:

In Sub-question Two, the concern was the way teachers in the study responded to change, and the influence of emotional reactions on the choices that were made to engage with curriculum changes.

Sub-question 2

How do teachers respond to the negotiation of mandated curriculum changes?

Finding 2

Teachers in the research school responded to the negotiation of mandated curriculum changes according to their personal and professional choices.

The first issue relates to the influence of the emotions of teachers involved in negotiating curriculum changes. The data indicated that teachers in the research school often responded to change through emotion first and action second. The personal aspects involved being convinced of the need to change, then choosing to go slowly and remain comfortable with familiar practices or plunge more rapidly into the unknown and new. Teachers in the study needed to move through their feelings to accept change and move forward. Change was uncomfortable for many, and their capacity to manage their emotions was a strong predictor of personal effectiveness in negotiating changes.

The second issue relates to the concerns that teachers had about negotiating changes. Concerns were reflected in the words "frustrated" (T3), "worried" (S4), "scared" (T5) and "inadequate" (T6). If teachers in the study operated from these self-concerns, it was possible for them to be disenfranchised by curriculum changes. When they engaged with the change, it became part of their routine. When they changed their focus from the curriculum to the students, they became concerned with the effective implementation of the change. These concerns were underpinned by emotional responses. This meant teachers negotiated mandated curriculum changes according to the choices they made about the demands and expectations of the curriculum changes.

The third issue involved the responses of teachers to change, and this was aligned with The Seven Steps of Change (Matthews, O'Mahony & Barnett, 2006). Teachers in the study unconsciously negotiated some of the Seven Steps as they engaged with change initiatives. However, most of their approaches to managing curriculum changes were unstructured and lacked clear direction and sustainability because they were not aware of the cycle of the Seven Steps of Change. Consequently, they may not have responded to changes as effectively as they could have.

The fourth issue relates to the choices teachers made as they responded to the accountability demands of government testing agendas. Teachers in the study felt pressured to ensure students performed well on mandated tests.

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There was a perception that performance as a teacher was judged by the results of students. The general feeling of teachers in the study was that they had to *teach to the test* to give students *every chance* to meet the required standards. Most teachers in the study were unsupportive of the testing agendas because of the stress they saw in students, and because of the media coverage that appeared to compare schools. Teachers struggled with the dilemma of the conflicting paradigms of the holistic education and the focus on academic achievement in government testing agendas. The confidence of some students was destroyed by test results that often did not reflect the true abilities of the students.

Conclusion 2

Consequently, it is concluded that the responses of teachers to changes in the research school reflected their emotional intelligence and the choices they made as they engaged with the demands of different curriculum approaches. For teachers to be effective change agents, they needed to move out of self-concern and focus on the impact of the change. Teachers in the research school had varying degrees of success in their engagement with change initiatives. They were unaware that successful change followed a prescriptive pattern.

8.4.3 First Conclusion for Sub-question 3:

The focus for Sub-question Three was the influence of the culture of society and the possible influence of the faith tradition of the research school on the delivery of mandated curriculum changes. Therefore, two conclusions were reached for this sub-question. The first deals with the social culture of the learning environment and the second deals with the Catholic culture of the research school.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

Finding 3

The social culture of the school underpinned the professional learning of teachers negotiating curriculum changes.

The first issue relates to the culture of social communication in the research school. The changes associated with curriculum changes were often interpreted through social interactions between peers and colleagues within the comfortable environment and social safety of the school learning context. Teachers in the research school felt valued, and valued each other. The research shows that the majority of professional learning occurred through the social cohesion of the group on some formal and many informal levels in the school. The data indicated that the social culture of the research school was generally a positive conduit for the negotiation of mandated curriculum changes.

The second issue relates to the benefits of formal professional development sessions. Teachers at the research school engaged in professional development opportunities that were organised and facilitated at system level. Some teachers in the study thought they had benefited from these sessions. Others felt that there was little advantage in the gatherings. Few connected the professional development they received to their professional learning, and most felt there was no impact on classroom practices.

The third issue relates to the difficulty teachers in the study had engaging in robust professional conversation and dialogue. Few wished to be seen as critical, and they were not prepared to challenge their peers and colleagues about the suitability or quality of their contributions at inter-school moderation activities. Accordingly, it was found that the opportunity for professional learning to occur within inter-school contexts was limited.

The fourth issue relates to mentoring, coaching and networking approaches in the research school. Generally, these strategies occurred informally and were grounded in the social relationships of the teachers. Formal approaches such as support for graduates and return to work teachers, or shared teacher leadership arrangements, were structured and had specific purposes, but it appeared that such approaches failed to connect to classroom practices. The strength of social networking within the learning environment of the school seemed to be an untapped source. Often, the professional learning of the norms of practice in the research school occurred through osmosis from daily exposure to *the way it is done around here*.

The fifth issue involves the professional learning community in the research school. At school level, there was a congenial and collaborative approach to learning together. Decision-making occurred through the shared wisdom of the group, and all teachers communicated to solve the macro-level problems of school management and organisation. Everyone had an opportunity to *have their say*. This contributed to the building of the collective internal capacity of the school to negotiate changes. However, this method of professional sharing did not extend to the privatisation of classroom practices. While teachers in the research school reflected a professional learning community in the management of changes collectively within the school, this did not appear to extend to individual classroom practices of teaching and learning.

Conclusion 3

Consequently, it was concluded that the most effective professional development that resulted in the professional learning of the teachers in the research school occurred through social interactions, primarily within the social norms of the school context. There was some uncertainty about the
influence of professional development and professional learning on classroom practices.

8.4.4 Second Conclusion for Sub-question 3

As previously mentioned, the culture of the learning environment existed within societal and ecclesial dimensions. The second conclusion for Subquestion Three focuses on the ecclesial dimension, namely, the Catholic faith tradition.

Sub-question 3

How does the culture of a school influence the way teachers negotiate mandated curriculum changes?

Finding 4

The faith tradition of the research school had the potential to influence the learning culture, which, in turn, had the potential to influence the way teachers negotiate mandated curriculum changes.

The study was undertaken in a school that exists within the Catholic faith tradition. The negotiation of mandated curriculum changes occurred within the framework of system beliefs of Church teaching. Hence, the influence of the Catholic identity of the research school on negotiating mandated curriculum change was considered.

The first issue involved examining the influence of contemporary society on the culture of the research school. Tension existed between the ecclesial and societal aspects of school life because of the differences in the value-base of society and the value-base of a school in the Catholic tradition. This tension had the potential to shape the culture of the school. The second issue was linked to an overloaded curriculum and the demands on teachers to be more than facilitators of academic instruction. Teachers in the study felt that the addition of such programs as health and well-being education, family life and the management of social-emotional behaviours changed the focus of the role of the teacher to a doctor, a psychologist and a counsellor.

The third issue related to the changing role of parents in the school and the perceived escalation of self-interest in the parent community. Parents in the school community supported respect, care and compassion, yet this was not shown in the way some approached difficult issues. Sometimes, what parents said they believed in was not reflected in their actions. Although parent partnerships to support the education of the student were promoted in the school, parent support of teachers in their role was, at time, tenuous.

The fourth issue aligned with the influence of the Catholic faith tradition on the teachers in the research school. These teachers were following in the footsteps of the teaching religious personnel, who had promoted the faith tradition of the Catholic Church in the school. Teachers were aware that increasingly it was becoming their responsibility to be *examples of witness* of the message of Jesus to the students in the school. With the disengagement of families with Church, it was possible that the school was representing *the face of Jesus* for many.

The fifth issue involved maintaining the authenticity of the Catholic identity within the learning environment of the research school. When Non-Catholic teachers were employed, there was a responsibility to ensure that they understood the ministry of teaching within the Catholic faith tradition. Many young Catholics were not demonstrating the *old Catholic ways* of church attendance and parish commitment. Most teachers in the research school believed that the faith formation of the student began in the family unit. However, perceptions were that this responsibility was being passed on to the

school by many parents. Some teachers indicated that it was *difficult* to teach faith formation and nurture the spirituality of the students when, at times, they themselves lacked the background knowledge and experience of Church to assist young people in this way.

The sixth issue was what made the research school feel *different*. Teachers in the study equated the differences to the teaching of Religious Education and behaviours and relationships that reflected the Gospel Values. Connecting the content of the curriculum to Church teaching was seen as integral to the teaching and learning in the research school. Teachers in the study indicated that the influence of the Catholic learning environment was in living the messages of Jesus through prayer, worship and works of justice.

Conclusion 4

Consequently, it was concluded that the faith tradition of Catholic teachings had the potential to influence the learning culture of the school, depending on the way teachers promoted the Catholic identity of the school within the ecclesial and societal tensions of contemporary life. Teachers in the research school negotiated the religious life of the school and an overcrowded curriculum within the tension of the conflicting value-bases of society and Church tradition. Data from the research study showed that the faith formation of most teachers occurred primarily through experiences of Church in family or schooling. Ongoing engagement with faith formation was a result of the individual choices of teachers to participate in study, retreats or personal formation sessions during their teaching career. Teachers were convinced that the learning environment of the research school was *different*, and they saw this difference in the way the Catholic identity of the school was lived through the messages of Jesus. There was a feeling that this *difference* had the capacity to influence the implementation of curriculum changes.

In summary, the conclusions of the three sub-questions underpin the overarching question of the study and contribute to the conclusion of the

overarching question, which is grounded in the following major finding of the study.

8.5 Conclusion for the Overarching Question of the Study

The major finding of the study emerged from the process of building theory from case study research, undertaken by the researcher in Iteration 2. The major finding synthesises the understandings, management and responses of teachers to mandated curriculum changes within the culture of the research school.

Overarching question

How do teachers negotiate mandated curriculum changes?

The major finding

Teachers in the research school negotiated mandated curriculum changes as Curriculum Keepers, Curriculum Shapers and Curriculum Changers, according to the choices they made and their depth of engagement with the changes.

Consequently, the conclusions of the major finding are addressed through the three types of approaches that emerged from the theory building process of this case study research. The types are Curriculum Keepers, Curriculum Shapers and Curriculum Changers.

8.5.1 Curriculum Keepers

The first issue was the dimensions and processes engaged in by Curriculum Keepers as they negotiate mandated curriculum changes. In the dimension of *Interpreting*, the processes of filtering and auditing defined the way Curriculum Keepers interpreted mandated curriculum changes. They filtered their understandings of the changes through their own interpretations. They listened to the interpretations of peers and colleagues; however they could

choose to ignore this information. Although they were open to auditing their current practices against the expectations of the changes, they were reluctant to change what they were doing.

The second issue reflected the resistance of Curriculum Keepers in their negotiation of mandated curriculum changes. Some were passive and others were critical and cynical about the ongoing cycles of curriculum changes that, to them, had no purpose or benefit. These teachers often preferred the privatisation of classroom practices and did not readily engage in deep and robust professional dialogue. It was their belief that they should be given what they were expected to teach from system authorities. Curriculum Keepers liked maintaining the status quo and remaining comfortable, and they were reluctant to take risks with new practices.

The third issue was linked to the engagement of Curriculum Keepers in the religious life of the school. These teachers interpreted the Catholic identity of the school through their faith experiences, filtering and auditing what they were expected to do through the religious norms of the school. Some had limited understandings of the Catholic tradition, and they relied on peers and colleagues to keep them informed. Curriculum Keepers accepted the culture of the research school.

The fourth issue related to the influence of the Curriculum Keepers on the research school. All teachers began their engagement with curriculum change as Curriculum Keepers. However, it was through attitude, choice and response that Curriculum Keepers either remained in the type, or engaged with mandated changes. It was possible for a teacher to be a Curriculum Keeper in one change, and demonstrate a different response in another change, relative to their capacity to engage with the change. The data of the study indicated that, overall, Curriculum Keepers were in the minority in the research school and those who tended towards this type did not have a lot of influence on the attitudes and choices of other teachers.

Conclusion 1 of the major finding

Consequently, it is concluded that all teachers were Curriculum Keepers at the onset of mandated curriculum changes. Passive Curriculum Keepers were resistant, and active Curriculum Keepers challenged the purpose, need and benefit of mandated changes. Reasons for this included lack of knowledge and understanding of the philosophy of the change, lack of confidence in the change to be any more effective than current teaching approaches and lack of motivation to engage in change. In the research school, most began the change journey as Curriculum Keepers, but few remained in this type after their initial engagement with the curriculum syllabi and change expectations.

8.5.2 Curriculum Shapers

The first issue aligned with the processes engaged in by Curriculum Shapers as they negotiate mandated curriculum changes by *Adapting* and *Adopting*. They engaged in the processes of manipulating and agreeing as they were *Adapting* to change and the processes of accepting and practising when they were *Adopting* change. *Adapting* and *Adopting* constitute a partnership of deeper engagement and connecting with the intent of the changes. However, findings from the research showed that it was possible for Curriculum Shapers to put a lot of energy into *Adapting* and *Adopting* through restructuring procedures and redesigning processes, but the influence on student learning remained uncertain.

The second issue relates to the compliance of Curriculum Shapers in their negotiation of mandated curriculum changes. Although teachers chose to manipulate the syllabus content, they were proactive and energetic in promoting changes. Peer interpretations were accepted and valued, and attitudes to change were open and positive. Teachers engaged in social communication and generally learnt what they needed to do from each other. Not all were confident in their ability to design quality learning programs to implement the changes. Data from the research indicated that Curriculum

Shapers felt it took some time to become comfortable with change. Once this happened, there was a danger that Curriculum Shapers could default to Curriculum Keepers if they were not continually challenged to engage with ongoing reflection and review of the curriculum they put into place. Curriculum Shapers conformed to the expectations of mandated changes, and chose to move forward with care.

The third issue relates to the engagement of Curriculum Shapers in the religious life of the school. Curriculum Shapers recognised and promoted the Catholic identity. Their attitudes and beliefs were grounded in the Christian values of the Gospel and the articulation of the Jesus story in the research school. They described their school as *different*, and explained that the difference was in the way they wove Church teachings into the fabric of the school culture.

The fourth issue relates to the influence of the Curriculum Shapers on the research school. Most of the teachers in the study were Curriculum Shapers and this was demonstrated by their engagement with curriculum changes. They were continually *Adapting* and *Adopting* the changes to deliver teaching and learning programs. Although there was much activity in changing planning, assessing and reporting processes, teachers in the study indicated that it was possible that there was less impact on their teaching practices. Curriculum Shapers reflected a sense of energy and control over the management of mandated curriculum changes.

Conclusion 2 of the major finding

Consequently, it was concluded that the majority of teachers in the study reflected the type of the Curriculum Shapers in their attitudes, choices and responses to the negotiation of mandated curriculum changes.

8.5.3 Curriculum Changers

The first issue relates to the processes engaged in by Curriculum Changers as they negotiate mandated curriculum changes. By *Committing*, Curriculum Changers engaged in the processes of transferring and transforming the change. They focussed on how the changes would benefit students and they had a willingness to learn and grow with the changes. Curriculum Changers had the capacity to transfer the knowledge and understandings of change into their teaching and learning approaches so that they could transform their practices to reflect the change. Their motivation and moral purpose was improving student outcomes.

The second issue involved the embedding and sustainability of mandated curriculum changes into school and classroom practices by Curriculum Changers. With a willingness to share knowledge and expertise in their areas of passion, Curriculum Changers supported shared teacher leadership approaches in the research school. Often, their facilitation and promotion of curriculum changes contributed to the embedding and sustainability of processes and procedures that supported change.

The third issue relates to the engagement of Curriculum Changers in the religious life of the school. Curriculum Changers were proactive in being the *face of Jesus* to students. They had a commitment to Parish life and Church tradition and participated in on-going faith formation opportunities. Curriculum Changers were confident that the identity of their Catholic school was reflected in their thoughts, words, actions and deeds.

The fourth issue involved the influence of the Curriculum Changers on the research school. Curriculum Changers often generated excitement about engaging with curriculum changes. They had innovative and creative ideas for what could be done, and they were prepared to work to make it happen. How Curriculum Changers influenced their peers and colleagues was relative to their sphere of social influence and the support and encouragement given by

school leadership to empower them as teacher leaders. The data showed that Curriculum Changers embedded sustainability of approaches through collegial teamwork and co-operative teaching and learning practices.

Conclusion 3 of the major finding

Consequently, it was concluded that the type of Curriculum Changers was reflected in the depth of engagement teachers had with change initiatives. Different teachers in the study engaged in curriculum changes in different ways, and the Curriculum Changers type emerged at certain times in certain mandated changes. This was relative to the way the teacher performance culture of the school was supported and promoted by school leadership.

In summary, interrogation of the data indicated that the continuum of teacher involvement with mandated curriculum changes fluctuated from shallow to deep engagement, or somewhere in between. The researcher explained this as the depth of engagement of the types of Curriculum Keepers, Curriculum Shapers and Curriculum Changers. The engagement of Curriculum Keepers was generally surface level, the engagement of Curriculum Shapers was somewhat deeper and the engagement of the Curriculum Changers promoted the embedding of curriculum changes. The reason for this was the motivation of the teacher and it was reflected in the human dimensions of resistance, compliance and confidence in implementing mandated curriculum changes. As previously stated, teachers in the research school could be Curriculum Keepers with one mandated curriculum change, Curriculum Shapers with another and Curriculum Changers with yet another, depending on their levels of engagement. Engagement was not static or linear because teachers chose to engage or dis-engage with mandated curriculum changes for particular reasons.

This is the major finding of the study and it answers the overarching question, which is:

Overarching question

How do teachers negotiate mandated curriculum changes?

Having presented the conclusions of the study, the contributions to new knowledge, to practice and to policy are identified. These contributions are positioned in the conclusions of the study.

8.6 Contribution to New Knowledge

There are two contributions to new knowledge offered by the researcher. The first recognises a need to educate teachers to reflect on their attitudes, choices and responses to curriculum change, and the second illuminates the influence of the social learning environment of the research school.

Contribution 1

The first contribution to new knowledge from this research is that the practices of teachers reflect the types of Curriculum Keepers, Curriculum Shapers and Curriculum Changers. It may be beneficial for teachers to be informed of the characteristics of these types so that they can enhance their self-awareness when dealing with curriculum changes. Educating teachers to identify their attitudes, choices and responses to mandated curriculum changes through these curriculum perspectives may be the catalyst for the growth of Teacher Capital in managing, understanding and responding to mandated changes.

Contribution 2

The second contribution to new knowledge is the influence of the social comfort zone of the school-learning environment on the professional learning of teachers. Teachers in the study indicated that their most powerful and beneficial learning occurred through interaction with their peers and colleagues within the school context. It is possible that consideration of informal and formal channels of communication through mentoring, coaching

and networking in a school could promote professional learning and capitalise on this social interaction to encourage teacher growth.

8.7 Contribution to Practice

The contribution to practice from this research is that the negotiation of mandated curriculum changes requires well-planned approaches. The researcher suggests that four strategic approaches could be considered.

Contribution 1

A strategic approach to negotiating mandated curriculum changes through 'A Change Plan' is proposed to give teachers clarity of direction and common understandings.

Findings from the study have shown that teachers in the research school negotiate mandated curriculum changes according to their knowledge and understanding of the change. Unless teachers are well informed about what the mandated curriculum changes are, they will default to interpreting the changes according to their experiences and the experiences of their colleagues. This implies that systems and schools should give clarity of direction to teachers through well-articulated 'Change Plans', so there is common and shared wisdom and discernment about the vision, expectations, direction, processes and procedures of the changes.

Contribution 2

A strategic approach to negotiating mandated curriculum changes through 'A Choice Plan' is proposed to give teachers confidence and assurance in the control and ownership of curriculum changes.

The second contribution to practice is that teachers in the research school determined the way they negotiated mandated curriculum change through choice. Their resolve to either connect or disconnect with curriculum changes

was underpinned by their attitudes and emotions. If teachers are to move through decisions to engage with curriculum changes rather than return to feeling comfortable and maintaining the status quo, their choices, both reactive and responsive, should be recognised. Choices can be addressed through individual 'Choice Plans' so that a change culture can be promoted and supported.

Contribution 3

A strategic approach to negotiating mandated curriculum changes through 'A Performance Plan' is proposed to give teachers an understanding of the professional learning they must engage in to manage ongoing changes.

The participants in the study negotiated two levels of engagement with mandated curriculum changes. They experienced it collectively as a professional learning community and individually as a classroom teacher. Generally, the better informed the teacher, the deeper the negotiation with the curriculum changes. Hence, the need for 'A Performance Plan' that identifies the personal and professional learning needs of the teacher in any change is recommended. Those in leadership positions in systems and schools should work in partnership with teachers to identify and meet the learning needs of individual teachers as well as the professional learning needs of a school to enable depth of engagement with the negotiation of mandated curriculum changes.

Contribution 4

A strategic approach to negotiating mandated curriculum changes through 'A Formation Plan' is proposed to develop the philosophical and theological understandings of teachers in the values base of their school.

This strategy concerns the formation of teachers in the ecclesial traditions of a school. The philosophical and theological grounding of the research

participants in the Catholic faith tradition has the potential to influence the Catholic culture and the learning environment of the research school. Consequently, it is appropriate to suggest there is a need for 'A Formation Plan' that promotes the Catholic Identity of a school and offers individual teachers the opportunity to continue their faith journey as people and teachers who chose to be part of Catholic Education.

8.8 Contribution to Policy

The practices of teachers and schools in the negotiation of mandated curriculum changes are underpinned by educational policies formulated at government and system levels. It is prudent for policy makers to consider the realities of taking policy into practice. Therefore, there are two contributions for the consideration of policy-makers in this study.

Contribution 1

This research was a study about the negotiation of mandated curriculum changes by teachers in a particular primary school. Teachers in the study indicated that they often entered into curriculum changes with no clarity of direction or common understandings of the changes. Consequently, it is suggested that policy-makers take into consideration the challenge of change for teachers and develop change policies that will contribute to promoting the confidence and professional learning of the teachers who are charged with and engaged in curriculum changes.

Contribution 2

Much teacher activity surrounded the negotiation of mandated curriculum in the research school. However, there was uncertainty about the influence of the changes on the classroom practices of teachers. Consequently, it is suggested that policy-makers develop policies about teaching practices to promote the effective implementation of mandated curriculum changes that focus on improving student outcomes.

This study began with the words of Sergiovanni (1995), who indicated "few changes touch teachers and students and few changes affect teaching and learning in the long run" (p. 278). Levin (2012) was of the opinion that "governments, schools and systems tend to be much bigger on announcing new initiatives than they are on putting in place all the mechanisms necessary for those new announcement to turn into reality and become permanent features of the landscape" (pp. 5-6). Both statements issue a challenge to policy-makers. The challenge is for policy makers to ensure the policies that are produced are able to be transferred into practices that make a difference in schools, so that teachers may negotiate mandated curriculum changes with confidence and assurance.

8.9 Recommendations

The following recommendations come from the conclusions of the study and they are offered for the consideration of policy-makers, system leaders, principals and teachers.

Recommendation 1

It is recommended that 'Change Management Plans' be designed to support and direct the development of the knowledge and understanding of teachers to negotiate mandated curriculum changes effectively. Such plans could focus on the process of change and provide clarity of direction for those involved. There is a need to develop policies and implement procedures to support change management approaches at system, school and classroom levels.

Recommendation 2

It is recommended that the emotional capacity of the individual to respond to mandated curriculum changes should be carefully assessed before any change is introduced. This was apparent in the diverse human responses of teachers in their negotiation of mandated changes. The interview data indicated that responses to change were grounded in the emotional intelligence of the individual. The concerns of those involved underpin the attitudes, choices and responses to change. Any personal or professional resistance should be managed appropriately to build resilience and confidence, so that the individual and collective capacity of teachers and leaders to negotiate ongoing mandated curriculum changes is developed and supported.

Recommendation 3

It is recommended that a performance culture of professional learning in schools could capitalise on the social communication of teachers. Approaches in schools could be structured to incorporate informal and formal mentoring, coaching and networking approaches. The purpose and focus of all these approaches should be professional learning to promote classroom practices that improve student outcomes.

Recommendation 4

It is recommended that there should be a focus on structured and formal approaches to promote the formation of teachers in the knowledge and understanding of the identity of a Catholic school in contemporary society. As the responsibility for shaping the culture of a school in the Catholic tradition is passed from religious personnel to teachers, it is important to offer opportunities for the ongoing faith formation of teachers in Catholic schools. There is a system responsibility to ensure teachers understand that they are obliged to negotiate and connect mandated curriculum changes to the philosophical and theological values of the Catholic faith tradition.

Recommendation 5

It is recommended that the types of approaches of Curriculum Keepers, Curriculum Shapers and Curriculum Changers be used to evaluate the personal and professional capacities of teachers to engage with curriculum changes. The types offer a Conceptual Framework to guide the Professional Development of Teachers. They are a platform that teachers can use to review and reflect on their approaches and practices. In addition, it is a guide for principals charged with supporting teacher performance and providing professional feedback. System personnel could create a framework for the Professional Development of Teachers to develop common approaches across Diocesan schools to support quality teaching practices and teacher formation. Such practices could promote a common language for the development of a vision and mission that inspires school personal to engage in the successful negotiation of mandated curriculum changes.

Recommendation 6

It is recommended that that further research is conducted on the influence of mandated curriculum changes on the classroom practices of teachers. This research study focussed on the space between the rhetoric of the policy on mandated curriculum changes and the negotiation of these changes by teachers in a particular school. Throughout the research, there was some uncertainty about how this influenced teaching practices. It was apparent that the tradition of the privatisation of classroom practices existed in the research school. While much energy surrounded the negotiation of mandated curriculum changes at a collective level in the school, little data were collected about the individual classroom practices of teachers. In a time when teachers are being challenged by governments and systems to be accountable for their performance and provide evidence to show the effectiveness of their practices, this study may stimulate further research into the implementation of mandated curriculum changes by individual classroom teachers.

8.10 Conclusion

In conclusion, the researcher offers the Triple E Model for the Negotiation of Mandated Curriculum Changes. The model encourages those involved in education to Envisage, Engage and Embed all aspects of mandated curriculum changes. It is encapsulated in the vision:

> Envisage the change Engage with the initiative Embed the practices

The model synthesises the conclusions of the research and encourages all those involved in the negotiation of mandated curriculum changes to begin the process with four plans in mind: namely, 'A Change Plan', 'A Choice Plan', 'A Performance Plan' and 'A Formation Plan'. It is a reminder that such plans should be considered at system, school and classroom levels. The successful negotiation of mandated curriculum changes is grounded in the Capacity of the teacher to Change, which, in turn, promotes the growth of Teacher Capital at individual and collective levels in schools. It is the enabling and empowering of social networking in the comfort and tradition of a particular school learning environment that contributes to the performance ethos of a school, with teachers Learning Together, creating the norms that contribute to Shaping Culture.

Accordingly, the researcher offers The Triple E Model as a response to the overarching research question of the thesis.

The overarching question was:

Overarching question

How do teachers negotiate mandated curriculum changes?

Figure 28 is the Conceptual Framework of the Triple E Model that may be considered for Negotiating Mandated Curriculum Changes in the future.

TRIPLE E MODEL for NEGOTIATING MANDATED CURRICULUM CHANGES



Figure 28. Triple e model for negotiating mandated curriculum changes.

REFERENCES

- Abrams, L. (2004). *Teachers' views on high-stakes testing: Implications for the classroom*. Temple, AZ: Education Policy Studies Laboratory.
- Aiken, C., & Keller, S. (2009). The irrational side of change management. *McKinsey Quarterly*, (2). *Retrieved from* <u>www.mckinseyquarterly.com</u>
- Anderson, M., & Cawsey, C. (2008). *Learning for leadership: Building a school of professional practice.* Camberwell, VIC: ACER Press.
- Andrews, D., & Lewis, M. (2004). Building sustainable futures. *Improving School 7*(2), 129-150.
- Andrews, R., Burn, A., Leach, J., Locke, T., Low, G., & Torgerson, C. (2002). A systematic review of the impact of networked ICT on 5-16 year olds' literacy in English. Institute of Education, University of London.
- Argyris, C. (1980). Inner contradictions of rigorous research. New York: Academic Press.
- Argyris, C. (1985). Strategy, change and defensive routines. Boston: Pitman.
- Argyris, C. (1992). On organisational learning. Cambridge, MA: Blackwell Publishers.
- Argyris, C., & Schon, D. (1974). *Theory in practice: Increasing professional effectiveness.* San Francisco: Jossey Bass.
- Argyris, C., & Schon, D. (1978). Organisational learning: A theory of action perspective. Reading, Mass: Addison Wesley.
- Argyris, C. & Schön, D. (1996) Organizational learning II: Theory, method and practice. Reading, Mass: Addison Wesley.
- Ashkanasy, N. H. (2000). *Emotions in the workplace: Research, theory and practice.* Westport, CT: Quorum Books.
- Australian Curriculum Assessment and Reporting Authority. (2010). *School profile: Myschool.* Retrieved from <u>http://www.myschool.edu.au/MainPage/SchoolProfileRep.asp/SDRSchoolID=3200</u>...
- Australian Curriculum Assessment and Reporting Authority. (2011). *Myschool.* Retrieved from <u>http://www.acara.edu.au</u>
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education 27*, 10-20.

Babbie, E. (2010). The practice of social research. Belmont, CA: Wadsworth.

- Ball, S. (2008). The education debate. Bristol, UK: The Policy Press.
- Barber, M., & Mourshed, M. (2007). *How the world's best-performing school systems come out on top.* London: McKinsey & Company.
- Barnes, C., Camburn, E., Sanders, B., & Sebastian, J. (2010). Developing instructional leaders: Using mixed methods to explore the black box of planned change in principals' professional practice. *Educational Administration Quarterly, 45*(2), 241-279.
- Barnett, B., & O'Mahony, G. (2008). Mentoring and coaching programs for the development of school leaders. In G. Crow, J. Lumby & P. Pashiardis (Eds.), *International handbook on the preparation and development of school leaders*. Mahwah, NJ: Lawrence Erlbaum.
- Barry, G., Elliott, M., Harvey, D., Koszarycz, M., Lavercombe, P., Rush, K., Sunter, G.,
 Walsh, T. (2003). *Religious education: Years 1 to 10 learning outcomes.* Brisbane:
 Brisbane Catholic Education.
- Barry, G., Elliott, M., & Rush, K. (2003). *Religious Literacy: Redesigning the religion classroom*. Paper presented at Third National Symposium Religious Education and Ministry. Melbourne: ACU.
- Bate, P. B. (2005). *Towards a million change agents: A review of the social movement's literature.* London: Natural Health System.
- Bauerlein, M. (2008). *The dumbest generation: How the digital age stupefies young Americans and jeopardises our future.* New York: Tarcher Penguin.
- Beare, H. (2006). *How we envisage schooling in the 21st century: Applying the new 'imaginary'*. London: ACEL & Specialist Schools and Academies Trust.
- Beare, H., Caldwell, B., & Millikan, R. (1991). *Creating an excellent school.* London: Routledge.
- Becta. (2003). What the research says about interactive whiteboards. Coventry: British Educational Communications and Technology Agency.
- Beck, D., & Cowan, C. (1996). Spiral dynamics: Mastering values, leadership and change. London: Blackwell Business.
- Bertram, T., & Pascal, C. (2002). *Early years education: An international perspective.* London: National Foundation for Educational Research in England and Wales.

- Bevan, H., Roberts, G., Maher, L, & Wells, J. (2007). Using a design approach to assist a large scale organisational change. *Journal of Applied Behavioural Science* 43(1), 135-152.
- Bloom, B. (1968). Learning for mastery. *Evaluation Comment*, (1) & (2).
- Blumer, H. (1998). *Symbolic interactionism: Perspective and method.* California: University of California Press.
- Blyth, A. (2002). Outcomes, standards and benchmarks. *Curriculum Perspectives*, 22(3), 13-22.
- Boe, E., & Shin, S. (2005). Is the United States losing the international horse race in academic achievement? *Phi Delta Kappan, 86*(9), 688-695.
- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & Quantity, 36,* 391-409.
- Boeve, L. (2006). The identity of a catholic university in post-christian European studies. *Louvain Studies*, 31(3-4), 238-258.
- Bogdan, R., & Biklen, S. (2007). *Qualitative research for education: An introduction to theory and methods.* Boston: Allyn & Bacon.
- Bourgeois, L., & Eisenhardt, K. (1988). Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management Science*, *34*, 816-835.
- Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking questions: the definitive guide to questionnaire design.* San Francisco: Jossey-Bass.
- Bridges, W. (1995). *Managing transitions: Making the most of change*. London: Nicholas Brealey.
- Bryk, A., & Frank, K. (1991). The specialisation of teachers' work: An initial exploration. In S. Raudenbush & J. Wilms (Eds.), *Schools, classroom and pupils* (pp. 195-196). San Diego: Academic Press Inc.
- Buchanan, M. (2009). Religious education in Australian catholic schools: Past and present. *Religious Education Journal of Australia, 25*(2), 30-37.
- Buckingham, J. (2010). *The rise of religious schools in Australia*. Australia: Centre for Independent Studies.
- Burford, C. (2002). Pedagogy, frameworks and learning: Can we make the link? *Learning Matters*, *7*(3) 3-7.

- Burney, D. (2004). Craft knowledge: The road to transforming schools. *Phi Delta Kappan, 85*(7), 526-532.
- Burns, R. (2000). Introduction to research methods. Australia: Pearson.
- Campbell, E. (2005). Challenges in fostering ethical knowledge as professionalism within schools as teaching communities. *Journal of Educational Change 6*(3), 207-226.
- Canavan, K. (1995). Why parents choose (or don't choose) a catholic school. *The Australasian Catholic Record, LXXII*, 3, 295-305.
- Canavan, K. (2003). *Life in the media age from 1978-2000.* Sydney: Catholic Education Office.
- Carr, P. (2008). Educators and education for democracy: Moving beyond "thin" democracy. *International Journal of Education and Democracy, 1*(2), 247-264.
- Carr-Gregg, M. (2004). Why adolescence is harder in 2004 than in 1974. *Lights Out 17*(3),1-2.
- Catholic Education Office Melbourne. (2009). *Learning centred schools: A sacred landscape*. Retrieved from <u>http://www.asacredlandscape.catholic.edu.au/contemporary-learning/index.html</u>
- Champion, R. (2003). Planning for action, step by step. *Journal of Staff Development, 22*(4), 62-63.
- Charon, J. (2001). Symbolic interactionism: An introduction, an interpretation, an integration. Upper Saddle River, NJ: Prentice Hall.
- Chesterton, P., & Johnson, K. (1999). *Access to catholic schooling.* Canberra, Australia: National Catholic Education Commission, Australian Catholic University.
- Church Documents on Catholic Education. (2004). John Paul 11:Ecclesia in oceania: The church in oceania. Homebush: St Pauls Publications.
- Congregation for Catholic Education. (1998). *The catholic school on the threshold of the third millennium.* Homebush: St Paul Publications.
- Conner, D. (1992). Managing at the speed of change. New York: Random House.
- Conzemius, A., & O'Neill, J. (2001). *Building shared responsibility for student learning.* Alexandria, VA: Association for Supervision and Curriculum Development.
- Cook, T. (2004). Architects of catholic culture: Designing and building catholic culture in catholic schools. Washington, DC: National Catholic Education Association.

- Corbin, J., & Morse, J. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative Inquiry*, *9*, 335-354.
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research. Los Angeles, CA: Sage.
- Corner, T. (2000). Education and the third wave. In C. Matheson & D. Matheson (Eds.), *Educational issues in the learning age* (pp. 216-232). London: Continuum.
- Cresp, M. (2005). *In the spirit of Joseph.* North Sydney, NSW: Trustees of the Sisters of St Joseph.
- Creswell, J. (1998). *Qualitative inquiry and research design: choosing among five traditions.* Thousand Oaks: CA: Sage.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches.* Upper Saddle River, NJ: Pearson Education.
- Creswell, J. (2007). Qualitative inquiry and research design: choosing among five approaches. Upper Saddle River, NJ: Pearson Education.
- Creswell, J. (2009). *Research design: Qualitative, quantitative and mixed methods approaches.* Los Angeles: Sage.
- Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. Sydney: Allen & Unwin.
- Crowther, F. (2009). Teacher leadership. New York: Corwin Press.
- Crowther, F. (2011). *From school improvement to sustained capacity.* Thousand Oaks: CA: Sage.
- Crowther, F., Andrews, D., Dawson, M., & Lewis, M. (2001). *IDEAS facilitation folder.* Toowoomba, Australia: Leadership Research Institute, University of Southern Queensland.
- Crowther, F., Kaagan, S., Ferguson, M., & Hann, L. (2002). *Developing teacher leaders: How teacher leadership enhances school success.* Thousand Oaks, CA: Corwin Press.
- Crowther, F., Ferguson, M., & Hann, L. (2009). *Developing teaching leaders: How teacher leadership enhances school success.* Thousand Oaks: CA: Corwin Press.
- Cuban, L. (2001). *Oversold and underused: Computers in the classroom.* Cambridge, MA: Harvard University Press.

- Cumming, J., Wyatt-Smith, C., Elkins, J., & Neville, M. (2006). *Teacher judgment: Building an evidentiary base for quality literacy and numeracy education.* Centre for Applied Language, Literacy and Communication Studies and Centre for Learning Research, Brisbane.
- Curriculum Corporation. (2007). *The curriculum discourse in Australia in 2007 and beyond: The future of school in Australia report.* Retrieved from www.dest.gov.au/schools/publicaton/2003/ves/ves_report.pdf.
- Cuttance, P. (2005). *Planning and accountability for school improvement: National and international literature review.* Retrieved from http://www.sofweb/vic/edu/au/standards/pdf/05
- Day, C. (2007). *Teachers matter: Connecting work, lives and effectiveness*. Maidenhead: McGraw/Hill Open University Press.
- Day, C. (2011). New understandings of teacher effectiveness: Emotions and education change. In *How School Principal's Sustain Success Over Time*. (pp. 223-230). International Perspective: Springer.
- Day, C., & Gu, Q. (2010). The new lives of teachers. Hoboken: Routledge.
- Day, C., Harris, A., & Hatfield, M. (2001a). Challenging the orthodoxy of effective school leadership, *International Journal of Leadership in Education, 4*(1), 39-56.
- Deal, T., & Peterson, T. (2009). *Shaping school culture: Pitfalls, paradoxes and promises.* San Francisco: Jossey Bass.
- Dee, T., & Jacob, B. (2011). The impact of no child left behind on student achievement. Journal of Policy Analysis and Management. 30(3), 418-446.
- Degenhardt, L., & Duignan, P. (2010). *Dancing on a shifting carpet: Reinventing traditional schooling for the 21st century.* Camberwell, Victoria: ACER Press.
- Degenhardt, L., Lynskey, M., & Hall, W. (2000). Cohort trends in the age of initiation of drug use in Australia. *Australian and New Zealand Journal of Public Health 24*(4), 421-426.
- Denscombe, M. (2010). *The good research guide: For small-scale social research projects*. Philadelphia: Open University Press.
- Denzin, N., & Lincoln, Y. (2005). *The sage handbook of qualitative research.* Thousand Oaks, CA: Sage.
- Denzin, N., & Lincoln, Y. (2007). *Collecting and interpreting qualitative materials.* Thousand Oaks, CA: Sage.

- Denzin, N., & Lincoln, Y. (2008). *Strategies of qualitative inquiry.* Thousand Oaks, California: Sage Publications.
- Department of Education, Science and Training. (2003). Values Education Study: Final report. Canberra, ACT: McMillan Printing Group.
- Department of Education, Employment and Workplace Relations. (2004). *Learning Together: Achievement through Choice and Opportunity.* Act No. 135. Canberra: McMillan Printing Group. Retrieved from <u>http://www.deewr.gov.au/aschooling/RecurrentGrants/NonGovSchools/Pages/GrantTostates.aspx</u>
- Department of Education, Science and Training. (2004). *Taking Schools to the next level.* Canberra, ACT: Australian Government. Retrieved from <u>http://www.dest.gov.au/school/taking_schools_to_the_next_level_htm</u>.
- Department of Education, Employment and Workplace Relations. (2008). Success through partnership: Achieving a national vision for ICT in schools. Retrieved from <u>http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/Documents/DER%20</u> <u>stratgic%20plan.pdf</u>
- Department of Education, Employment and Workplace Relations. (2008). Administrative guidelines: Commonwealth programs for non-government schools, 2009-2012. Act No. 124. Canberra: Australian Government. Retrieved from <u>http://www.deewr.gov.au/aschooling/RecurrentGrants/NonGovSchools/Pages/GrantToStates.aspx</u>
- Department of Education, Employment and Workplace Relations. (2011) Success through partnership: Achieving a national vision for schools. Retrieved from <u>http://foi.deewr.gov.au/documents/success-through-partnership-achieveing-national-vision-ict-schools</u>.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualisations and measures. *Educational Researcher, 38*(3), 181-190.
- De Souza, L., (2002). *The catholic school: Nurturing young people's spirituality*. Unpublished paper delivered at Melbourne Religious Education Conference.
- Deutschman, A. (2005). Change or die. Fast Company, May, 94, 53-57.
- Dixon, R. (2005). The catholic community in Australia. Adelaide: Openbook Publishers.
- Dowling, A. (2008). *Output measurement in education*. Melbourne, Victoria: Australian Council for Educational Research.

- Duignan, P., Kelleher, M., & Spry, G. (2003). *Framework for educational leadership: Queensland catholic schools.* Strathfield, Australia: ACU National.
- Duignan, P., & Gurr, D. (2007). *Leading Australia's schools*. Winmalle, NSW: Australian Council for Educational Leaders.
- Dwyer, B. (2002). Has religious education become a derivative subject? *Journal of Religious Education, 50*(3), 50-54.
- Earl, L., & Katz, S. (2006). *Leading schools in a data rich world*. Retrieved from http://www.eed.state.ak.us/nclb/2008wc/Focus_On_Leadership.pdf
- Edwards, B., & Taylor, M. (2009). *Does it matter what age children start school in Australia?* Australian Institute of Family Studies Mario Fiorini, Sydney: University of Technology.
- Edwards, M. (2010). Organisational transformation for sustainability: An integral metatheory. New York: Routledge.
- Eisenhardt, K. (1989). Building theories from case study research. Academy of Management *Review, 14*(4), 532-550.
- Eisenhardt, K., & Graebner, M. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal, 50*(1), 25-32.
- Elmore, R. (2004). School reform from the inside out: Policy, practice, and performance. Cambridge, MA: Harvard University Press.
- Elmore, R. (2011). *I used to think, and now I think.* Cambridge, MA: Harvard Education Press.
- Eltis, K. (2003). *Time to teach, time to learn.* Sydney: NSW Department of Education and Training.
- Ehrich, L. (2008). Mentoring and women managers: another look at the field. Gender In Management: *An International Journal, 23*(7), 469-483.
- Ehrich, L. (2011). Mentoring. In S. O'Toole, N. Ferres & J. Connell (Eds.), *People Development: Developing Individuals, Managers and Organisations*. (pp. 7-16). Tilde University Press, Prahran, VIC.
- Fine, D., Hansen, M., & Roggenhofer, S. (2008). From lead to lasting: Making operational improvements stick. *McKinsey Quarterly, November.* Retrieved from <u>www.mckinseyquarterly.com</u>
- Fink, A. (2003). *How to report on surveys*. London: Thousand Oaks.

- Fisher, J. (2005). A Time for Change. *Human Resource Development International, 8*(2), 257-264.
- Fisher, D., Roach, V., & Frey, N. (2002). Examining the general programmatic benefits of inclusive schools. *International Journal of Inclusive Education, 6,* 63-78.
- Fleming, J., & Kleinhenz, E. (2007). *Towards a moving school: Developing a professional learning and performance culture.* Camberwell, Victoria: ACER Press.
- Flynn, M. (1993). The culture of catholic schools. Homebush: Society of St Paul's.
- Flynn, M. &. Mok, M. (2002). *Catholic schools 2000.* Sydney: Catholic Education Commission.
- Flyvbjerg, B. (2006). Five misunderstandings about case study research. *Qualitative Inquiry*, *12*(2) April, 219-245.
- Flyvbjerg, B. (2011). Case Study. In N. K. Denzin and Y. S. Lincoln, (Eds.), *The sage handbook of qualitative research.* (pp. 301-316). Thousand Oaks, CA.
- Frederickson, B. (2001). *The role of positive emotions in positive psychology,* American Psychologist, *56*(3), 218-226.
- Freebody, P. (2005). *Queensland curriculum, assessment and reporting framework: Background and specifications.* Brisbane: Queensland Government: Department of Education and Arts.
- Fullan, M. (2005). 8 forces for leaders of change. *Journal of Staff Development, 26*(4), 54-64.
- Fullan, M. (2005b). *Leadership and sustainability: System thinkers in action.* Thousand Oaks, CA: Corwin.
- Fullan, M. (2006). Turnaround leadership. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2008). The six secrets of change. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2009). *The challenge of change: Start school improvement now.* Canada: Corwin.
- Fullan, M. (2011). *Choosing the wrong drivers for system reform.* Centre for Strategic Education. Seminar Paper No. 204, Melbourne: Victoria.

Fullan, M., Hill, P., & Crevola, C. (2006). Breakthrough. London: Sage.

- Galton, M. (2000). Big change questions: Should pedagogical change be mandated? 'Dumbing down' on classroom standards: The perils of a technician's approach to pedagogy. *Journal of Educational Change* 1(2), 199-204.
- Gardiner, J., Tom, C., & Wilson, K. (2000). *The consistency of teacher judgment research project*. Brisbane: Queensland School Curriculum Council.

Gardner, R., Lawton, D., & Cairns, J. (2005). Faith schools. London: Routledge .

- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K., (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915-945.
- Geertz, C. (1973). The interpretation of cultures. NY: Basic Books.
- Gibson & Associates. (2000). *Parental preference survey*. Catholic Education Office, Toowoomba: Australia.
- Gilbert, C. (2005). Unbundling the structure of inertia: Resource versus routine rigidity. *Academy of Management Journal, 48*(5), 741-763.
- Gilchrist, M. (2000). AD2000. Australian Catholic University Student Survey. Retrieved from http://www.ad2000.com.au/articles/2000/may2000p3 51.html
- Gilgun, J. (2010). Methods for enhancing theory and knowledge about problems, policies, and practice. In K. Briar, J. Orme, R. Ruckdeschel, & I. Shaw (Eds.), *The sage handbook of social work research* (pp. 281-297). Thousand Oaks, CA: Sage.
- Gillham, B. (2000). *Case Study Research Methods.* London: Continuum International Publishing Group Ltd.
- Gipps, C. (2003). *Educational accountability in England: The role of assessment.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago. IL.
- Giroux, H. (2001). Theory and resistance in education. London: Bergin & Garvey.
- Glaser, B. (1978). Theoretical sensitivity. Mill Valley, CA: Sociology Press.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine.
- Goleman, D. (1998). Working with emotional intelligence London. Bloomsbury Publishing.

- Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. In I. Cherniss & D. Goleman (Eds.), *The emotionally intelligent workplace* (pp. 13-26). San Francisco: Jossey-Bass.
- Goleman, D. (2005). *Emotional intelligence: Five years later.* Retrieved from <u>http://www.edutopia.org/php/article.php?id-Art665&key=020</u>
- Grace, G. &. O'Keefe, J. (2007). Developments in catholic schools in the USA: Politics, policy and prophecy. In Grace, G. & J. O'Keefe, (Eds.), *International handbook of catholic education: Challenges for school systems in the 21st century, (*pp. 61-83). The Netherlands: Springer.
- Grace, G. (2003). *Catholic schools: Mission, marks and morality.* London: Routledge Falmer.
- Green, B.,& Stortz, M. (2006). The syllabus as a passport into a common culture of teaching and learning: Developing and assessing strategies for dealing with diversity. *Teaching Theology and Religion, 9*(4), 221-228.
- Griffiths, W. (1999). *Parental expectations of a catholic secondary school.* Unpublished dissertation. Australian Catholic University: Brisbane, QLD.
- Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational Management and Administration, 28*(3), 371-338.
- Groome, T. (1998). *Educating for life: A spiritual vision for every teacher and parent*. Thomas More: Texas.
- Groome, T. (2002). What makes us Catholic. New York: Harper Collins.
- Gubrium, J., & Holstein, J. (2003). Postmodern interviewing. Thousand Oaks, CA: Sage.
- Habanek, D. (2005). An examination of the integrity of the syllabus. *College Teaching 53*(2), 62-64.
- Hall, G. & Hord, S. (2006). From silos to pyramids: Closing the gap through leadership development and succession planning. Hartford, CT: Hartford Public Schools.
- Hall, G. &. Hord, S. (2006). *Implementing change patterns, principles and potholes.* Boston: Allyn and Bacon.
- Hall, G., & Loucks, S. (1978). Innovation configurations: Analyzing the adaptation of innovations. In R. Marzano, R. (Ed.), *A new paradigm for educational change*. Proquest Information and Learning Company, Winter 1995. Retrieved from <u>http://findarticles.com/p/articles/mi_qa3627?is_199501/ai_n8730397/pg1</u>

- Hallinger, P. & Heck, R. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership & Management*, 30(2), 95-110.
- Halstead, J. &. Taylor, M. (2000). Learning and teaching about values: Review of recent research. *Cambridge Journal of Education, 30*(2), 169-170.
- Hammer, M., & Stanton, S. (1995). *The reengineering revolution: A handbook*. NY: Harper Business.
- Handy, C. (1993). Understanding organisations. London: Penguin Books.
- Handy, C. (1996). Gods of management: The changing work of organisations. Sydney: Arrow Books.
- Hansford, B., Tennent, L., & Ehrich, L. (2003). Educational mentoring: Is it worth the effort? *Education Research and Perspectives, 39*(1), 42-75.
- Hargreaves, A. (2001). The emotional geographies of teachers' relations with their colleagues. *International Journal of Educational Research, 35*, 503-527.
- Hargreaves, A. (2002). Sustainability of educational change: The role of social geographies. *Journal of Educational Change, 3*(3/4), 189-214.
- Hargreaves, A. (2003). *Teaching and the knowledge society.* New York: Teachers College Press.
- Hargreaves, A. (2008). Leading professional learning communities. In P. Blankstein (Ed.), Sustaining professional learning communities (pp. 175-198). Thousand Oaks, CA: Corwin.
- Hargreaves, D. (2011). System redesign for system capacity building. *Journal of Educational Administration, 49*(6), 685-700.
- Hargreaves, A., & Fink, D. (2006). The ripple effect. Educational Leadership, 63(8), 16-21.
- Hargreaves, A., & Fullan, M. (1998). *What's worth fighting for out there?* Sydney: Australian Council for Educational Administration in association with the Ontario Public School Teachers Federation.
- Hargreaves, A., & Moore, S. (1997). Educational outcomes, modern and post-modern interpretations: Response to Smyth and Dow. *British Journal of Sociology of Education, 21*(1), 27-42.
- Hargreaves, A., &. Shirley, D. (2009). *The fourth way: The inspiring future for educational change.* California: Thousand Oaks.

- Harrington, M. (2008). Australian curriculum assessment and reporting authority bill: *Bill's Digest (60).* Retrieved from <u>http://www.aph.gov.au/library/Pubs/bd/2008-</u> <u>2009/09bd060.htm</u>.
- Harris, A. (2004). Teacher leadership and distributed leadership. *Leading and Managing 10*(2), 1-9.
- Harris, A. (2008). *Distributed Leadership: Developing tomorrow's leaders.* London: Routledge.
- Harris, A. (2009). *Distributed school leadership: Evidence, isues and future directions.* Penrith, NSW: Australian Council for Educational Leaders.
- Harris, A. &. Spillane, J. (2008). Distributed leadership through the looking glass. *Management in Education* 22(1), 31-34.
- Hart, D. (2002). *To know worship and love teaching companion: Year 9.* Melbourne: James Goold House.
- Harvard Family Research Project. (2004). Adolescence: Are parents relevant to student's high school achievement and post-secondary attainment? MA: Cambridge.
- Hassel, B. (2006). Restructuring: what we know about the NCLB options. *Building State Capacity to Improve Schools: CSR, Title 1.* Atlanta: GA.
- Hattie, J. (2003). *Teachers make a difference: What is the research evidence?* Melbourne: Australian Council for Educational Research.
- Hattie, J. (2009). *Visible learning: Maximising impact on learning.* Florence, KY, USA: Routledge.
- Herbert, P. (2012). *Technology and the teaching of thinking: The key to 21st century instruction.* Retrieved from <u>http://www.itcpublicatons.com.au</u>
- Hoge, D., Dinges, W., Johnson, N., & Gonzales, J. (2001). Young adult catholics: Religion in the culture of choice. Notre Dame, IN: University of Notre Dame Press.
- Hopkins, D., & Jackson, D. (2003). Building the capacity for leading and learning. In A. Harris, C. Day, M. Hadfield, D. Hopkins, A. Hargreaves & C. Chapman (Eds.), *Effective leadership for school improvement.* (pp. 84-104). London: Routledge Falmer.
- Hord, S., Rutherford, W., Huling-Austin, & Hall, G. (1987) *Taking charge of change*. Association for Supervision and Curriculum Development.

- Hronek, G. (2002). 12 tips for building a winning team. Retrieved from http://www.businessknowhow.com
- Hu, W. (2007). Schools move toward following students' yearly progress on tests. New York: Times.
- Hursh, D. (2005). The growth of high-stakes testing in the USA: Accountability, markets and the decline of educational equality. *British Educational Research Journal, 31*(5), 605-622.
- Ingvarson, L. M., & Kleinhenz, E. (2006). Teaching and learning leadership: Professional development for teachers and school leaders. *Educational Policy Analysis Archives*, *13*(10), 1-28.
- Inkpen, A., &. Currall, S. (2004). The co-evolution of trust, control, and learning in joint ventures. *Organization Science 15*(5), 586-599.
- IBM SPSS. (2008). Statistics for windows: Version 16.0. Armonk, NY: IBM Corp.
- Isaacson, N., & Bamburg, J. (1992). Can schools become learning organisations? *Educational Leadership, 50*(3), 42-44.
- Jansen, H. (2010). The logic of qualitative survey research and its position in the field of social research methods. *Qualitative Social Research, 11*(2), Art. 11.
- Jansen, J., & Christie, P. (1999). *Studies on outcomes-based education in South Africia*. South Africia: Kenwyn: Juta and Co.
- Jauncey, P. (2006). *Managing yourself & others*. Brisbane, QLD: Copyright Publishing Company Pty Ltd.
- Jensen, B. (2012). *Catching up: Learning from the best*. Grattan Institute, Melbourne. Retrieved from <u>https://www.grattan.edu.au</u>
- Jensen, B., & Reichl, J. (2011). *Better teacher appraisal and feedback: Improving performance.* Grattan Institute, Melbourne. Retrieved from <u>https://www.grattan.edu.au</u>
- Jick, T. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly, 24*(4), 602-611.
- Johnston, C. (2001). Fostering deep learning: Resources for secondary teachers of economics. University of Melbourne: Victoria. Retrieved from http://www.econ.unimelb.edu.au/ecowww/fos.html

Joseph, P. (2011). *Cultures of curriculum*. New York, Routledge.

- Jost, J., &. Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Current Directions in Psychological Science, 14*(5), 260-265.
- Joyce, B., &. Showers, B. (2002). *Student achievement through staff development.* NY: White Plains.
- Katz, S., & Earl, L. (2010). Learning about networked learning communities. *School Effectiveness and School Improvement, 21*(1), 27-52.
- Katz, S., Sutherland, S., & Earl, L. (2001). Developing an evaluation habit of mind: The experience of the Manitoba School Improvement Program. *Paper presented at the annual meeting of the American Evaluation Association.* St Louis.
- Katzenmeyer, M., & Moller, G. (2001). Awakening the sleeping giant: Helping teachers develop as leaders. Thousand Oaks, CA: Corwin.
- Kekale, T., & Vitala, R. (2003). Do networks learn? *Journal of Workplace Learning, 15*(6), 245-247.
- Keller, S., & Aiken, C. (2008). The inconvenient truth about change management: Why it isn't working and what to do about it. *McKinsey Quarterly, 3.* Retrieved from <u>www.mckinseyquarterly.com</u>
- Kennedy, J., Mulholland, J., & Dorman, J. (2011). The school choice decisions of Catholic families. *Journal of Catholic School Studies*, *83*(1), 6-18.
- King, B., & Bouchard, K. (2011). The capacity to build organisational capacity in schools. *Journal of Educational Administration, 49*(6), 653-669.
- King, N., &. Horrocks, C. (2010). *Interviews in qualitative research.* London: Sage Publications.
- Klenowski, V., & Wyatt-Smith, C. (2012). The impact of high stakes testing: the Australian story. Assessment in Education: Principles, Policy and Practice, 19(1), 65-79.
- Klopfer, E., Osterweil, S., Groff, J., & Hass, J. (2009). Using the technology of today, in the classroom today: The instructional power of digital games, social networking simulations and how teachers can leverage them. Retrieved from, <u>http://education.mit.edu/papaers/GamesSimsSOcNets-EdArcade.pdf</u>
- Kotter, J. (1995). *Leading change: Why transformation efforts fail.* Harvard Business Review. Harvard Business School Press: Boston.

- Kotter, J. (1996). Change management theories, Change management models. Retrieved from http://www.practical-management-skills.co/change-management-theories.html
- Kotter, J. (2003). Leading change. Massachusetts, USA: Harvard School Press.
- Kotter, J., &. Rathgeber, H. (2006). *Our iceberg is melting. Changing and succeeding under any conditions.* Massachusetts, USA: Harvard Business School Press.
- Lacey, K., &. Gronn, P. (2007). *Letting go: Former principals reflect on their role exit.* Jolimont, Victoria: Centre for Strategic Education.
- Lambert, L. (2007). A framework for shared leadership. *Educational Leadership*, *59*(8), 37-40.
- Larson, A. (1992). Networked dyads in entreprenural settings: A study of the governance of exchange relationships. *Administrative Science Quarterly, 37*(1), 76-104.
- Lashway, L. (2001). The new standards and accountability: Will rewards and sanctions motivate America's schools to peak performance? Washington, DC: ERIC Clearinghouse on Educational Management.
- Leberman, S., & Martin, A. (2003). Does pushing comfort zones produce peak learning experiences? *Australian Journal of Outdoor Education*, *7*(1), 10-19.
- Leithwood, K. M. (2009a). *Distributed leadership according to the evidence*. London: Routledge.
- Leithwood, K., & Day, C. (2008). *The impact of school leadership on student outcomes.* London: Routledge.
- Leithwood, K., &. Janz, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement, 17*(2), 201-227.
- Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning: A review of research for the learning from leadership project.* New York: Wallace Foundation.
- Levin, B. (2012) *How to change 5000 schools: A practical and positive approach for leading change at every level.* Cambridge, MA: Harvard Education Publishing Group.
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues, 2*(4), 34-36.
- Lieberman, W., & Wood, D. (2003). Inside the national writing project. *Teaching and Learning*, *17*(2) 101-162.

- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 140*, 1-55.
- Limerick, D. C. (2002). *Managing the new organisation: Collaboration and sustainability in the post-corporate world.* St Leonards, New South Wales, Australia: Allen and Unwin.
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. California: Sage Publications.
- Lincoln, Y., & Guba, E. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & U. S. Lincoln (Eds.), *Handbook of qualitative research* (pp.163-188). Thousand Oaks, CA: Sage.
- Lingard, B., Hayes, D., Mills, M., Christie, P., & Wilson, M. (2003). *Leading learning: Making hope practical in schools.* Berkshire: Open University Press.
- Lonergan, B. (1973). *Method in theology*. London: Darton, Longman and Todd.
- Lonsdale, M. (2003). *Global gateways: A guide to online knowledge networks*. Melbourne: ACER.
- Lortie, D. (1975). Schoolteacher: A sociological study. University of Chicago Press, Chicago.
- Loucks-Horsley, S. (1996). *The concerns-based adoption model (CBAM): A model for change in Individuals.* Retrieved from http://www.nas.edu/rise/backg4a.htm
- Lovat, T. (2002). What is this thing called religious education?: A decade on. Sydney: Social Science Press.
- Luke, A., & Freebody, P. (1999). *Further notes on the four resources model*. Retrieved from, <u>http://www.readingonling.org/research/Wikefreebody.html</u>
- Luke, A., Weir, K., & Woods, A. (2008). *Development of a set of principles to guide a P-12 syllabus framework.* Brisbane: Queensland Studies Authority.
- Macbeath, J., & Dempster, N. (2008). *Connecting leadership and learning: Principles for practice.* Taylor & Francis.
- Mackay, H. (2004). Generational differences. *Paper presented at the AHISA Chairs of Governing Bodies Conference,* Sydney.
- Marzano, R., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results.* Alexandra. VA: Association for Supervision and Curriculum Development.
- Masters, G., & McBryde, B. (1994). An investigation of the comparability of teachers' assessment of student folios. Brisbane: Tertiary Entrance Procedures Authority.
- Matthews, R., O'Mahony, G., & Barnett, B. (2006) *Managing change: Leading school improvement.* Heatherton, VIC: Hawker Brownlow Education.
- MCEETYA. (1999). *The Adelaide declaration on national goals for schooling.* Retrieved from http://www.mceetya.edu.au
- MCEETYA. (2007). National assessment program: ICT literacy years 6 & 10 report. Carlton, VIC: Ministerial Council on Education, Employment, Training and Youth Affairs. Retrieved from http://www.mceetya.edu.au
- MCEETYA. (2008). *Melbourne declaration on educational goals for young Australians*. Retrieved from <u>http://www.mceetya.edu.au</u>
- McLaughlin, D. (2000). *The catholic school: Paradoxes and challenges*. Strathfield, NSW: Set Paul Publications.
- McLaughlin, D. (2011). Qualitative data analysis. Retrieved from <u>https://www.slideserve.com/omer/qualitative_data_analysis</u>.
- McLaughlin, M., & Talbert, J. (2006). *Building school-based teacher learning communities.* NY: Teachers College Press.
- McNichol, H. (2008). *Catholic identity...triumphant re-emergence!* Retrieved from <u>http://www.catholic.org/featured/headline.php?ID=5493</u>
- McRae, D., Ainsworth, G., Groves, R., Rowland, M., & Zbar, V. (2001). *PD 2000-Australia: A national mapping of school teacher professional development.* Canberra: Commonwealth Department of Education, Training and Youth Affairs.
- Medel-Anonuevo, C., Ohsako, T., & Mauch, W. (2001). *Revisiting life-long learning for the 21st Century.* Retrieved from <u>http://www.unesco.org/education/uie</u>
- Meiers, M. (2009). The use of ICTs in schools in the digital age:What does the research say? Retrieved from http://www.nswteachers.nsw.edu.au
- Merriam, S. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Jossey Bass.
- Merriman, S. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey Bass.

Middleton, M. (2000). A curriculum for beyond 2000. Toowoomba: Catholic Education Office.

- Miles, J. (1987). *Practical guidelines for school administrators: How to get there.* Paper read at a synposium of Effective Schools Programs and the Urban High School. Washington, DC: Annual Meeting of the American Educational Research Association.
- Miles, M., & Huberman, A. (1984). *Qualitative data analysis.* Beverley Hills, CA: Sage Publicatons.
- Miles, M., &. Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook.* Thousand Oaks, California: Sage.
- Mintzberg, H. (1979). An emerging strategy of "direct" research. *Administrative Science Quarterly*, *24*(4), 580-589.
- Mintzberg, H. (2004). *Managers not MBAs: A hard look at the soft practice of managing and management development.* San Francisco, CA: Berrett-Koehler Publisher.
- Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly*, *30*, 160-197.
- Mitchell, C., &. Sackney, L. (2001). *Building capacity for a learning community*. Retrieved from http://www.umanitoba.ca/publications/cjeap/articles/mitchellandsackney.html.
- Mitchell, C., &. Sackney, L. (2009). Sustainable learning communities: From managed systems to living systems. Paper presented at the Annual Conference of the International Congress for School Effectiveness and Improvement, Vancouver.
- Mulford, B. (2007). Overview of research on Australian educational leadership, 2001-2005, ACEL Monograph Series. Winmalee, New South Wales, Australia: Australian Council for Educational Leaders.
- Mulford, B., &. Silins, H. (2003). Leadership for organisational learning and improved student outcomes: What do we know? *Cambridge Journal of Education, 33*(2), 175-95.
- Murphy, J. (2001). *Re-culturing the profession of educational leadership: New blueprints.* Paper commissioned for the 1st meeting of the National commission for Advancement of educational Leadership Preparation. Retrieved from <u>http://www.ucea.org</u>
- Nespor, J. (2002). Networks and contexts of reform. *Journal of Educational Change, 3*(3-4), 365-382.
- Newmann, F., &. Wehlage, G. (1995). Successful school restructuring: A report to the public and educators. Madison: University of Wisconsin, Center on Organization and Restructuring of Schools.

- Organisation for Economic Cooperation and Development. (2010b). *PISA 2009 results*: *What students know and can do: Student performance in reading, mathematics and science.* OECD Publishing.
- O'Brien, E. (2007) Catholic schools must commit to the new evangelisation: Australian bishops exhort. Retrieved from <u>http://www.lifesitenews.com</u>
- O'Donoghue, T., & Punch, K. (2003). *Qualitative educational research in action: Doing and reflecting*. London, Routledge Falmer.
- O'Mahony, G., Barnett, B., & Matthews, R. (2006). *Building culture: The framework for school improvement.* Victoria, Australia: Hawker Brownlow.
- O'Mahony, G. & Matthews, R. (2006). Where wisdom meets hope: The role of mentoring in supporting the development of beginning principals. *Leading & Managing*, *12*(1), 16-30.
- O'Mahony, G., Matthews, R., & Barnett, B. (2009). *The power of coaching for school improvement: Nurturing talent and building capacity.* Victoria: Hawker Brownlow.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life.* San Francisco: Jossey Bass.
- Patton, M. (2002). *Qualitative research and evaluation methods*. United Kingdom: Sage Publications.
- Pesche, M. (2008). *Digital education revolution workshop keynote address.* Unpublished thesis University of Adelaide. Retrieved from http://www.research.acer.edu.au/viewcontent.cgi?article=1001&context=digital
- Petterson, K., & Deal, T. (2002). *The shaping of school culture fieldbook*. San Francisco: Jossey-Bass Publishers.
- Pettigrew, A. (1988). Longitudinal field research on change: Theory and practice. Paper presented at the National Science Foundation Conference on Longitudinal Research Methods in Organisations, Austin.
- Pettit, P. (2010). From data-informed to data-led? School leadership within the context of internal testing. *Leading and Managing*, *16*(2), 90-10.
- Pianta, R., & LaParo, K. (2003). Improving early school success. *Educational Leadership* 60(7), 24-29.
- Pollefeyt, D. (2011). Assessing and enhancing catholic school identity. Paper presented at National Catholic Education Convention. Adelaide.

- Potter, G., & Briggs, F. (2003). Children talk about their early experiences at school. *Australian Journal of Early Childhood, 28*(3), September.
- Price, C., & Lawson, E. (2003). The psychology of change management: Cracking the code. *McKinsey Quarterly, 2,* 30-41. Retrieved from <u>www.mckinseyquarterly.com</u>
- Priestley, M. (2010). Schools, teachers, and curriculum change: A balancing act? *Journal of Educational Change, 12*(1), 1-23.
- Prosci Research. (2009). *Being human*. Retrieved from <u>https://beinghuman.com.au/prosciprocess.asp</u>
- Prosci Research. (1998 to 2009). Best practices in change management reports. Retrieved from www.prosci.comwww.change-management.com
- Punch, K. (2005). *Introduction to social research: Quantitative and qualitative approaches.* London: Sage.
- Queensland Schools Curriculum Council. (2002). *QSCC Reports*. Retrieved from <u>https://www.gsa.gld.wedu.au/3517,html</u>.
- Queensland Studies Authority .(2004). QSA: Development of a Set of Principles. Retrieved from https://www.qsa.qld.edu.au/downloads/publications/qsa_publications_list.pdf
- Queensland Studies Authority (2006). *Statewide assessment, background paper: Assessment and comparability.* Retrieved from <u>http://www.qda.qld.edu.au/downloads/publications/qsa_publications_list.pdf</u>.
- Queensland Studies Authority. (2008). *Building student success: A guide to the Queensland curriculum, assessment and reporting framework.* Retrieved from http://www.qda.qld.edu.au/downloads/publications/qsa_publications_list.pdf.
- Queensland Studies Authority. (2008). *P-3 framework, Queensland Studies Authority: Partnership and innovation*. Retrieved from <u>http://www.qda.qld.edu.au/downloads/publications/qsa_publications_list.pdf</u>.
- Ranson, D. (2006). Forming a new generation of leaders for Catholic schools. *Australiasian Catholic Record, 83*(4), 415-421.
- Raver, C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report, 16*(3), 3-19.
- Redline, C., & Dillman, D. (2002). The influence of alternative visual designs on respondents' performance with branching instructions in self-administered questionnaires. In R. Groves, D. Dillman, J. Eltinge and R. Little (Eds.), *Survey Nonresponse.* New York, Wiley.

- Reeves, J. (2008). Between a rock and a hard place? A curriculum for excellence and the quality initiative in Scottish schools. *Scottish Educational Review, 40* (2), 6-19.
- Reynolds, C. (2000). Big change questions: Should pedagogical change be mandated? Can and should pedagogical change be mandated at times? *Journal of Educational Change 1*(2), 193-198.
- Reynolds, P. (2001). A disjunction between personal, professional and social values in preservice teacher education. *Australian Journal of Teacher Education, 26*(2), 1-14.
- Robertson, M. (2007). Sustainable futures: Teaching and learning: A case study approach. Camberwell, VIC: ACER Press.
- Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635-674.
- Roderick, M., Jacob, B., & Bryk, A. (2002). The impact of high-stakes testing in Chicago on student achievement in promotional gate grades. *Educational Evaluation and Policy Analysis, 24* (A), 333-357.
- Rossiter, G. (2002). Addressing an apparent crisis for Catholic school religious education: The importance of 'relevance' and of the theme 'search for meaning'. *Journal of Religious Education 50*(2), 53-61.
- Russell, J. & Feldman Barrett, L. (1999). Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, *76*(5), 805-819.
- Ryan, M. (1997). Foundations of religious education in catholic schools: An Australian perspective. Australia: Social Science Press.
- Sachs, J. (2003). The activist teaching profession. Buckingham, UK: Open University Press.
- Saker, L. (2004). A study of 1st and 2nd year catholic university students' perception of their senior religious education classes in catholic schools in Western Australia.
 Unpublished PhD thesis. Edith Cowan University. Perth: Western Australia.
- Saker, L. (2006). A mini-survey conducted at Edith Cowan and Curtain Universities in Perth, Western Australia. Unpublished paper, Edith Cowan University Perth, Western Australia.
- Saldana, J. (2009). *The coding manual for qualitative researchers*. London: Sage Publications.

- Sandholtz, J., & Scribner, S. (2006). The paradox of administrative control in fostering teacher professional development. *Teaching and Teacher Education, 22* (8), 1104-1117.
- Schein, E. (1985). Organizational culture and leadership (1st ed). San Francisco: Jossey Bass
- Schein, E. (1992). *Organizational culture and leadership* (2nd ed). San Francisco: Jossey-Bass.
- Schein, E. (1992). *Three levels of culture*. Retrieved from <u>http://www.valuebasedmanagement.net/methods_schein_three_levels_culture.html</u>
- Schein, E. (2004). Organizational culture and leadership. San Francisco: Jossey-Bass.
- Schildkamp, K., & Kuiper, W. (2009). Data-informed curriculum reform: Which data, what purposes, and promoting hindering factors. *Teaching and Teacher Education, June*, 1-15.
- Schwandt, T. (2001). *Dictionary of qualitative inquiry*. Thousand Oaks, CA: Sage.
- Scott, C. (2007). Stakeholder perceptions of test impact. Assessment in Education, 14(1), 27-49.
- Scweinhart L., &. Weikart, D. (1997). The high/scope preschool curriculum. *Early Childhood Research Quarterly*, *12* (2), 117-143.
- Seaton, A. (2002). Reform the hidden curriculum: The key abilities model and four curricula forms. *Curriculum Perspectives*, 22(1), 9-15.
- Seidman, I. (2006). Interviewing as qualitative research: A guide for researchers in education and the social science. London: Sage Publishers.
- Senge, P. (1990). *The fifth discipline: the art and practice of the learning organisation.* New York: P. Lang.
- Senge, P. (2001). Schools that learn. New York: Doubleday.
- Senge, P. (2008). The power of presence. Santa Monica CA: Sounds True.
- Sergiovanni, T. (1995). *The principalship: A reflective practice perspective*. Needham Heights, MA: Allyn & Bacon.
- Sergiovanni, T. (1996). Leadership for the schoolhouse: How is it different? Why is it important? San Francisco, CA: Jossey Bass.

- Sergiovanni, T. (2000). The lifeworld of leadership creating culture, community, and personal meaning in our schools. San Francisco: Jossey-Bass Inc.
- Sergiovanni, T. (2003). The life-world at the centre: Values and actions in educational leadership. In N. Bennett, M. Crawford & M. Cartwright (Eds.), *Effective Educational Leadership*. London: Sage Publications.
- Shavelson, R., & Townes, L. (2002). *Scientific research in education.* Washington, DC: National Academy Press.
- Shaw, A. (2011) OECD Digital Literacy Report Helps Inform School Leaders. *The Australian Educational Leader, 33*(4), 55.
- Shermer, M. (1997). *Why people believe weird things: How thinking goes wrong.* Retrieved from <u>https://www.positiveatheism.org/faq/faq1114f.htm</u>.
- Shields, C. (2007). Can case studies achieve the "gold standard"? Or when methodology meets politics. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois.

Silverman, D. (2005). Doing qualitative research. London: Sage.

- Simons, H. (2009). Making qualitative research reports less boring: The techniques of writing creative nonfiction. *Qualitative Inquiry, 14*(3), 424-449.
- Slavin, R. (2006). Educational research in an age of accountability. UK: Allyn & Bacon.
- Slee, R. (2003b). Valuing diversity and inclusiveness: the DDG speaks out on inclusive education, *Education Views, 11.*
- Smith, E., & Gorard, S. (2005) 'They don't give us our marks': the role of formative feedback in student progress. *Assessment in Educational Principles, Policy and Practice, 12*(1), 21-38.
- Solansky, S. (2008). Leadership styles and team processes in self-managed teams. *Journal* of Leadership and Organisational Studies, 14(4), 332-341.
- Spady, W. (1994). *Outcome-based educaton: Critical issues and answers.* Arlington, VA: American Association of School Administrators.
- Spady, W. (2001). *Beyond counterfeit reforms: Forging an authentic future for all learners.* Arlington, VA: American Association of School Administrators.
- Spady, W. (2007). *The paradigm trap: Getting beyond the "No Child Left Behind" policy.* Arlington, VA: American Association of School Administrators.

- Spillane, J. (2009). Leading and managing instruction: Adopting a diagnostic and design mindset. *Voices in Urban Education: Leadership in Smart Systems, 25* (Fall), 16-25.
- Spillane, J., Halverson, R., & Diamond, J. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3-34.
- Spry, G. (2004). *Framing leadership in Queensland catholic schools: A report*. Catholic Educational Leadership: Flagship of Australian Catholic University.
- Spry, G., & Duignan, P. (2003). *Framing leadership in Queensland Schools*. Paper presented at the NZ-AARE Conference, Auckland.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (pp. 443-466). Thousand Oaks, CA: Sage.
- Steiner-Khamsi, G., Silova, I., & Johnson, E. (2006). Neoliberalism liberally applied: Educational policy borrowing in Central Asia. In T. S. J. Ozga (Ed.), 2006 World yearbook of education, Education research and policy: Steering the knowledgebased economy (pp. 217-245). New York/London: Routledge.
- Stewart-Dore, N. & Bartlett, L. (1999). *External review of the year 2 diagnostic net.* Brisbane: Queensland School Curriculum Council.
- Stoll, L. (2003). School culture and improvement. In M. Preedy, R. Glatter & C. Wise (Eds.), Strategic Leadership and Educational Improvement, Paul Chapman Publishing, London.
- Stoll, L. (2009). Capacity building for school improvement or creating capacity for learning? A changing landscape. *Journal of Educational Change, 10*(2-3),115-127.
- Stoll, L., & Fink, D. (1996). *Changing our schools: Linking school effectiveness and school improvement.* Buckingham: Open University Press.
- Strauss, A., &. Corbin, J. (1998). *Basics of qualitative research techniques and procedures* for developing grounded theory, London: Sage Publications.
- Stringfield, S., Millsap, M., & Herman, R. (1997). Urban and suburban/rural special strategies for educating disadvantaged children: Findings and policy implications of a longitudinal study. Washington DC: US Department of Education.

Surowiecki, J. (2004). The wisdom of crowds. New York: Doubleday.

Sutton, R., & Callahan, A. (1087). The stigma of bankruptcy: Spoiled organisatonal image and its management. *Academy of Management Journal, 30*, 405-436.

- Swaffield, S. (2004). *Exploring Critical Friendship through Leadership for Learning*. A paper within the symposium Leadership for Learning: The Cambridge Network. 17th Congress for School Effectiveness and Improvement, Rotterdam, 6-9. Retrieved from, <u>http://instep.net.nz</u>
- Sykes, J. (Ed.). The Concise Oxford Dictionary of Current English. Taipei: Caves Books Ltd.
- Tacey, D. (2004). *The spirituality revolution: The emergence of contemporary spirituality.* Hove, UK: Brunner-Routledge.
- Tan, L. W. J., & Subramaniam, R. (2009). Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges. Retrieved from www.credoreference.com/book/igihrnml
- Taylor, S., Kemeny, M., Reed, G., Bower, J., & Gruenewald, J. (2000). Psychological resources, positive illusions and health. *American Psychologist, 55*, 99-109.
- Teddlie, C., & Reynolds, D. (1999). *The international handbook of school effectiveness* Research. London: Falmer Press.

The Standish Group. (2011).CHAOS survey. Retrieved from http://www.standishgroup.com

- Thompson, B. (2007). The syllabus as a communication document: constructing and presenting the syllabus. Communication Education, 56(1), 54-71.
- Thompson, C. &. Zeuli, J. (1999). The frame and the tapestry: Standards-based reform and professional development. In L. Darling Hammond & G. Sykes (Eds.), Teaching as the learning profession: Handbook of policy and practice (pp. 341-375). San Francisco: Jossey-Bass.
- Thomson, S., Hillman, K., Wernert, N., Schmid, M., Buckley, S. & Munene, A. (2011). *Highlights from TIMSS & PIRLS 2011 from Australia's perspective*. Retrieved from <u>www.acer.edu.au/timss</u>.
- Timperley, H. (2005). Distributed leadership: Developing theory from practice. *Journal of Curriculum Studies, 37*(4), 395-420.
- Tognolini, J. (2006). *Meeting the challenge of assessing in a standards based education system.* Western Australia: Western Australia Curriculum Council.
- Treston, K. (1998). *Following the heart: Reflections on christian leadership*. Brisbane: Creation Enterprises.

Treston, K. (2000). Visioning a future church. Brisbane: Creation Enterprises.

- Treston, K. (2001). *Wisdom schools: Seven pillars of wisdom for catholic schools.* Brisbane: Creation Enterprises.
- Turner, D., & Crawford, M. (1998). *Change Power: Capabilities that drive corporate renewal.* NSW: Business and Professional Publishing.
- Vardi, Y., & Weitz, E. (2004). *Misbehaviour in organisations*. Mahwah, New Jersey: Lawrence Erlbaum Associates Incorporated.
- Volante, L. (2008). Equity in multicultural student assessment systems worldwide: *Journal of Educational Thought, 42*(1), 11-26.
- Vroom, V. (1964). Work and motivation. San Francisco, CA: Jossey Bass.
- Wagner, C., & Marsden-Copas, P. (2002). An audit of culture starts with two handy tools. *Journal of Staff Development, 23*(3), 42-53.
- Walberg, H. (2007). *Handbook on restructuring and substantial school improvement*. Charlotte, NC: Information Age Publishing.
- Walford, G. (2001). *Doing qualitative research, a personal guide to research process.* London: Continuum.
- Wardlaw, C. (2006). *Curriculum reform: Planning for the future of Hong Kong.* Retrieved from http://ci-lab.ied.edu.hk/ckkprogram/icp/
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research*, *79*(2), 702-739.
- Wellington, J. (2000). *Educational research: Contemporary issues and practical approaches.* New York: Continuum
- White, A. (2008). From comfort zone to performance management. Retrieved from http://wales.academia.edu/AlasdairWhite/Papers/447676/
- White, D. (2004). Pedagogy the missing link in religious education: Implications of brainbased learning theory for the development of a pedagogical framework for religious education. Unpublished doctoral thesis, ACU, Stratfield, Australia.
- Wicks, P. (2005). *Mary MacKillop inspriation for today.* Croydon, NSW, Australia: Trustees of the Sisters of St Joseph.
- Wolcott, H. (2001). Writing up qualitative research. Thousand Oaks, CA: Sage.

- Wu, M. (2011). *Interpreting NAPLAN results for the layperson.* Victoria, Australia: Assessment Research Centre, University of Melbourne.
- Wuthnow, R. (2007). After the baby boomers: How twenty and thirty-somethings are shaping the future of American Religion. Princeton: Princeton University Press.
- Yeigh, T. (2008). Quality teaching and professional learning: Uncritical reflections of a critical friend. *Australian Journal of Teacher Education* 33(2), 1-15.
- Yesseldyke, J., Dennison, A. & Nelson, R. (2004). *Large scale assessment and accountability systems: Positive consequences for students with disabilities.* Minneapolis, MN: National Center on Educational Outcomes.
- Yin, R. (1984). Case study research. Beverley Hills, CA: Sage Publications.
- Yin, R. K. (2009). Case study research: Design and methods. Thousand Oaks, CA: Sage.
- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255-316.
- Zeus, P., &. Skiffington, P. (2003). The coaching at work toolkit. Sydney, NSW: McGraw-Hill.
- Zink, R., & Leberman, S. (2003). Risking a debate-redefining risk and risk management: A New Zealand study. *New Zealand Journal of Outdoor education: Kotane Mahuta Pupuke, 1*(2), 63-76.
- Zohar, D. (1997). *Rewiring the corporate brain: Using the new science to rethink how we structure and lead organisations.* Berrett: Koehler.
- Zott, C., & Huy, Q. (2007). How entrepreneurs use symbolic management to acquire resources. *Administrative Science Quarterly*, *52(1)*, 70-105.

APPENDICES

APPENDIX A: Copy of letter seeking permission to undertake study in the Diocese

13 October 2008

Mr John Borserio Director Catholic Education Office PO Box 756 TOOWOOMBA 4350

Dear John

RE: Research Project for Doctor of Education Qualification

The Experiences of Teachers Responding to Mandated Curriculum Change.

I am seeking your permission to conduct a research project concerning the negotiation of mandated curriculum change, specifically Outcome-Based Education, in the Diocese of Toowoomba. In order to gain approval from the Human Research Ethics Committee at Australian Catholic University I must show evidence of your approval of the research project.

The project has three main aims. The first is to explore perspectives of teachers and other system personnel regarding the change to an outcomes approach to teaching and learning during the years 2000 to 2009. Second, the project aims to identify the perceptions and experiences of teachers as they adapt and respond to changing curriculum requirements within a particular learning environment. Third, the project aims to identify features of a Catholic learning environment that may influence mandated curriculum changes.

Diocesan system and school personnel will be invited to participate in the research. Participants may include Education Officers from the Faith Education and Curriculum Division, Principals, Assistant Principal/Religious Education Co-ordinators and Teachers. Data for the case study will be collected through surveys (taking approximately 15 minutes to complete) and individual in-depth interviews (approximately 30 to 60 minutes).

At any time during the project participants are free to withdraw and discontinue participation without giving any reason. Confidentiality will be maintained during the study and in any report. All participants will be given a code and names will not be retained with the data. Individual participants will not be able to be identified in any report of the study, as only aggregated data will be reported. We plan to present the findings of this project at either a conference or in a scientific journal. It is emphasized that this will be in a form that does not allow the identification of any individual participant. When all data has been collected and collated, all participants have the offer of receiving appropriate feedback on the results of the project. In the event that there is any complaint or concern about the way in which participants are treated during the study, or if there are any queries that the Supervisor and/or Student Researcher have not been able to satisfy, participants may write to the Chair of the Human Research Ethics Committee at the Brisbane branch of the Research Service Unit. Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

If you agree to allow this research to occur within the Diocese of Toowoomba please forward written permission to Robyn Sharpe, PO Box 308, Southtown 4350.

I would be pleased to discuss any aspects of the research project with you. If you wish to discuss aspects of the research project with my supervisor, please contact Dr Janelle Young, Senior Lecturer, School of Education, Australian Catholic University, McAuley Campus, Banyo. (Tel: 07 3623 7160).

At the completion of this study the researcher will make recommendations in relation to the responses of the participants to mandated curriculum changes. Findings and recommendations from this study will be shared with you.

Thank you for your consideration of this matter.

Yours sincerely

Robyn Sharpe (Student Researcher)

Dr Janelle Young (Principal Supervisor)

APPENDIX B: Information Letter to Participants

21 October, 2008

INFORMATION LETTER TO PRINCIPALS, ASSISTANT PRINCIPALS RELIGIOUS EDUCATION, EDUCATION OFFICERS AND TEACHERS

TITLE OF PROJECT: The Experiences of Teachers Responding to Mandated Curriculum Change

NAME OF PRINCIPAL SUPERVISOR: Dr Janelle Young

NAME OF STUDENT RESEARCHER: Robyn Sharpe

PROGRAM IN WHICH ENROLLED: Doctor of Education

Dear Principal, Assistant Principal Religious Education, Education Officer or Teacher,

RE: Research Project The Experiences of Teachers Responding to Mandated Curriculum Change

I am currently enrolled in a Doctor of Education at Australian Catholic University and I am conducting a research project concerning the negotiation of mandated curriculum changes in the Diocese of Toowoomba. I invite you as a person who has been directly and professionally involved in these processes to participate.

The project has three main aims. The first is to explore perspectives of teachers and other system personnel regarding the change to an outcomes approach to teaching and learning during the years 2000 to 2009. Second, the project aims to identify the perceptions and experiences of teachers as they adapt and respond to changing curriculum requirements within a particular learning environment. Third, the project aims to identify features of a Catholic learning environment that may influence mandated curriculum changes.

As a person in a teacher/leadership role you are invited to participate in this project by responding to a survey and providing your perceptions and understandings of the negotiation of curriculum changes, specifically Outcome-Based Education. It is anticipated that the survey will take approximately 15 minutes.

As a person in a teacher/leadership role involved with the negotiation of curriculum change, you also may be invited to participate in an individual in-depth interview. The interview will relate to your perceptions and experiences of how you have adapted and responded to the changing curriculum requirements within a Catholic learning environment. Interviews will be audio-taped and will be approximately 30 to 60 minutes duration.

At any time during the project you are free to withdraw your consent and discontinue participation without giving any reason. Withdrawal from the research will not prejudice your position of employment or standing within your professional working community.

Confidentiality of the data collected is ensured during the conduct of the research and in any report or publication arising from it. There are no limits to this confidentiality.

Any questions regarding this project should be directed to the Supervisor, Dr Janelle Young, (Telephone: 07 3623 7160) in the School of Education, McAuley Campus, Banyo and/or the Student Researcher Robyn Sharpe (Mob: 0402285082)

When all data has been collected and collated, all participants have the offer of receiving appropriate feedback regarding the results of the project.

Please be advised that, in accordance with the National Statement for research projects involving human participants, this study has been approved by the Human Research Ethics Committee at Australian Catholic University.

In the event that you have any complaint or concern about the way in which you have been treated during the study, or if you have any query that the Supervisor and Student Researcher have not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee at the Brisbane branch of the Research Service Unit at the following address.

Chair: HREC, C/- Research Services Australian Catholic University Brisbane Campus PO Box 456Virginia QLD 4014 Tel: 07 3623 7429Fax: 07 3623 7328

Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

If you agree to participate in this project, could you please sign both the attached copies of the Consent Form, retain one copy for your records and return the other to Robyn Sharpe, PO Box 308, Southtown, 4350.

Yours sincerely

Robyn Sharpe (Student Researcher)

Dr Janelle Young (Principal Supervisor)

APPENDIX C: Participant's Consent Form

PARTICPANT'S CONSENT

TEACHERS AND THOSE IN LEADERSHIP POSITIONS

(Participant's Copy)

TITLE OF PROJECT: The Experiences of Teachers Responding to Mandated Curriculum Change

NAME OF PRINCIPAL SUPERVISOR: Dr Janelle Young

NAME OF STUDENT RESEARCHER: Robyn Sharpe

Ihave read and understood the information provided in the Letter to the Principals, Assistant Principals Religious Education, Education Officers and Teachers. Any questions I have asked have been answered to my satisfaction. I agree to:

- Participate in the survey (15 minutes approximately);
- Be involved in an individual in-depth interview (30 to 60 minutes duration if invited to do so) where my contributions will be audio taped to allow for accuracy of data collection, analysis and interpretation.

I realise I can withdraw at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify participants in any way.

NAME OF TEACHER

NAME:

SIGNATURE.....

DATE.....

SIGNATURE OF RESEARCH STUDENT.....

DATE.....

APPENDIX D: Ethics Approval Letter

Australian Catholic University Brisbane Sydney Canberra Ballarat Melbourne

ACU National

Human Research Ethics Committee

Committee Approval Form

Principal Investigator/Supervisor: Dr Janelle Young Brisbane Campus

Brisbane Campus Co-Investigators:

Student Researcher: Ms Robyn Sharpe Brisbane Campus

Ethics approval has been granted for the following project: The Experiences of Teachers Responding to Mandated Curriculum Change. (Responding to Curriculum Change.)

for the period: 16 October 2008 to 30 June 2009

Human Research Ethics Committee (HREC) Register Number: Q200708 40

The following standard conditions as stipulated in the National Statement on Ethical Conduct in Research Involving Humans (2007) apply:

- that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as: (i)
 - security of records
 - · compliance with approved consent procedures and documentation
 - · compliance with special conditions, and
- that researchers report to the HREC immediately any matter that might affect the ethical (ii) acceptability of the protocol, such as:
 - proposed changes to the protocol
 unforeseen circumstances or events
 - adverse effects on participants •

The HREC will conduct an audit each year of all projects deemed to be of more than low risk. There will also be random audits of a sample of projects considered to be of negligible risk and low risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a Final Report Form and submit it to the local Research Services Officer

If the project continues for more than one year, researchers are required to complete an Annual Progress Report Form and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

K. Pashlug.

Signed:

Date: 16 October 2008 (Research Services Officer, McAuley Campus)

(Committee Approval.dot @21/11/2007)

Page 1 of 1

APPENDIX E: Copy of the Survey

SURVEY

Please circle your response to each question.

ABBREVIATIONS: OBE = Outcome Based Education; QSA = Queensland Studies Authority; KLA =Key Learning Area; RE = Religious Education

	Strongly	Disagree	Neither/	Agree	Strongly
	Disagree		Not Sure		Agree
The change to the Outcome-Based Approach					
1. The move to the Outcomes approach to education effectively meets the demands of the 21 st century.	1	2	3	4	5
2. The change to an Outcomes approach has addressed the inequalities in education.	1	2	3	4	5
3. All students have been able to succeed through the Outcomes approach.	1	2	3	4	5
4. The Outcome syllabi reflect the work of the American W. G. Spady.	1	2	3	4	5
5. Spady's 4 principles of planning (clarity of focus, designing down, high expectation, expanded opportunity) must be used to successfully implement Outcomes.	1	2	3	4	5
A variety of teaching approaches should be used to complement the Outcomes change	1	2	3	4	5
7. Australia was wrong to adopt the change to an Outcomes approach.	1	2	3	4	5
Interpreting the outcomes approach					
1. Teachers have common understandings in their interpretations of the syllabi.	1	2	3	4	5
2. The Outcomes syllabi clearly aligned planning, teaching, assessing and reporting.	1	2	3	4	5
 The KLA outcomes (strands, levels, core & discretionary outcomes) were easily understood by teachers. 	1	2	3	4	5
4. It is a simple process to plan to the Outcome levels.	1	2	3	4	5
5. Teachers engaged in adequate professional development to enable them to interpret and adapt to the Outcomes change.	1	2	3	4	5
6. Teachers had difficulty explaining and reporting Outcomes to parents.	1	2	3	4	5
Planning, teaching, assessing and reporting					
1. The change to Outcomes improved the planning of teaching and learning.	1	2	3	4	5
2. Academic standards of students have improved with the OBE curriculum change.	1	2	3	4	5
 An integrated approach to planning is the most effective way to plan to Outcomes. 	1	2	3	4	5
4. It is difficult to cover all the Outcomes in all the syllabi.	1	2	3	4	5
5. Unless assessment informs teaching and	1	2	3	4	5

	Strongly	Disagree	Neither/	Agree	Strongly
	Disagree		Not Sure		Agree
learning it is pointless.					
6. The "achieved" and "not achieved" approach to measuring student performance in Outcomes is "flawed" because it gives no indication of the quality of student performance.	1	2	3	4	5
Consistency of Teacher Judgment of student work is difficult to reach.	1	2	3	4	5
 Teaching in a Catholic school influences a teacher's understanding of curriculum 	1	2	3	4	5
 The Outcomes approach nurtures the sacredness of the human person. 	1	2	3	4	5
10. Schools provide a learning environment that develops a particular ethos independent of curriculum.	1	2	3	4	5
Personal Reflection					
1. I understand the uniqueness of each of the nine KLAs in the Outcomes syllabuses.	1	2	3	4	5
 I understand the need to effectively develop learning experiences that incorporate life-long learning, content, knowledge and learner - centred approaches. 	1	2	3	4	5
 I have competently managed the impact of the outcomes change at system, school and classroom level. 	1	2	3	4	5
 I have a clear understanding of how to align planning, teaching, assessing and reporting processes to outcomes. 	1	2	3	4	5
 I believe the outcomes approach narrows the curriculum, reducing its richness. 	1	2	3	4	5
 I believe the features of a Catholic learning environment influence the implementation of an outcomes approach. 	1	2	3	4	5

BACKGROUND QUESTIONS Please	circle:					
Gender: Male/Female Age band: 21-	-25 20	6-30	31-35	36-40	41-45 46-50	>50
Years of teaching (total career): 1	2	3-5	6-10	11-20	>20	
Years of teaching in this school: 1	2	3-5	6-10	11-20	>20	
Years in leadership (APRE/ EO/Princi	ipal)	1	2 3-5	6-10	11-20 >20	

APPENDIX F: Copy of the Interview Questions

Robyn SharpeMarch 2009, Research questionsPart 1. Demographic snapshot.

- How long have you been teaching? When did you graduate? From where?
- Qualifications?
- Year levels taught ?
- What schools have you taught at?
- How long have you been teaching at this school?

Question 1: How do teachers understand and manage change processes? The line of inquiry from the survey data was to illicit understandings of how teachers managed changes and addressed curriculum initiatives.

- Where were you 2000-2004? (schools)
- Where were you 2004-2008? (schools)
- Teaching experiences of Outcome-Based Education.
- The types of curriculum changes experienced between 1999 and 2009? At the research school and other schools?
- Work structures & approaches
- Experiences of Outcome-based Education, Standards, Inclusive Ed, Early Years, Digital Education Revolution, Essential Learnings and Standards, any other?
- What is your understanding of the philosophies and purposes of the changes experienced?
- What is your opinion of the success of the change in schools? The difficulties experienced?
- How does curriculum change affect you personally? Professionally?

Question: How do teachers respond to implementing curriculum change? The line of inquiry from the survey data was to probe the issues around planning, assessing and reporting and the effect of curriculum changes on teacher practices.

What do you know of the framework for curriculum in the Diocese? How does this influence your teaching approaches? contribute to the culture and learning environment of the school?

Planning?

- The helpfulness of the syllabi (QSA & RE)
- Changed approaches
- Other?

Teaching ?

- Changes to teaching approaches?
- Challenges
- Other?
- Formative, summative, peers observations, checklists etc
- Other agendas State, national testing impact (NAPLAN, State Yrs.3 5 7, QCAT)
- Accountability processes and measures
- Other?

Reporting changes ?

- Report card formats
- Consistency of Teacher Judgment, Moderation processes
- Parents understanding
- Other?

Question 3: How does the culture of a school influence curriculum change? The line of inquiry from the survey data was to probe the influence of the culture of the learning environment (Catholic culture) of the research school.

Your opinion of working in a Catholic learning environment? Discuss the following:

- Human beings are made in the image and likeness of God
- Catholic schools are the teaching arm of the Church
- The values of the Gospel
- Stewards of creation
- A 2000 year old heritage of worship, teachings, literature, tradition and works for justice
- Church teaching, Church tradition
- Catholic ethos and culture

What is your perception of the influence of the Catholic learning environment on teaching the curriculum?

Do you wish to add anything further ?

Thank you for your participation in this research.

APPENDIX G: Copy of one transcribed interview

DATE OF INTERVIEW: 18 March 2009 INTERVIEWEE: 013 INTERVIEWER: Robyn Sharpe

/?/ Indecipherable

Q. Your demographic snapshot, how long have you been teaching and what are your teaching experiences from the year 2000 and beyond.

A. Ok so were I started, my first teaching role was basically I would say C, when I first graduated I did 6 months at HN, then I was transferred out to C. So that would have been mid 93 and stayed there to end of 2000. Then to D, and then to T. Upper and middle grades mostly. And I like my sport. It is more of an outside passion, probably on the school side of it I like Maths. I used to like when I first started teaching. I loved the old social studies and these things, I loved it in terms of the history of Australia, Kevin Rudd's idea of history coming back I am very much a history person, not so much overseas history but Australian history. How it happened and stories of how it happened in that era so, social studies social science area, really I enjoy and even when it turned in society and environment you still had different areas which were good because I felt a lot of the younger children didn't know much about their culture and environment. Sort of lost it a lot with those outcomes though, teaching things altogether.

Q. What are your experiences of teaching to the OBE change?

A, Just starting at C when I moved. Yes, I remember we had all the in services and it was also coming in and D also decided to go /?/ so there was a big try to combine both of them and how it was going to work how the levels fit in.

Q. How did you go about that?

A. Discussions mostly.... we were having then. We had a few in services,, I think we started with SOSE. Science too, we had a bit of practice with that. But we joined them together. When I first started teaching there was more content. I taught Aboriginal Australia and things like that. I know they're gone but in a way some of those old books were very good. The explorers and things. That is something I think is very lacking in primary schools now is the explorers, Bourke and Wills and Leichardt you know what I mean, children have no idea. So when I am teaching, I try to get that Australian history into my programs. I know L likes to do that too. Teach a bit like we did in the past. I think we were brought up in that era that's what we used in our Christian brother's schooling. As my brother says you learn so much from reading history books and books about people, their life their environment around them, that's what I love about biographies when you read about someone's life growing up. And these days it's not being taught. In a roundabout way it is being mentioned but is not being taught.

Q. Why do you think that is?

A. Outcomes are too vague I think. Too much interpretation happens. That's what I found as I move around. End of 2000 I left C and I moved to D at the beginning of 2001. That's probably when Outcomes really started to come in I had a taste of it but when I got to D I found that they had hardly had any of it, and I had started planning in a way, a bit of a way, no one had really showed us how to plan in Outcomes you know, so I just devised my own thing, you know the old three column outcome /?/ resources assessment ,and I just did that for myself. I remember a meeting we had with the EOs. They took one of my examples to show this a /?/ how we are supposed to plan. Surprised me a bit, because no-one had showed us.

Q. How many curriculum changes have you managed?

A. I don't know. A few. At D we started to build the Outcomes in our planning. I guess here there was the Essential Learnings that we all had to do, and we had computers happen, teaching with them a bit.

Q. Has it changed your approaches and your understandings of curriculum very much?

A. Well, D was a trial for some sort of staging. Some trial or something. I don't know what version they used. I know it was levelling I called it fast tracking. There was levels all the way through and you had 4 and 5, I remember teaching the upper maths at one stage and I had mainly grade 5s and then I went to a middle stage and I had a combination of some 5's and some 4's obviously the lower stage. Different structures. Streaming, I think, the old term was streaming, but then levelling came in when I was leaving. The year after I left they got away from that, I think they changed that.

Q. How have curriculum changes influenced what you have done?

A. We changed to the new building, yeah, that was all being set up. But with Outcomes, not many at D seemed to know much about it for a good while. I was one of the rare teachers who had actually seen it. They hadn't had much to do with it at all but the school embraced the idea mostly, the school went for it. I remember having my last year there we had a big school meeting to explain the outcomes for year levelling, the staging and what was happening. I remember it being in the Library and parents could just not get a handle on it, in terms of , "Ok so if my child's really intelligent and they do all the levels they can skip up to grade 6", and things like that. And I remember trying to explain to them, no, they still staying in grade 5 but we go outwards, "Oh so they can do level 4 outcomes" we don't really want them attempting a level until they fully understand. Oh, but my child is clever so he should be in a higher level. It was so hard, not just for parents, but for teachers too.

Q. How much support did you get with managing curriculum changes?

A. Mainly left to the school to do it, like example /?/ came in and did the HPE at the time, someone else did SOSE, but mainly it was left to the devices of school to try as soon as

documents were coming through it was left to look at those and try to explain. Seems to be the way of it...we have to work it out for ourselves.

Q. How did you get to understand what you needed to do?

A. Basically took the syllabuses and worked from there. Talked to each other, worked it out together, or some just did it by themselves. You had your main syllabus documents and then you had your modules and I think when people were able to look up the bigger thicker one where it was broken down a lot more like you had the outcomes. Like, the source book we used to have. You could look at that and see these are the things they want in that outcome, I think before that everyone was flying a little bit blind. Yes you were reading the outcome but it was open to a very broad interpretation I think I remember having one of the moderation days at Ch, and it was very interesting how I had interpreted something compared to the teacher out there who was new out of college. Lots of different interpretations. But you could see how they had done theirs. I could see where they were coming from. I could understand what they were saying how they interpreted and their activity to do it. It was different to mine but I could see how they had done it. And that was the thing, when we were moderating, as we said at the time, it is very hard in terms of pass fail, it is very hard to fail, because what I see, ok that is totally different to mine and it is not how I would have done it, but that's his version. And his versions seems to be meeting what they want it to meet. But the pass fail was hard. Then the assessment to A, B, C, D, E arrived, and that was a bit silly with everyone getting a C. Again, hard for parents to work out.

Q. What about the reporting changes you have experienced?

A. The outcomes, everyone got an achieve. I had a lot of arguments in D in terms of how we reported to this, the advice we got back was simply that you had achieve or not achieve. Like a drivers licence pass / fail which left that really grey area. Some could have been just scraping over the line, meeting minimum standards, leading people to a mediocre society, it was just good enough to get over the line that's all you had to do. You do not have to put any effort in, there was no reward to get the effort. Then it changed. I think that's when, rubrics started coming in. It was a good form of assessing you can go to the /?/ this is an A, this a high standard this is a middle and it gave myself a chance to have a look at it and say right this is quality work, this is average work, this is not good enough, before that it was very much they've done it they gave me something. I know the theory behind it was when it first came in, it was supposed to help those children who are great at writing things down. Everybody succeeds so they can see it in their own way. They did not have to be, the idea was to get away from book learning they did not have to read a book they could do it with their strengths. It was marked and they still achieved. To me that was really good for those children, but in a way I always saw it again as the mediocrity. They were not really pushing themselves. If we didn't change, I remember saying at the time of this change, if we don't move on from this we will have a whole generation going through getting jobs going "I can do that, I can put things together but don't ask me to read a manual", they will not know what to do. I can achieve that in my way. As my brother said it is very interesting because he goes to courses with his job, he is a photocopy technician, he said that you'd be amazed. There are people who can work with their hands but you put a manual in front of them for a new machine and they struggle to understand the manual. We talk about the information reports and everything we do now they obviously have not grown up with that or have not seen that Concept of things laid out and can't follow that. But they are a very visual learner, you know if someone shows them how to do it they can do it really quickly. And I think education has changed in this way, until we tinkered with it a little bit to make it more academic.

Q. What were your biggest challenges with changes?

A. I think the problems teachers faced with it there were a few older teachers there so something new They were scared of it, they didn't really want to embrace it and they were so used to the old way planning, get the syllabus book out, get the source book out, and away you go. So that was something they did not understand, it was scary. So they did not really want to stretch in term of, I know in terms on my planning. You'd come up with an idea like you'd look at the synthesising thing, so my end product was this, and they didn't work that way and they wouldn't change, they stuck with their pen and paper when computers came in, and they said their programs were OK and kept on with them. Getting older teachers to understand it was the big thing. Then they had to look at modifying programs for kids with special needs. That was too much. Just teach to the middle of the class is what they did. It amazed me to when I started using Outcomes in D, probably Grade 5. Along came outcomes and some of the kids were as bad as the teachers. They didn't embrace it either, they were so used to being the very good mathematicians, the very good spellers and the good rote learners. Suddenly they weren't doing as well. When they didn't just have to write things down, when they had to build me a little model, create something, they could not do that. They weren't creative thinkers. And they didn't like not being the best. Got a lot of upsets then. I had parents come to me "why did my child only get a C They have always been A students", yeah they are still very good but they still haven't met the outcomes. See that caused contention. There was a lot of discussion and having to deal with parents. Being a country school it was passed down from generation to generation. And when something new came in it was fearful, it was fear. Didn't worry me. Even though people say I live in my own little comfort zone, which I do, I'm not a big change person, but I kind of easily fell into change easily, I didn't mind outcomes and I like the Essential Learnings. I think that change has tidied things up a bit. I like the idea of a national curriculum too, bringing back that history. I like history. Now when I finished in D and I came here, well, the school was well into OBE and probably ahead of what I was used to. I understood what was going on I could easily emerge myself into it. I think the school has been a leader in terms of assessment for outcomes and moving into other changes.

Q. What sort of examples could you give to support that comment.

A. Well, like our rubrics, we are onto them. Since I started here I've seen a change in assessing too, more evidence based. We plan and teach the unit but when you came to assessing it you suddenly go how do we assess it? And the rubric sorts that out. Yeah, how did that meet that and how do I change that and I think that also changed even /?/

Q. If your assessing has changed, has your teaching changed?

Sort of I think. Not sure. A little bit maybe. But I changed my planning. Well, without mentioning names, in terms of how teachers change, well, with Outcomes, some used to create the unit and then try and fit the outcomes to go into the unit which was to me always the wrong way. You have to take the outcomes to get to it and like bit of a jumping around which people are just getting used to now you've got your outcome you really have to know how you are going to assess that first before you can even put in the middle bit which I think teachers found hard. And I think with ELS that teachers are still finding that a problem. They see the outcome think right I'm going to do this yeah yeah yeah yeah but then when it came to the assessment part of it they go what will we do now? It's about lining it up to make sure it all works. I think in terms of getting the assessing right people were creating one synthesising activity, which makes it hard. I know we did that, we work together a lot as a team, which is really good, and when we first started, well, we didn't assess what we were doing very well. It took two or three years for us to really /?/ to discover that. We were doing the teaching, but the assessing wasn't matching up well. They told us we could use one assessment piece for many outcomes, but you can't really. Not well. Teach an outcome and assess it straight away. You could not leave it to the end for one big assessment piece it didn't work. Maths was a bit different. Let's just do the operations and look at a list of shapes yeah but with I think with English and Science you had to do it as you went along because otherwise you did not actually get to assess everything. People panicked in terms of having fifty outcomes, well that means we have to do fifty tests. I think that was the part that scared everybody. But then we found incidental outcomes and we worked out a pattern. These are the ones you do in the first year, these are the ones you achieve in the second year. I think that has been the good thing about the staging thing in a way, We had to look at things and go these you need to be finish by the end of Grade Four, these are the outcomes you need to be finished by Grade Five. But some still went off an planned by themselves. I know at D, M would go and plan by himself with no communication. He was an older teacher, so he found it very difficult for someone younger than him to coming along and say these are the ones you have to teach. He could not handle that. He was used to the old this is my class I'll plan the way. I've been teaching Grade Four for this long and this is what I teach so that's what I'm teaching and do not tell me what to do.

Q. What sort of professional development did you receive to help teachers like M work through curriculum changes?

A. Well, when Cath Ed put out their syllabus documents and scope and sequence charts you could suddenly see that this is what we had. I think for a long time. not just us Catholics, but the State as well, was flying blind. You didn't know what to do. Because it was too hard, the change was too hard, and we had no help with it. But I think when they gave us the scope and sequence charts we started to work out what we were doing. I know I digress a little bit here, but one of the things I always say out socially, or even to other teachers is this. We have these so called experts who get paid the big money, so what they really should be doing is saying right I'm in charge of literacy so here's the scope and sequence for the whole Diocese. Right, here's your scope and sequence, here's your term breakdown, you go and

do that ok. Work it all out for us. Here's a couple of sample lessons so you can see what to do, instead of us trying to develop everything. They have the access to all the research and stuff, we are the teachers. They go and do all these conferences and /?/ in-service and say well I can in-service you now on this and da da da da da. But if they actually came along and say this is the new way Essential Learnings work so, here it is for you. You get in there and teach it. Say to us, here's the list of ways of teaching now ok here's your scope and sequence and here's how your bit fits it. Give it to us and show us. Don't just say there's that picture, there's that picture and here's the old one over here. Give us examples of what to do. Here is an example of a plan that you can all take back and use for the first term, stuff like that, and this is how you should teach your English /?/ The keep helping us till we get a handle on it. I know that sounds a bit mean and selfish but I think that would make the teaching of these changes so much easier.

Q. Is there anything else that you think would help you manage curriculum changes?

A. Designing units of work maybe. We could refer to them. You don't want to be a robot just teach whatever someone else gives you, but if they gave you some examples of how to write a unit up properly it would help. You know, this is how it's done, this is how it all fits, that would make it easy for us, and for brand new teachers too, because for them all this planning is scary. If they were to write the scope and sequences for us then we would know what they wanted us to do. And we've got national curriculum coming. That's where the problem starts all over again if we go about another change in the same way.

Q. Any other issues?

A. Yeah, every time you have an election things change so how do we keep coping with it all. I'm remembering my first couple of years at C when the maths thing came in. They came in with these Maths folders that were all the go, putting together Maths folders for kids. We have folios now. I remember having an in-service with all these state people. You had to slip in all these things and everyone was panicking about being able to do it and teacher at the same time, and suddenly we had an election and it was gone.

Q. You mentioned the coming change to national curriculum. What are you thinking about that?

A. I think national curriculum could be great because it will line up the ages of kids at school. I know it's difficult when you've got a different starting ages in Victoria and New South Wales. I think it's great because if you have to transfer it makes a level playing field. You know, this child from this person from Queensland can go and apply for a job in Victoria because they've had the same education. Might stop them putting kids in the wrong class. Like my friend, he started with me in our class and he was actually a year older and should have been should have been in the class above. And with the curriculum, well, if we could use the people in the office, not just Cath Ed but in Qld Ed as well, if we could use these people to put together what we have to teach, that could actually work for us. Q. Have the curriculum changes improved your classroom practices?

A. I think they did----with Outcomes, in terms of changing my teaching it allowed me to broaden it in terms of new ideas. Allowed me to expand what I did in terms of coming up with new creative ways of teaching I think that helped me but saying that it also made teaching a little difficult in terms of assessment that's what we were talking about before. You feared how you were going to assess that. Yes you were having a lot of fun teaching it but it was very, very difficult when you came to the assessment side. You had a lot of fun the children had a lot of fun but the assessment just did not meet what you were trying to achieve. So I think in that way changes have helped my teaching. You weren't a robot, you were able to expand your mind, but it also made it difficult the assessment. I think now we are finally getting a handle on that. Before that, you know, I think it was very much all over the place. So I think it's made me a better teacher in terms of you're not rigid, you can leave yourself a little bit of room to move. But it can also be very scary because you may not understand what you have to do to meet an outcome. You may not know how to teach an outcome when they're so broad. You don't have the old sourcebooks. When I first started teaching I had sourcebooks that told me to teach the colour green, red, blue, pink and that's what you did. You didn't have to fear too much. It wasn't exciting, but you weren't scared of it. Now I think sometimes I have some much to work out before I can even thing about planning that I'm not really sure what it means sometimes. My teaching is probably more fun now, more relaxed teaching, that's probably a good thing. You could experiment with the changes and you got away from the teaching blue green black and that's it. But you also had that little bit of fear when it comes to the assessment. If you don't fully understand what the outcome said to do, then you didn't know how to assess it. I think it really helped break down the walls in terms of you got away from the old stereotype teaching and learning. And it made you look at the kids.

Q. What do you mean by looking at the kids.

A. In the way you taught them. I try to use a lot of real life connections and my life in my teaching. Explain why they are doing things. Explain to them even in maths. You say we're doing addition and multiplication because you would use this when you go to the shop to buy things. Give it a purpose. Same in religion too, I always try to use real stories in religion. So they can connect things like that so...

Q. What do you think of the curriculum syllabuses?

A. Probably the RE syllabus is slightly confusing to put it nicely. I've got to be honest I think the new RE syllabus to me are just a little bit above where the children should be. Bit above where the children should be and the sad thing is that a lot of the bible stories that I learnt and grew up with as a kid and at school in the Catholic system are suddenly now gone. Once you learnt your religion by the moral of the bible story. One of my fondest memories was my first play. I was Lazarus---I remember coming up in my little white /?/ I was only grade three but I still remember that /?/ It's a shame. We talk about the old social studies books gone but you might remember we used to have the big religion books, the red, the blue, the orange and they had picture stories in them. They were glossy beautiful pictures and I really related to them. I think you could read that story about the three wise men and you could read that story in there with the picture of the family escaping to Egypt. You could look at the pictures. These days we have the bible in the class. Yes you can read the version of the story in the bible but it's not a story it's a scripture passage where they were stories. And I think in a way it's a shame that has gone out of the school. I know people poo-hooed it was the old boring. But those stories were entertaining and you could still teach the moral aspect. You could have the story and you could talk about a real life situation. The syllabus even a few years back, when we had the old RE syllabus, that wasn't too bad either. I just think it all seems to go too in-depth on the scripture readings too in-depth on talking to the children. Eight year olds don't think morally, they're flat out reading the scripture bits. I remember, too, you would talked about the Saints. You know, Francis of Assisi and the different saints and their life stories and we had picture books on those. I don't know if they're still in the library here but /?/ teachers how often do we use them? So I think in that way, and now I sound like a grandpa, but bring back some of that old stuff. It wasn't too bad, you may have to reword it but it wasn't too bad. But mostly I think the syllabuses from Cath Ed and the government have professional people writing them and I think in a way they have lost contact with the school....they've lost contact with the people who are in schools and they have forgotten what it is like to be teaching.

Q What do you mean by forgotten what it is like to be teaching?

A. Well I know it's a silly idea and we digress a little but I have a friend and she suggested some of these people who've been in the office for a while should come back into the classroom. Into a real school and that yeah just take time off give them two years or so and say your job will be here but you need to go back into the school and reacquaint yourself with planning, lessons everyday class then come back and see what you think should be provided at office level. In a way that would help those people when they plan for us, that is, if they eventually get round to planning for us. They'd be able to go I know what you want. I know what you need this, this and this. It's all good reading the philosophy out of textbooks and everything, and thinking that's a fabulous idea that I heard that at a seminar. A fabulous idea, but to get it to work in an everyday school, now that's the thing.

Q. What did you find difficult about the changes you implemented?

A. Well, with outcomes, they were something brand new and exciting when we started, but I think they need to be reworked after a while to look at what didn't work and change it. Get feedback from our schools and ask what was too hard to teach and what didn't work. They need to cull those or reword those or rework those so they actually fit in the classroom. Hopefully if they do that, take the feedback and say well that's not really working in primary school or that's not really working then it would improve. I guess that is what they did with the Essential Learnings though. Looked at what didn't work with Outcomes and changed it. I think that always needs to be done in education. But most times, people don't review anymore. Just put changes in. But I wonder too, because, you know, we go to these bishop

days and in-services and they ask us about things, but do those people really listen to what we say. I mean we give the feedback in terms of you know no that's not working and yes, that's OK, but it doesn't seem to make much difference. I think that's the most frustrating part for teachers, the fact that you're asked for your feedback, you give your feedback but nothing changes. Money gets spent on things, thousands of dollars, but nothing much changes.

Q. Looking at changes in measuring student achievement, we have testing agendas. We have gone from state tests to national tests with the Yr. 3, 5, 7 NAPLAN. What is your opinion of that.

A. State tests, well, when I first did the state tests when they came in I liked the idea because it gives you a bit of a medium where children are at. The only problem is in terms of who sets them /?/ and I didn't do them last year but previous years they were ahead of where we were actually with teaching our kids. You had a year five test and realistically you didn't teach some of that stuff till third term but you were having to test it in first term. There was no way they could actually pass it. That's why I get a little bit angry all the time when you read these teacher reports and Queensland Government going on about how we're the behind as a state in literacy. I get really angry and I think, hang on, is this fair. And we had those other Queensland tests, what were they.

Q. Do you mean the Queensland Common Assessment Tasks - the QCATs?

A. Yes, them. Well I read through that one last night and even having the core class I think my kids will be able to handle it. All I have to do is a little bit of lead in work, but I think they'll be able to handle it. I don't think it's as bad as the one last year when they had to go out and design the course, which for a core class is just too hard because they can't follow directions. This one is not so much direction it's a bit of common sense really in terms of reading and talking about money. Real life everyday situations, so I think they should be ok on it I think they'll do. It's not too bad really, a lot different from the NAPLAN approach. A. Works better in terms of real life situations. And you have a good rubric to go by to give you direction. You aren't going in blind on it.

Q. With the QCATs, how did you find setting the standards for student performance?

A. Went OK with that. Indicators we had were good. Great to have a base statement, but you need indicators. That's always important. It comes down to teacher judgement. That's where you can get yourself into a lot of trouble when you have different teachers just giving their opinion. Teachers need to understand how to moderate properly. But you know, we have found when we go to those moderation days that there are only a few who really seem to know what to do. Or maybe we don't know what we are doing. But I think we do. We don't really talk much about what we have done on those days you know. Most teachers go there and say professional etiquette says that you don't criticize another teacher's work. There are some teachers who will but the majority of us go yeah that looks great you've done a great job there you know, and good on you...

Q. What value do you see in moderation processes then?

A. I think moderations at school are great. We find now that we actually have a team her at school that works well together, collaboration I guess /?/ last year's team was good as well. We moderate better now than we did at first /?/ not knocking the people I worked with then, but with practice we got better. We weren't good moderators for a long while. With the broadness of outcomes it was hard to moderate. Well, you can't moderate when you've got different outcomes. You know and you don't have to do it the same way but your ends have to be the same, or you can't moderate. You have to do the same thing. If you bring along something that's beautiful and great and met your expectations of this outcome, and I bring something along that is a different outcome, I can't compare mine to yours. They are two different things and I find that on moderation days you go along and yes, we moderate the outcomes, but it's too varied. It's too varied to get a good moderation. So we end up just giving our opinion on each other's. I don't think that is what we are meant to do.

Q. How do you set standards then?

A. We find that when we moderate to set standards it's different in different areas. Say, in the integration area compared to English. English is quite easy because if you do your information report right sorting out an A and a B is fine. But when we take our integration in, where we have met lots of outcomes, like we're doing our posters now to see what they know about the Antarctic, it's harder. One of the hardest things at moderation is moderating the actual work. Have they done what you asked, or are you just looking at how beautiful things are, and how nicely typed and set out things are? Presentation rather than information, and that's a hard thing to get across to parents too. We know that there ourselves, we're even saying it now when we're starting to mark and moderate. Now you know some parents are going to be saying look my child has done a beautiful background da da da da. Yeah, but they haven't answered the question.

Q. How do you sort this out with parents?

A. I think that's where we've developed it well here. In terms of the folio's of work we put together for students. Plus putting your marker guide in with the folio, which a lot of schools don't do. But I think that has come a long way in helping parents understand that's the work, this is the rubric and the guide and you can see that it does not match that little square here. So I think that's helped a lot of parents in some ways. There's been a lot of changes for parents too you know. What with the ELS taking over the Outcomes. But they are better I think. You read through them, they're not too wordy, but really not too much different to outcomes. Yeah, better for teachers, and probably should have taken over from Outcomes long before they did. Some states got rid of Outcomes a lot earlier than we did. They just chucked them out.

Q. Do you have anything else to say about curriculum changes before we look at the learning environment of the school.

A. No, probably not. I've been in the Catholic system about sixteen years now. Been in Catholic schools all my life. Excommunicated from being an altar boy when I got caught drinking the altar wine down at the back of the hall /?/ Excommunicated------ But I went through the Catholic system, it was what I was brought up with. I like the Catholic system. I like the nurturing side of it and the respect that people show. You know, that's the environment I want to be in. That's what I pass on and I want to be in things like that. I want to be part of it. I know there are teachers, Non-Catholics in the Catholic system. They find it hard, because they're just not used to the expression.

Q. Can you talk more about the environment? What do you mean?

A. I guess it's like when we talk about God. You see a reaction in the children. When you say it in the classroom, like when you're teaching a maths lesson and you say that God's given you the intelligence to do this. They look up at you and they are thinking what's that got to do with maths? We only talk about God in religion don't we? But you tell them it's about using the gifts that God has given you to do good for the world. It's a different slant.

Q. What do you think contributes to this difference?

A. Well, I grew up with the nuns and the Christian brothers teaching. Now it is totally different to what it was then. Religious are gone. Just us now. I do think it's for the better in education, because back then I think it was a case of nuns and brothers those rare few priests taught and only did it because they had to. They weren't teachers like us, they started a Catholic school for the Bishop, and the Bishop needed people to do it so they said right, you do it. I was telling my children about the five perceptions of the church. We were doing what the church expected. One of the things was the church expected the people to fulfil the needs of the church. I was saying how people like N would go to the priest at the Christmas holidays to get her holiday pay and he would say there was no money. Couldn't pay her, and she said that wasn't a one off occasion. There were numerous occasions when the priest would wander over and go you know we don't have enough to pay you this week. Because the school was run by the church and not by the Education body. Now that we have the education body, at least you can get paid. I think it's good that they work in together now. But you know, the church parishioner down here in the church, well, they perceive what they think should go on in schools and get a bit critical. A lot of them are the older style of education.

Q. Do you think that the Catholic environment influences the way the curriculum is delivered?

A. Well I think that we do things in a different way in the Catholic learning environment. Like I said, we use the words love God. We use that in our teaching more than they do in the State. I've done several pracs in State and I know doing one of my pracs at R. I was told not

to mention God. I remember talking about God in one of the lessons and saying da da. I remember the teacher didn't pull me up at the time, but told me after not to talk like that because it was a state school and multi-denominational. Yeah, not to do that and really just stick to the basic education language. Where to me, that's why the Catholic school is really good, because you are treating these people as human beings. You're giving them a way of life, you're giving them hope you're not just like Maths and English straight at them. You're making it human, so they can see this part of the English story this bit of comprehension is something I can use out there in the world. How am I going to use that? I'm going to use that in a special way to help someone and things like that. So I think in that regard the Catholic system is very good in that way.

Q. The curriculum in our schools is underpinned by the Diocesan Learning Framework. How do you think that influences what we teach.

A. Can't say much about this. Don't really know. I think if everyone understood it correctly it probably might work but I think because it's still a little bit confusing. Most of us find it too hard. People are, I've got to be honest, people are a bit lost with it, because it's confusing and I don't think people would really use it or look at it or think about curriculum when they look at it. People will just say well we don't understand it so it's like anything people don't understand, they just won't use it. Most of us want things that aren't too hard to understand, just so we can connect them. Maybe we were born in the wrong era. We don't want to be spoon fed, but we do want things in front of us that we can understand. You know, we want to be able to see it put it together. I've seen blue poles down at /?/ art gallery and I still don't understand what it means. It's no good putting something beautiful in front of us that looks great and modern and dramatic with having us understand it. It's not going to work for us, and I think that if it was more structured you'd see how it linked up yeah I think people would probably try and use it a bit more, but at this stage I think it's a little too confusing. How much connection does it have to what we do in schools, or are we just making it up.

Q. What do you mean by connection?

A. Living the messages of Jesus in our schools. You know, the Catholic stuff. Getting the best out of people. Making sure you have people teaching in the right spots. You have your person for high school your people for primary school. Then comes personality of teachers. I honestly believe after sixteen years of teaching I like that middle area. Having done year seven for six years I enjoyed it I found the children great but I don't know if I'd want to go back into that area. So I think it comes down to personality. So someone like M, it would be very difficult to see him in say the lower school just not his personality. You've got to look at the strengths and the weaknesses of the people where they are best suited otherwise that's where your area of education falls down so it would be like me going in to prep.

Q. Can you explain living the messages of Jesus a bit more?

A. Well, like I said before, I like Catholic schools. It's all I've ever had. I think you are doing God's work with the kids you teach. We have the Gospel Values in our school, we didn't need the Values Education program of the government because we have the Gospels. We live by them and teach by them. Jesus and his messages are right there in what we do.

Q. Can you give me an example of this.

A. Well, the social justice stuff we do here, helping out when we can. And the caring that we get the kids to do. Thinking about each other and not just themselves. Care and compassion. Treating each other well, that's important too. All that sort of thing.

Q. Is there anything else you would like to add about curriculum changes in our Catholic schools before we finish.

A. I think everyone has an opinion about changes and curriculum. The government and the office have an opinion and teachers also have an opinion. Parents too. Trying to get everyone to come to agree is hard. We say this is what this is supposed to mean, but getting everyone to actually see what we mean is very difficult. But change is about making it better for kids. The Outcomes thing was that all students will succeed, yes I think everyone can succeed in their own way. In Outcomes it was easy, pass or fail. Then I think with the standards, we put a bit more into it, made it harder for all to succeed. I don't think every child will pass now. With Outcomes, no one ever gave you the assessment. The government or whoever designed it gave you the syllabus, but no assessment. We had to make it up ourselves. With Essential Learnings at least they backed it up with the assessment tools and showed you the proper way of assessing. Let's hope the national curriculum will do that well, otherwise everyone will go their own way and it'll go out here and then you'll try to bring it all back here. You know, it will be open to interpretation about how you saw something and how I saw something. And we'll end up with kids not knowing the states of Australia even.

Q. And Catholic schools?

A. And with our Catholic schools, well, that's where I want to be because that's where I was brought up. It's the place I am comfortable in and I think that we teach our curriculum with God in it.

APPENDIX H: Cop	by of the topics that eme	erged from the interview data.
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From the Interview Data													
Teachers	1	2	3	4	5	6	7	8	9	10	11	12	13
Topics	'	2	3	4	5	0	/	0	3	10		12	13
Diocesan Learning Profile	Y	Y	Y	Y	Y	Y	Y			Y	Y		Y
Teacher's voice	Ť	Ť	Ť	Ť	Y Y	r Y	r Y	Y		Ť	Y Y		Ť
					Ĭ	ľ	r Y	ľ			Y Y		
Teacher performance pay	V				V	V	Ŷ	V	V		Ŷ		
Teacher attitude	Y		V	V	Y	Y		Y	Y			X	
Religious Ed syllabus, lessons	Y		Y	Y	Y	Y		Y	Y			Y	Y
Teaching religion, pedagogy	Y				Y			Y				Y	Y
Church, teaching arm	Υ	Y	Υ	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Evangelization											Y		Y
Catholic culture, environment	Y	Υ	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
Authenticity												Y	Y
Joy of teaching, compassion											Y		Y
personal catholic story	Υ	Y	Υ	Y	Υ	Υ					Y	Y	Y
Personal Christian story									Y	Y			
Parents as role models						Υ	Υ						Y
Teachers as role models						Υ						Υ	Υ
Catholic university													Y
Report cards, parents	Υ	Υ	Υ	Υ	Υ	Υ			Υ				
Reporting difficulties				Υ	Υ	Υ	Υ					Y	
Teacher moderation CTJ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Y	Y	Y	Υ	Υ	
Folios, criteria sheets, rubrics	Υ		Υ		Υ		Υ	Y	Y	Y	Y	Y	
Parents and outcomes/change				Y	Y	Y			Y		Y		
Maternity leave implications		Y	Y			Y	Y						
University courses	Y	-	-					Y					
Early years planning	Ý											Y	
Philosophy understandings	Ý	Y	Y	Y			Y	Y	Y		Y	· ·	
Computerized tracking	Ý	•		† ·					-		•	Y	
Syllabus content	•			Y	Y							•	
QSA syllabuses/understanding				Ý		Y			Y		Y		
White middle class syllabuses						-	Y		Y		•		1
Yr 3 5 7 tests	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Media and gov testing	1	1	Y	-	-	1	1	1	-		-		
ABCDE government			1	Y			Y					Y	
NAPLAN , QCATS			Y	I			I					Y	
Formative/summative tests		Y	T	Y		Y						T	-
Professional development		Y		Y		T	-	Y	V		Y		
	Y	Y Y	V	Y Y	V	V		r Y	Y	V	Y Y		
Outcomes – all succeed	Ŷ	Ŷ	Y	Ŷ	Y Y	Y	V	Y	Y	Y	Y	V	
Interpretation of outcomes	V	V	V	V	Y	Y	Y		Y		Ŷ	Y	
Engagement with outcomes	Y	Y	Y	Y	V		X						
Essential Learnings, wows					Y	Y	Y		Y			Y	
National curriculum	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Y	<u> </u>	<u> </u>	<u> </u>	Y	<u> </u>			
Government/politics	<u> </u>				Υ				Y		Y	Y	
Socio/economic impact	<u> </u>								<u>.</u> .		Y		
Specialist aspects	<u> </u>						Y		Y	Y	Y		
Inclusive ed ESL	<u> </u>									Y	Y		
Curriculum organiser									Υ				
Similarities of states syllabi		Υ											
Found outcomes overwhelming	Υ	Υ		Υ	Υ	Υ	Υ				Y	Υ	
Teaching changes		Υ		Υ	Υ	Υ	Υ		Υ		Y	Υ	
Different methodologies	Υ	Υ		Υ		Υ				Y			
Changes in content of teaching	1			Υ	Υ								

From the Interview Data													
Teachers	1	2	3	4	5	6	7	8	9	10	11	12	13
Topics													
Outcomes planning difficulties		Υ		Υ	Υ	Υ	Υ	Υ		Υ	Υ	Υ	
Assessing difficulties	Υ	Υ		Υ	Υ	Υ	Υ				Υ	Υ	
Tracking		Υ				Υ					Υ		
Integrate/aggregate planning		Υ	Υ				Υ	Υ					
Alignment of p, t, a, r		Υ							Υ		Υ		
accountability/assessment		Υ		Υ		Υ						Υ	
School based English program											Υ		
Class/school structures		Υ		Υ					Υ	Υ	Υ		
School /systems/states		Υ			Υ	Υ	Υ	Υ	Υ	Υ			
Students and change					Υ								
System role					Υ			Υ	Υ		Υ	Υ	
Unit accreditation								Υ					
Government role					Υ								
Cater for students needs						Υ				Υ	Υ		
Classroom practice							Υ						
Student, teaching changes		Υ		Υ					Υ				
Impact of society on students		Υ		Υ		Υ			Υ				
Breadth of curriculum												Υ	
Students know their ability				Υ									
Students challenged									Υ				
Comparing outcomes with past			Υ	Υ	Υ		Υ					Υ	
Diagnostic net				Υ									
Involvement in pilot school					Υ								
Working collaboratively			Υ	Υ			Υ	Υ		Υ		Υ	Υ
Resourcing mandates				Υ			Υ		Υ			Υ	
Pedagogy vs content				Υ			Υ						
Academics of good design							Υ						
Leadership				Υ				Υ				Υ	Y
Renewal								Υ					
APPENDIX I: Copies of researcher-generated documents: Iteration 1





1a. Reflection on Curriculum Changes (11): Classifying and Connecting

Classifying	Connecting
CHANGE AGENDAS	HOW TEACHERS ENGAGE WITH MANDATED CHANGE IS THEIR "STORY OF THE ACCEPTANCE OF CHANGE".
Questions to help classify. What is the PERSONAL HISTORY of teachers around mandate. Some adopted changes, some adapted them. There are teacher stories of design, stories of engagement. What were the influences and impacts that teachers dealt with when they accepted a mandated change? What are teacher opinions of the outcomes change? Were they the same for other changes?	THEIR "STORY OF THE ACCEPTANCE OF CHANGE". Some had only ever taught to the OBE change and when this happened, the change presented no problems. Some had positive experiences, a lot depended on how the colleagues of young teachers saw changes e.g. in a small rural school teachers had embraced it. Therefore: the attitudes and opinions of colleagues and colleagues interpretations will heavily impact on the young teacher. Teaching experiences of the teacher directly impacted on their acceptance of any changes. How they were introduced to it was important. Some had to come to understand change through the interpretations of their colleagues, especially when they joined a staff from another system and had not experience of the changes that they had to deal with in the classroom. Some moved into classroom teaching from specialist areas and had to learn the change. Some had to learn how to plan, assess and report to the change because they had no experience of it in previous teaching roles. Many were heavily influenced by the way the research school approached change, and adopted the norms of the school.
	1

REFLECTION: The influence of peers is relative to the depth of relationships between the beginning teacher and the "experienced" teachers in a school.
REFLECTION: The teaching story of the individual teacher has great impact on how change is approached.
REFLECTION: The culture of a school is really important.
REFLECTION: Do young teachers adopt the thinking of teachers they begin teaching with when it comes to mandates? The IMPORTANCE of mentors!!!
REFLECTION: What are the most formative years for teachers in curriculum changes? How long does it take for teacher to come to understand change? What happens if the experience of change is not good? What are teachers greatest needs in changes? What is the greatest impact on teachers involved in curriculum changes? How do teachers view mandated changes?

1b. Reflection on Curriculum Changes (11): OBE, ELS, National Curriculum

(Field notes, memos)

CURRICULUM CHANGES OBE, ELS & National Curriculum (field-notes) Facts

Between 1999 and 2012 schools will have witnessed 3 changes in syllabus documents for Years 1 to 10. These have been the Queensland Studies Authority OBE syllabuses put into schools between 1999 and 2004, the ELS syllabuses that were drafted in 2006 and 2007 and the federal national curriculum syllabuses are scheduled for implementation in 2012. The Essential Learnings were grounded in the Outcome-Based syllabuses. They collapsed the number of outcomes. The National approach introduces History and Geography as subjects and promotes a year-based approach to curriculum delivery.

Impact

The ELS were used to audit the OBE planning in the research school. The directive to do this was given by the system. According to teachers in the study, some schools completed 6 cycles of OBE delivery, some completed 2 cycles and at least 1 had limited engagement with the OBE syllabuses. There was evidence that one school barely worked from the OBE syllability at all and engaged with ELS as from 2009 to plan their curriculum. In other schools it was felt that Essential Learnings are transitory and they too will pass. Some teachers were reluctant to engage with them in any way.

There was some confusion around the purpose of ELS. One belief was that the purpose of the syllabuses was to take away the pass and fail assessment paradigm of the OBE model. Another was that ELS were in line with Education Queensland policies. Yet another was that state bodies had tweaked the OBE syllabuses into ELS to reduce the number of outcomes to be met.

Consequences & Implication

Consequently there was no consistency of teacher engagement with OBE. There was lack of understanding about the purpose and implementation of OBE syllabus documents because of a lack of consistency in how it was approached in schools. Teachers came to the research school with many different interpretations of the OBE change. With the pending introduction of national syllabuses this has implications for the research school. It is a message that is saying very clearly that there needs to be clarity around implementation process of curriculum change so that all schools have a common approach and a common understanding of what is required for the mandated national change. There is a need for education officers to be consistent in strategic planning for national curriculum implementation with schools. The implication is that the needs of individual schools must be identified and supported and follow up is required and common messages must be given to teachers to deliver curriculum changes.

1c Reflections on the needs of teachers managing Curriculum Changes (11) in the culture of the research school (data-based)

TEACHER EXPERIENCES

- Only ever taught to outcomes/ teaching didn't change
- Different types of teachers complement each other in teaching
- Think teachers trial things without really understanding them, understanding comes from implementation and there needs to be help, in-servicing, modelling of what we need to do e.g. CEO need to write units so we can see how they work, model for us
- Teachers on the whole are generally very defensive
- Teachers operate on different perspectives and assumptions many times
- In the past new things are faced with negative attitudes
- Teachers feel as if they are drowning and things are on top of them
- My own pedagogies are in place, my philosophy of teaching and learning nestled into outcomes in a positive way
- Teachers didn't look at the outcomes properly
- Had teachers who wouldn't change, wouldn't plan together, had the don't tell me what to teach attitude
- I missed a lot, I was on maternity leave, I had to find my feet
- Everyone else seemed to know what to do, I didn't, it was hard
- I felt lost in the classroom, I didn't know where I was going with outcomes

- HN teachers had a positive attitude, teachers wanted to be progressive and stay up to date
- Teachers were overwhelmed with the changes
- To begin with, very unsure of expectations
- Not a big change person
- Bring back the old stuff
- Outcomes made me a better teacher not so rigid
- Out of uni, have only known outcomes, first experience was positive, all outcome based pracs, challenge was to learn to teach
- Eased into outcomes through job-share, gradual, picked up things as went along, didn't struggle to implement it, like outcomes, easier than what was done in the past
- Missed the outcomes change altogether
- My need was in-servicing
- When stated teaching it was a lot more stand in front of the class
- Found outcomes overwhelming
- Most teachers did not go through college with outcomes, they have not taught this way
- Teachers can let students down if they do not teach them the skills needed for basic assignments
- Get a group of teachers blindly leading and they might not be on the right track
- Still have groups of teachers who don't understand outcomes, don't embrace change
- Differences between teachers if they don't know they go and find out or they just sit and ignore it
- Teachers have different work ethics
- Teaching did not change with outcomes
- If teachers has a passion/interest, the teacher will know more than the consultant in 6 months, they will be experts and cast nets in 100 different directions
- Think teachers never understood the outcomes change, never understood it wasn't their performance being looked at, it was the child's, don't think they understood the value and process contained in the syllabus
- Teacher don't think interdependence and co-operation applies to their work they encourage children to work that way but don't do it themselves, so the can' understand it
- Been involved in OBE since its inception
- Think teacher were ready for a change, had a stable community the challenge was to support teachers with difficulties
- A lot of administrative demands and paperwork on teaches, rather than getting in and teaching
- Some were entrenched in habits, entrenched in attitudes to curriculum, that is very difficult for us to shift
- Only studied and taught to outcomes know no other

1d Reflections: Curriculum Changes (11) in the culture of the research school

(data-based)

Teacher perceptions had been formed in rural and western schools in the Diocese of the research and rural schools in other Dioceses in Queensland. Teachers in the study had graduated from universities, Teacher Colleges and Universities of Advanced Education in Queensland and New South Wales. Teacher qualifications were diverse, ranging from Diplomas of Teaching to Masters in specialist areas. The majority of teachers in the research school were Catholics.

Catholic identity reflected in a Catholic culture – what teachers said

- Use the words love God at this school, but was told not to use them in the state system
- Nurturing & respect in school
- A welcoming place
- Celebrations liturgies, prayer, and having an Assistant Principal Religious Education.
- Acceptance of others, Jesus' word, sacred spaces and prayer tables
- Project compassion we relate it to the daily life of others, kids are made aware of their place in the world, the needs of others and what we need to do
- Respect
- It is child centred, whole child focus
- Want kids to learn from their mistakes, be risk-takers in a safe environment
- Difference between state/catholic, we go to church but that depends on the catholic school
- I don't think being a catholic school influences the way we teach
- We make better children, good moral behaviour, good attitude to others, good Christian manners, look after one another, care for each other, care for the world, care for each other when we play, work at a communal level stronger than in state
- Go to church from prep on, have respect for environment, sit quietly, be reverent, have respect, be still, learn to listen, exposed to this all te time, it impacts, its absorbed, even if we don't want it to be
- Compassion for each other, look after each other, someone get hurt they help
- Reading the bible example of how Jesus cared for people
- Difference is how we treat each other
- It's what they learn, the way they treat each other, how they work together
- Being a catholic school it's there all the time, in our planning, we make the children aware all the time
- I love the catholic traditions, love the way the kids embrace them
- We promote prayer, values start the day with prayer, lovely way to start the day
- Our way gets into their talk, people of justice, people of joy

- Hard to be angry with children when ground your teaching in faith what would Jesus do?
- Need to keep our catholic traditions, give them words, what sets us apart from other religions
- Non church goers make it difficult to keep our Catholic Identity
- Mission, social justice, raising money for needy, St Vincent de Paul involvement
- Sacred spaces in classrooms, prayers, grace, afternoon prayers could be the only prayers they say in a lifetime
- Teaching spirituality is difficult
- Catholic schools have a different quality, but I think we get used to it
- Every school is unique
- Excitement in leadership, leadership that wants to do the work of God, and believes in it it is in the people and it impacts through the leaders
- Knowing acknowledging understanding the ways of Jesus, Jesus story comes through
- Evangelisation help people in their faith and God journey
- It feels different, it is the way we teach
- Welcoming and living communities
- The underlying message of Jesus is in our schools, in what we do and say
- Works for justice kids who want to do things e.g. breakfast club, weed garden, organise games for little ones
- Kids need to contribute to the uniqueness of the school culture
- Opportunity to have certain values put before children, we can stand for things very strongly without having to excuse ourselves in certain context
- The challenge is to connect people to community
- Kids can give right answers without connecting their behaviour to values we think we are living it out in catholic communities but are we?
- Each school has its own character and values that should connect to something that is important to the school link values to traditions, to gospel values, to church, it gives a reason for behaviour and decision making
- Sacred spaces, prayer both formal and informal,
- Children are already in mystery
- Like to think the culture of a catholic school makes it different
- It is the catholicity of the staff, not the ritual, but the living of the catholic christian values that matters
- A sense of genuine care and concern for the individual child
- Sense all staff is guided in what to do by the image of Jesus
- each school is different and links into their own school values
- social justice issues, looking after each other, school prayer, liturgy, assemblies, involvement – all helps share sense of the sacred
- mix of students gives less support for the religious mission
- cultural and media are powerful influences, sometimes negative
- poor not in the schools, can't pay, this is a challenge
- refugees and migrants are a challenge
- schools are centres of evangelisation

- everyone promotes the teaching of Christ in the school
- life and activity in the school = an encounter with Christ
- where parents students teachers and teachings of church meet
- live by example, actions, deeds, the way we interact, the environment we create the learning for students
- above all its respect and dignity of human person
- Gospel values in all we do
- we need to continue the traditions of the religious in a different way
- We have Religious Education classes, retreats, prayers, quiet times, celebrations, life and faith journey, and we create opportunities to address core faith beliefs. We invite a response from the community.
- we present the face of God
- school cultures are unique, there is parish involvement in some, a sense of belonging to a wider family
- we develop an appreciation for the big picture church family
- no separation of secular & catholic I don't live my life in separate compartments
- The religious side impacts on how we teach
- Evangelistion in the school
- The culture impacts hugely
- I love the spirit you get in a catholic school
- Catholic worship and gospel values are connected what you believe in, where you get your beliefs is in the school
- Students bring joy, special needs bring lessons
- Compassion in decision making
- General positive feel
- We are all God's children that's our working environment
- Love the traditions
- Gospel values are in the stories, the parables, the miracles
- We are the face of Christ to the world
- Community is important, a commitment to the future, socially just and inclusivity
- Take communion and we share at Gods table SK
- Links seen in teaching practices, a lot of teaching of church happens here, they won't learn it anywhere else
- Its central, its daily, it's always there
- Teacher student relationships, the care teachers show for kids, how they interact, handling of behaviour, expectations of kids
- Responsibility for caring for things, personal responsibility as stewards of creation
- Catholic identity growth of individual, life-long learning, community values, stewardship of creation – fits with QSA syllabus content – but we use different language

1e: Exploring Curriculum Change (11): Religious Education Syllabus

"I like the units that have been brought out with those new modules, linked to the RE syllabus." T5

"I think the modules have made it easier to teach the syllabus in the classroom." S3

"RE syllabus – I would like to see the older children using the gospel more in everyday life. Sometimes they're a bit airy fairy what they expect children to do and particularly with all this new theology that's coming in. You know, the creation story, how all that's changing." S5

CONTEXT	CONSEQUENCE	QUESTIONS
likes the way modules have been written to align	Using modules to plan.	The RE is implemented through the modules.???
with the RE syllabus, although she thinks that some of the outcomes are "airy fairy". She thinks children need to be made	Planning to incorporate an awareness of new theologies. (adopting an accepting of change)	Children understand that the Gospel stories connect to everyday life.???
aware of the different theologies and would like to see the Gospel stories connected to everyday life a bit more.		Children are given an understanding of creation theology.???
		What does this mean????

APPENDIX I: EXAMPLE 2 Reflections of data on change linked to empirical literature.

REFERENCES: Champion; Hall & Hord; Matthews, O'Mahony & Barnett

Reflections:

- 1. Change is a process not an event...change takes time and people don't usually change just because someone tells them they should. Also, people will rarely change what they do after just one lecture or workshop.
- 2. There are significant differences in the development and implementation of an innovation. Development creates the program or strategy to be used, implementation focuses on establishing use of the innovation. But, once the program or strategy is developed, the implementation must be developed at school level to address the local context.
- 3. An organization does not change until the individuals within it change. Individuals approach the same change with different feelings towards it and different levels of skill in relation to it. It is important to manage the change at the level of the individuals involved before attempting to deal with it as at a group level. Therefore the study of change is a study of the management of change by the individual. Therefore there are levels of implementation e.g. the development and implementation at system level, the development and implementation at the collective school level and the development and implementation at the teacher level. The gap is the knowledge, will and skill of the teacher, or the school......how they interpret the intent.
- 4. Interventions are the actions and events that are the key to the success of the change. They may be complex and lengthy e.g. workshops over a long period, or short, such as a

conversation in a corridor. They may clarify the focus of the change effort, the monitoring or the evaluation.

5. Facilitating change is a team effort – the principal, the management team...a team responsible for the change effort and the roles of the team are identified.

REFERENCES: Crowther, Fullan, Hargreaves. Focus on the principles of change.

Reflect on:

Capacity of teachers to change. Change is a general process? implementation is a more specific process. Implementation is a process that indicates some change has taken place e.g. alteration of existing practices or a new and revised practice to achieve outcomes. Implementation involves changes in resources, materials, behaviours and values and beliefs. Need to have a clear picture of the underlying thinking behind staff behaviours in order to plan future change efforts.

What are the changes that were involved for teachers (resources, materials, behaviours, values and beliefs).... BUT...did teachers change their values and beliefs about teaching???? What did they value? What did they believe?

Do teachers change their beliefs? They have learnt to do things in a particular way and they have succeeded so they do what they know succeeds...why...because they want to achieve outcomes with their students.....why....to cover the work they must do.....why....because they are accountable for covering the work.....why....that is what they are paid to do....why....because they are required to teach what is in the syllabi....why....to teach kids.....why....to move them into society...why....earners or learners....why....government expectation.....why....economic improvement of country...why....more money???

To begin change you need a clearly-stated goal for the change effort. Goals come from the external environment e.g. government mandate or Internally from the data collected within a school from surveys. From the broad statement of the goal the innovation is identified and developed e.g. planning, assessing and reporting to the syllabi. Innovations reflect the thrust of the goal e.g. reading program, strategy to improve the image of the school, a mentoring program, introduction of reflective practices.

POINT: Within curriculum change there are changes e.g. co-operative learning, individual learning journey of student; different type of assessing and reporting, different planning. There were change for teachers e.g. from isolation to cooperation, from isolation to teams.

The state of readiness for change in the organization is important?

Points:....

- 1. Goals is everyone clear about the rationale and the purpose of change?
- 2. Leadership who drives the change and takes responsibility for working with people?
- 3. Focus are we clear about the change? Are we clear about how people will be expected to change what they do?
- 4. Will there be a step by step plan for everyone to follow?
- 5. How will individuals know whether they are going along OK?
- 6. Will there be milestones built into the change process?

APPENDIX I: EXAMPLE 3 Curriculum Change (11): Comparing group data.

Comparing experiences and responses of Prep to Year 3 group on planning,	
assessing, reporting	
T2 different interpretations of outcomes at different schools. At J she had to cover it in	Experience
themes, straight year levels with theme based approach (not maths)	
T2 experience with designing curriculum that she thought caused more problems than	Experience
outcomes Had to think about purpose of activities chosen – which was good – not just	
busy activities	
T2 rubrics have become important to justify your decision making	Response
T2 reporting to outcomes was difficult, with music it was achieved not achieved type of	Experience
approach not a-e	
T3 when you look at units on line you get great activities that are fun but they don't	Experience
always align with assessment and reporting, there's not the resources, they don't match	
because I don't think anyone has even bothered to get that deep into them at primary	
school level.	
T3 I think that the SOSE and Science outcomes are a bit above the kids anyway –	Deenenee
above a lot of teachers also	Response
T4 outcomes were written by people who were experts in that discipline but teachers are jack of all trades, master of few, so you get different understandings and different	
terminology	Response
T4 you don't get time to read all the back-up material and the extra information – it all	Response
needs to be short and concise for us – so Essential Learnings should be good because	
you get the picture quickly	Response
T4 didn't hear much about Spady - referenced briefly but not done to death	Experience
T4 the amount of outcomes to cover – it was a lot in eight klas	Experience
T4 different in different schools – if they have music, art, pe,lote specialists, they cover	
those outcomes	Experience
T5 integrating you tend to just touch on lots of different topics but aggregated gives you	
more depth	
Comparing experiences and responses of Yr 4 to Yr 7 group on planning,	
assessing, reporting Yr 4-7 group	Experience
T6 I think outcomes improved assessment – you have to analyse and think about what	
you are going to assess	Response
T7 change to Essential Learnings brings ways of working to the fore where they were in	
outcomes as processes but not as apparent- looking at the verbs they said - we could	
miss the point	Response
T8 need summative assessment for maths – but if they know the process they can	
gather the information, they do not need to recall it	Response
T9 CTJ day – got my team to collaborate, but moderation depends on interpretation and	
sense of understanding outcomes and I didn't really see anyone else who followed the	
task, I saw a lot of activity and is saw a couple of rubrics but they didn't really assess the	
task – either lack of understanding, or its too hard, or I don't want to go there – there are	
a lot of variations – we work to the least common denominator and that is all that is	D
expected	Response
T10 with the change all kids are expected to reach higher standards of literacy, but is	
this a real expectation –we have always had kids who were less capable academically	
and they went out and got a job – classes were huge 50-60 percent of teachers stood	

Γ	and delivered the work – Maths, English, Geography, History – not all the extras we do	
	now – art and singing, easy report cards,% based	Response
	T10 there are some kids who just need a bit of paper and a highlighter pen while others	
	want to talk and brainstorm	Response
	T10 too many different interpretations of outcomes- need a scope and sequence to	
	maintain consistency and take the academics out of designing units- too much, too hard,	
	to many to address	

APPENDIX J: Copies of researcher-generated documents: Iteration 2 Example 1: Identifying the Dimensions

Theme	Data connection	Dimension development
Capacity to Change T8	 The attitude, motivation and openness of peers to change determines the success of change Teachers are generally accepting of change 	T8 adapts to change, following the example of her peers. She agrees with what they tell her. T8 adopts the norms of the school and accepts & practices what is in place.
Capacity to Change S4	 Accepted change and just did what was expected Resilient and worked with was given to work with it Implemented government expectations because it had to be done Was not truly affected by 	S4 adopts changes. She accepts what she is given to do. She adopts and accepts & practices government expectations. She adapts curriculum change and
	curriculum change in her role	agrees with it, but curriculum change does not change what she teaches.
Theme	Data Connection	Dimension development
Teacher Capital T8	 Adapted to curriculum change Interpreted curriculum according to the information and knowledge given 	T8 interprets curriculum change, filtering it through the understanding of others.
	 Manipulated curriculum to suit circumstances Focused on the learning journey of the student and found not all mandates supported this e.g. Yr 3,5,7 tests 	She audits what she does to meet the needs of students. She adopts government expectations, and accepts and practices the mandates.
Teacher Capital S4	 Did not have a deep understanding of curriculum changes and thought a prescriptive approach to syllabus design was a better idea Felt that she was not well prepared to engage with change Worked parallel with change in her role Saw the positives in curriculum change 	S4 adapts curriculum change by agreeing to the mandate. She interprets the benefits of change by filtering her understandings through her prior knowledge. She adapts to ongoing change, agrees with it, even though she was not truly affected by it in her role.
Learning Together T8	 Implemented curriculum according to the advice and information gathered from peers Professional development did not meet her needs Professional etiquette does not allow her to criticise her peers Found it difficult to enter into professional dialogue with peers at professional development sessions Felt there was not enough 	T8 interprets and adapts according to the advice of her peers, filtering and auditing what she is told through her prior knowledge and agreeing to it. She filters professional conversations through her personal values.

Learning Together S4	 informed professional development given about curriculum change Thought teachers were asked to 	S4 interprets her perception of learning about curriculum change
	 complete tasks that were well above their capabilities e.g. design school-based programs Learnt most of what she knew 	through her experiences. She filters and audits unsuccessful attempts at curriculum design.
	 about change from colleagues Felt that she did not have enough depth of knowledge about what she implemented 	She learnt about change by interpreting it through the knowledge of her peers, filtering and auditing her understandings through prior knowledge and experience.
Shaping Culture T8	 Saw the culture of the school as relational Believed the culture of the school was shaped by the behaviour of people Thought Catholic traditions influenced the school culture Thought connecting the traditions to the life of the school was done through the curriculum 	T8 adapts to the culture of a school by agreeing. She adopts the norms of the school environment and was accepting of the religious life of the school, practising promoting it through her behaviour and connecting it to curriculum.
Shaping Culture S4	 Was positive and accepting of change, which created a certain atmosphere in a school Was upset by the lack of acceptance shown by some 	S4 adopts the culture of the school. She is obedient to Catholic traditions. She and the norms of the school.
	 towards students Was accepting of the culture of the research school and happy to work within the Catholic tradition Felt that the Catholic traditions influenced school culture Emphasised the behavioural and 	She adopts the behavioural and relational aspects and is committed to her personal values of acceptance and inclusion.
	relational aspect of working in a Catholic schoolThought young Catholics had great spirit	

Connecting Dimension Development to Processes Development in Example 2.

Example 2: Identifying the processes

Process development within the	Data to validate process development
dimensions.	
Capacity to Change T8	Data from the interview with T8
T8 adapts to change, following the	"From what I picked up they actually felt comfortable with
example of her peers. She agrees	the change. They thought it would make it easier. In the
(process) with what they tell her. T8	lower grades they did integrated anyhow because of their
adopts the norms of the school and	Diagnostic Net, so it linked in well. No real problems. They
accepts & practices (processes)	were fairly positive I felt, from my point of view anyway. I
what is in place.	liked doing integrated units on topics. They helped me, so it

Process development within the dimensions.	Data to validate process development
	was good. When I changed schools I saw people reluctant to move forward with it, a big difference of attitude and I found it very frustrating the way they had grouped their outcomes." (T8)
Capacity to Change S4	Data from the interview with S4
S4 adopts mandated changes. She accepts (process) what she is given to do. She adopts and accepts & practices (process) government expectations. She adapts curriculum change, but it does not change what she teaches.	"Government testing is like comparing apples with oranges. On one hand we are being pushed to individualise education, meet each child's needs, modify and scaffold everything and they turn around and test, and it has nothing to do with what you're even teaching in most cases. Just ridiculous, but we have to do it." (S4)

Processes Development within the Concepts	Data to validate process development
Teacher Capital T8	Data from the interview with T8
T8 interprets curriculum change, filtering (process) it through the understanding of peers. She audits (process) what she does to meet the needs of students. She adopts government expectations, and accepts and practices (processes) the mandates.	"We heard that we were the first school to put units together to be accredited, so we gave it a go, worked together, you know, because that was how it was, so we just did it." "I don't like the Year 3 5 7 tests. I think too much pressure is placed on kids. I don't feel they give an indication of what happens in the classrooms. If you are poor in reading then the maths questions are going to be difficult. We spend all this time adapting tasks, adapting the way we teach children to support them, then you get a result that makes them feel like they are failing."
Teacher Capital S4	Data from the interview with S4
S4 adapts curriculum change by agreeing (process) to the mandate, although she felt she lacked understanding. She interpreted the benefits of change by filtering (process) her understandings through her prior knowledge. She adapted to ongoing change, agreeing with it, even though she was not truly affected by it in her role.	"Change doesn't affect me a great deal because I'm working on such basic things. For me, the main emphasis is teaching the children to read. When people say to me have they got comprehension, well, you can't be concerned about that until they can actually read and we have such limited time." (S4)
Learning Together T8	Data from the interview with T8
T8 interprets and adapts according to the advice of her peers, filtering (process) and auditing (process) knowledge and agreeing (process) to it. She filters (process) professional conversations through her personal values.	"We had people come out to help us. I think there was a big difference in understanding about what was required by them as well. One felt units were integrated and that we were on the right track and another one thought it was wrong. It was a learning experience. We integrated units under the same theme. Multi-age was easier than stage- based. In reality, we all plan to our level and we modify tasks."

Processes Development within the Concepts	Data to validate process development
	"I don't think anyone wants to say to another teacher that what they do doesn't justify what you are teaching because no-one wants to put them in that position." (T8)
Learning Together S4	Data from the interview with S4
S4 interprets her learning about curriculum change through her experiences. She filters and audits (processes) her opinions through an unsuccessful attempt at curriculum design in a school. She learnt about change by interpreting it through the knowledge of her peers, filtering and auditing (processes) her prior knowledge and experience.	"When we were planning school scope and sequences we had no idea. It was all so new. We used to plan at school level and then share with other schools. You feel that maybe there's an answer out there you should be given. None of us knew a lot about planning, so we tried to get our hands on every unit of work we could. But that's OK, because somebody who is better in that area had planned these things. We felt very inadequate." "There was a fair bit of collaboration, but I think in a bigger school that is more successful. The more people who can bring information and work together the better." (S4)
Shaping Culture T8	Data from interview with T8
T8 adapts to the culture of a school by agreeing (process) She adopts the norms of the environment and was accepting (process) of the religious life of the school, practising (process) promoting it through her behaviour and connecting it to curriculum.	"I didn't really see that schools were different till I started teaching. In the last four or five years I have started to relate to it more. Keeping the school identity when you don't necessarily have a class full of Catholics is a little bit difficult. The change in family dynamics and that sort of thing. When we teach them to accept others and Jesus' work it reflects how we relate to each other. I think then they start to see the connection. I don't know if they get the connection through Mass. The culture is in what we teach them in the classroom. How it relates to their everyday life. It's not just taught in religion, it's taught in our behaviour. It's taught in everything we do here." (T8)
Shaping Culture S4	Data from interview with S4
S4 adopts the culture of the school. She is obedient to the Catholic traditions and she accepts (process) and practices (process) the norms of the school. She adopts the behavioural and relational aspects and is committed to her personal values of acceptance and inclusion.	"I think culture impacts hugely on the school, very much so. I started in the state system and I've got a degree of comparison. Respect is very important. I think it comes down to each individual being true to themselves and their beliefs. When you become a staff member you commit to the ethos. We get our beliefs from the Gospel Values, so I think it impacts really significantly. The younger generation might not demonstrate the old Catholic ways, but I think they basically have the same spirit. It's in the way we look at our students. We have compassion to fall back on when we make a decision. They bring so much joy,wonderful lessons are learnt from them." (S4)