Teachers in Transition:

A Journey of Educational Reform

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Statement of Sources

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

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Abstract

Three teachers in different schools in a regional city in Queensland, Australia agreed to implement trial components of Education Queensland's assessment reform agenda (The Assessment and Reporting Framework, [Education Queensland, 2003]). During the nine-month data collection phase, teachers were already simultaneously implementing an array of mandated curriculum and pedagogical reforms. The purpose of this research project was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms.

While acknowledging the importance of teachers' pre-existing knowledge, the central objective was to focus upon changes made by individual teachers over time, and the impact of a systemic reform on their practice. Narrative case study was the selected methodology as teachers narrated their personal change journeys. The methods of data collection included in-depth semi-structured interviews and conversations, written personal documents and systemic documents associated with reform and assessment. The findings provide insights into the processes of change and teachers' sources of support.

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1.1   INTRODUCTION TO THE RESEARCH

This research was undertaken during a period of educational reform in the state of Queensland, Australia. Teachers were expected to implement a range of curricular, pedagogic and assessment changes. Initially my intent was to understand how teachers made sense of and managed assessment during a time when an assessment reform titled *The Assessment and Reporting Framework for Education Queensland Schools* (Education Queensland, 2003) was trialled in our local education district. However, the significance of the broader educational reform agenda emerged. It became clear that teachers were managing multiple reforms simultaneously with assessment as the most recent reform. This led to the selection of my research topic: *Teachers in transition – a journey of educational reform*.

This research is timely for two reasons. First, this project documents how teachers attempt multiple and complex reforms simultaneously. A similar scenario of multiple reforms is currently being planned as a new, national curriculum is being written for implementation across Australia. Second, this project explores the many dilemmas for teachers when they attempt to broaden their understanding and use of assessment, at a time when high stakes, mandatory, summative testing is increasingly publicised and promoted. Recently, national literacy and numeracy test results have become available on the internet and are readily accessible to all, prompting a debate about the value and validity of external, summative assessment.

Chapter One provides an overview of this thesis. First I introduce the project (1.1), then explain the context in which this project is embedded (1.2) and connect pertinent issues to define the research problem (1.3). Subsequently the purpose of the project is described (1.4). Next, I explain and justify the research design adopted for this thesis (1.5) and state the significance of the project (1.6). Finally, the thesis outline (1.7) describes the contents of other chapters.

1.2 THE RESEARCH CONTEXT

In Queensland, Australia, The Assessment and Reporting Framework for Education Queensland Schools (Education Queensland, 2002) was a proposed new reform. Other reforms promoted by Queensland's state school employing authority, Education Queensland, included a transformation of all curriculum documents used by teachers, the development of a school-wide literacy strategy as part of the Literate Futures Project (Education Queensland, 2001b) and the implementation of an array of pedagogical practices based upon the twenty elements of Productive Pedagogies (Education Queensland, 2001c). These comprehensive classroom changes were justified by findings in local and national research including 'The New Basics Research Report' (Education Queensland, 2004b), 'The Queensland School Reform Longitudinal Study' (Education Queensland, 2001d) and '*Literate Futures: Report of the Literacy Review for Queensland State Schools*' (Education Queensland, 2000b).

Issues surrounding assessment had also become prominent. As well as the implementation of annual Australian tests (National Assessment Program [Literacy and Numeracy]) for three cohorts of primary school students, there had been an expanding global focus on assessment and test results (Forster, 2000; McGaw, 1994, 2005; Rowe, 2000). The publicity associated with comparative international data led assessment to become increasingly politicised (Black & Wiliam, 2005; Broadfoot, 1999; Hargreaves, Earl, & Schmidt, 2002; Rowe, 2000), making assessment reform 'a schizophrenic activity' (Hargreaves, Earl, & Schmidt, 2002, p. 83). Nowhere was this more apparent than in Queensland where the state's employing authority, Education Queensland, was promoting an assessment reform focussed on formative assessment whilst the state statutory education authority, Queensland School Curriculum Council (later re-named the Queensland Studies Authority), was promoting the use of outcomes as standards and also overseeing the rollout of the annual standardised national tests.

1.3 THE RESEARCH PROBLEM

Teachers in Queensland had been judged and were found wanting (Department of Education, 2000b; Lingard, et al., 2001). Classroom literacy and assessment strategies as well as pedagogic practices were described as inadequate (Lingard, et.al., 2001; Department of Education, 2000b; Department of Education, 2002c). In

addition, concern had been expressed about Australia's standing in international tests (McGaw, 1994, 2005).

In Queensland at this time, a completely new suite of syllabus documents, together with accompanying resources, were being produced. The outcomes-based syllabi meant that new documents were substantially different from previous ones. Teachers were expected to address these changes in their classrooms at the same time as they were amending their approaches to literacy and pedagogy.

A plethora of additional reforms in state schools such as *The Middle Phases of Learning State School Action Plan* (undated), initiatives for students deemed at risk [*Building Success Together: The Framework for Students at Educational Risk* (Education Queensland, 2000a)], and for indigenous students [*Partners for Success* (Education Queensland, 2000c)] required attention. Concurrently, school leaders were changing their school management structures (*School Improvement and Accountability Framework* [SIAF], Department of Education, 2002d). All this contributed to an increasingly complex environment for the teaching profession.

During this busy reform period, the messages about assessment did not remain constant (Year 1 – 10 Curriculum Framework [Education Queensland, 2001f]; Education Matters, 18 September, 2002). Therefore, the problem that underpins this research is the complexity facing teachers in their classrooms as they implement an educational reform namely, the Education Queensland's assessment reform agenda (The Assessment and Reporting Framework, 2002 – 2006), whilst balancing the demands from a range of other recent educational changes. By highlighting the problem in this manner, the purpose of this research project could be identified.

1.4   RESEARCH PURPOSE AND RESEARCH QUESTIONS

While acknowledging the importance of pre-existing assessment views and practices, this research project focused upon how assessment changes were made by individual teachers over time, studying the processes of change, sources of support and the impact that systemic assessment reform had upon these teachers. In this research project I wanted to provide classroom teachers with the opportunity to share their personal reform journeys. A limited number of teachers would be given the choice of implementing a self-nominated assessment change that aligned with Education Queensland's assessment reforms. It was important to acknowledge that reforms

meant changes to classroom practices. Therefore, the purpose of this research was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms.

The research purpose indicated there were two major fields of literature to be reviewed and these were the fields of teacher change and the field of assessment reform. First, to understand teachers' assessment transitions, the literature that documented key aspects of teacher change was interrogated. Reading of the literature led to the formation of an overarching question: *How do teachers respond and change over time as they implement an educational reform?*

1.5   RESEARCH DESIGN

It was important to provide a voice for the implementers of assessment change so as to better understand reform from their perspective. In addition, spending significant time over several months with a small number of participants from different schools offered multiple opportunities to listen as the teachers narrated their own story whilst they were implementing reforms. Given that the purpose of this study was to understand and explore the experiences of teachers as they grappled with an extensive reform agenda, an interpretivist approach was adopted (Crotty, 1998). This perspective allowed a re-storying and meaning-making process in which I would be involved and nuanced personal understandings of participants (Neuman, 2000; Sarantakos, 1998). Honouring the teachers' individualistic experiences of change in this way indicated that an appropriate epistemology was constructivism (Guba & Lincoln, 2001).

Given the varying layers of complexity surrounding the new assessment reform, case study had the potential to reveal holistic patterns in approaches to change (Merriam, 1998; Stake, 1995). Recording participant teachers' voices to illuminate their own lived experience and retelling these experiences in a storied manner, clearly indicated that the selected methodology needed to be narrative case study (Stake, 1995, 2005). Teacher involvement and 'voice' were essential parts of this research, further supporting a narrative approach.

However, I was also part of the story, selecting quotes for the teachers' narratives and challenging my own assumptions about systemic reform (Guba & Lincoln,

2005). My role as researcher meant that I was also a narrator, connecting and intermingling my voice with the voices of the participant teachers (Chase, 2005). I recognised that my views about assessment were significant and several personal experiences briefly presented below had shaped my perspective.

First, as a student, my earliest memories associated with assessment were both powerful and painful. Poor examination results in the subject of science in Year 8 meant I was excluded from an academic course at High School. All learning was tested in formal examinations throughout High School. I became nervous and did not perform well. When my teacher-training course began, assessment was broadened to include written assignments that were due in a period of weeks, not hours. My results improved significantly. At first my parents assumed the institution had mistaken my results for those of someone else. Assessment reforms that provided students with the time to reflect upon their learning and emphasised assessment as part of learning had an obvious appeal to me.

Second, during my career, many educator roles contributed to my views of assessment. In a multi-age setting, children remained in my classroom for a number of years. There, formal assessment prior to reporting merely confirmed my existing knowledge of my students and their abilities. As a curriculum leader and deputy principal in schools where innovation was fostered, issues surrounding the links between outcomes and assessment remained a significant hurdle. A collaborative, positive approach to change could not mask issues associated with assessment. I recalled long discussions about the risks of using outcomes as criteria for assessment ahead of systemic clarification about an outcomes-based approach to assessment as well as teaching and learning.

I moved to a new location at the commencement of 2002. Here, there was an opportunity to experience new roles including a district-wide education adviser for Education Queensland, and later, a lecturer teaching an undergraduate course that explored the topics of assessment and student success. As Education Adviser, my involvement included supporting teachers as they implemented curriculum, pedagogic and assessment reform. As a university lecturer, I was actively involved in teaching and evaluating undergraduates' thinking about the topic of assessment. These experiences deepened my interest in the topics of assessment and teacher

change and motivated me to undertake this research. My role was one of interpreter who was actively engaged in the research and making meaning from it, exemplifying multi-voiced meaning making (Candy; Guba & Lincoln, 2005). At all times, I took care to authenticate my narratives of the participant teachers (Neuman, 2000) and to tell their stories with both respect and responsibility (Czarniawska, as cited in Chase, 2005).

1.6   SIGNIFICANCE OF THE RESEARCH

This research project was significant because it provided a voice for teachers as implementers of systemic change. Past research in Queensland had given little space to teachers' voices and their personal journeys as they partake in a reform agenda. Thus, the meaning of a particular, system-wide reform was explored through the eyes of teachers who were implementing it. Giving teachers a voice makes this study important because teachers' voices had become muted by the power given to previous large-scale local, national and international research data.

The methodology selected provided teachers with an opportunity to reflect upon their own individual practices whilst at the same time informing others about their change journeys. Stories about reform allow others to engage in the story-telling and reflect upon their own journeys as well. In addition, teachers' narratives challenge the readers to consider their own personal assumptions about teachers' needs and abilities.

1.7   THESIS CONTENT

This research project documented the experience of three classroom teachers whilst they changed their assessment practices.

Chapter 2 – The Context: Defining the Research Problem

The context of the research project is described in detail in Chapter 2. The array of curriculum, pedagogical and assessment reforms are outlined. These reforms had been mandated for teachers in state schools in the years just prior to and during the data collection phase of this project. Reference is made to a wider set of circumstances beyond the Queensland classroom. This indicates the intensity and complexity of the professional life of teachers in Queensland in the mid-2000s and

leads to an understanding of both the research problem and the purpose of this research project.

Chapter 3 – Review of the Literature: Identifying the Research Questions

In this chapter, literature from the fields of teacher-change and assessment is reviewed. From this literature detailed research questions are formulated. Following data collection, it became apparent that the literature associated with teachers' emotions and also needed to be considered. As a result, reflective research questions provide an opportunity for further interrogation of the data.

Chapter 4 - The Research Design

The epistemology (constructivism) is established in this chapter and the alignment of the theoretical perspective (interpretivist) with the selected methodology (narrative case study) is stated. The methods of data collection include in-depth semi-structured interviews and conversations, written personal documents and systemic documents associated with reform and assessment. Analytic processes feature open and axial coding and chain of evidence and these are described to establish the authenticity of the emerging themes. Discussion of ethical issues is included to ensure that data is recorded and analysed in an appropriate and ethical manner.

Chapter 5 – Presentation: Individual Case Studies. Case studies of the three participants are contained in this chapter. All were teachers in Queensland primary schools who had agreed to make assessment changes that aligned with the proposed systemic reforms. As they implement assessment changes in the classroom, they narrate their stories of reform.

Chapter 6 – Presentation: Cross Case Analysis. In this chapter, three separate narratives are drawn together. Major themes emerging from the cases are examined. A journey metaphor is adopted as commonalities are highlighted and differences explored.

Chapter 7 - The Conclusion. Findings are summarised and compared with the findings located in the research literature. Key questions formulated in Chapter 3 provide a framework for examining the findings and proposing assertions for further consideration.

The context in which this research project is embedded and from which the research problem derives is outlined in the next chapter, Chapter 2.

Chapter 2: *The Context*

2.1 INTRODUCTION

This research project was conducted in a regional city in the state of Queensland at a time of rapid curriculum and pedagogic change. A plethora of systemic reforms in state schools contributed to an increasingly complex environment for the teaching profession. This chapter documents the array of concurrent reforms and the curriculum reform implementation timetable in order to provide better understanding of the lived realities of the teachers who participated in the research project.

The context within which the research problem is situated is detailed in this chapter. The dilemmas associated with the implementation of outcomes-based syllabi together with the intended assessment practices are stated (2.2). The complications caused by mixed messages about assessment that disseminated from authoritative sources (2.3) are explored. Education Queensland's trial assessment agenda is presented in detail (2.4) because teachers' implementation of this reform lies at the heart of this research project. In summarising the context, the research problem (2.5) is defined, and the purpose of this research stated (2.6).

2.2 THE DILEMMAS: ASSESSMENT AND CURRICULUM

At the time of this research project, teachers were endeavouring to understand outcomes-based education, implement several of the already published new outcomes-based syllabi, and consider assessment practices linked to the new syllabi. Other education reforms such as Productive Pedagogies (Education Queensland, 2001c) and Literate Futures (Education Queensland, 2001b) also impacted upon classroom teachers' practices.

2.2.1 *Curriculum Reform in Queensland: Outcomes-based education*

Following a meeting in Hobart in 1989, the ministers of education from each Australian state and territory, as well as the Australian Federal Minister of Education, agreed upon ten goals of schooling. It was from these goals that common, national learning areas were established (McGaw, 1994). Subsequently, in the state of Queensland, the Queensland School Curriculum Council (QSCC), an independent

statutory body, was established by an act of State Parliament (Education [School Curriculum P-10] Act, 1996) to develop a suite of eight outcomes-based syllabi for Queensland schools (Education [School Curriculum P-10] Act, 1996). These documents aligned with national key learning areas and included the Arts, English, Health and Physical Education, Languages Other than English, Mathematics, Science, Studies of Society and Environment, and Technology (Ministerial Council on Education, Employment Training and Youth Affairs website, downloaded 20.10.06). Professional organisations produced publications to develop an understanding of outcomes-based education (Cumming, 1998). Importantly, the initial message accompanying the roll-out of these outcomes based syllabi in Queensland was that core learning outcomes in each syllabus were to be used as assessment criteria (Education Queensland, 2001g).

Three new outcomes-based syllabus documents were published by the Queensland School Curriculum Council (QSCC) by 2001. These three documents, Health and Physical Education (QSCC, 1999a), Science (QSCC, 1999b), Studies of Society and Environment (QSCC, 2000), together with additional, subject-specific resources were steadily released to all state schools by the state employing authority, Education Queensland. From the start, the employing authority, Education Queensland, appointed Education Advisers with subject-specific skills to support the implementation of these new syllabi in schools across the state.

In the period between 2002 – 2004, another three new Key Learning Area syllabi were published by QSCC; the Arts (QSCC, 2002), Technology (QSCC, 2003) and Mathematics (QSCC, 2004). Again, these new syllabi documents arrived at schools, together with additional explanatory books and CDs. Education Advisers continued to be employed by Education Queensland to support the implementation of The Arts, Technology and Mathematics. At the start of 2002, I became one of two Education Advisers in the district where this research project was undertaken, but the title of the two adviser jobs became Education Adviser – Curriculum. Due to the increasing number of syllabus documents, our Education Adviser-Curriculum roles were changed so that instead of supporting teachers' understanding of a particular subject-specific body of knowledge, we were asked to provide a more general understanding of curriculum reform for school leaders and teachers in our education district.

The roll-out of additional outcomes-based syllabi and support documents created a number of problems for primary school teachers. First and foremost was the scale and scope of the new material. In total, the syllabus documents amounted to over three hundred pages of subject-specific knowledge. Second, the outcomes were written for levels of achievement. Each level consisted of two primary school years. For example, Level Four was written for Years Six and Seven of the primary school. In contrast, the most common classroom arrangement in the district where I worked was a single, year-level class. In addition, extra subject-specific resources provided by the QSCC were helpful but the books of elaborations that explained the outcomes were often lengthy and these additional resources rarely made cross-curriculum links. The burden of making such links across the Key Learning Areas fell upon the primary school teachers themselves.

Finally, the language of Outcomes-Based Education was new for teachers. Familiar subject areas were renamed to indicate new times. For example, the *'Life and Living'* strand was formerly known as *Biology* (Science, [QSCC, 1999])*. 'Natural and Processed Materials'* was formerly called Chemistry (Science, [QSCC, 1999]) and history became *'Time Continuity and Change'* as it incorporated a 'futures' learning perspective (Studies of Society and Environment, [QSCC, 2000]). Another complexity for primary school teachers was that some content was completely new. For example, this was the first time that drama and media had been given such prominence in the Key Learning Area, and Technology was a completely new subject.

2.2.2   *Assessment and Outcomes Based Curriculum*

Three years after the first Queensland syllabus documents were published, Education Queensland spelt out their understanding of quality education in a document titled *The Years 1 – 10 Curriculum Framework for Education Queensland Schools* (Education Queensland, 2001f). The forward explained that 'the release of the framework herald(ed) a fundamental reform strategy in the area of teaching and learning for Education Queensland students' (p. iii). There were four elements to this curriculum framework - core learnings, pedagogy, assessment, and reporting. The document identified assessment as an important component of the Queensland Curriculum Framework for state schools.

The initial assessment message that core learning outcomes in each syllabus were to be used as assessment criteria appeared to be confirmed in this Queensland Curriculum Framework document. However, primary school teachers were experiencing increasing difficulties and tensions using outcomes as assessment criteria. As each new syllabus was produced, the number of learning outcomes increased. As a result, ambiguity developed about how to manage this ever-increasing number of assessment criteria. As the number of outcomes mounted, the amount and type of evidence required to support achievement claims associated with each outcome was not made clear.

During this period, other, quite different assessment data were being collected by Education Queensland. Teachers who taught students in Years One, Two and Three were tracking all students on progress maps (Developmental Continua). Every state school undertook a validation and moderation process before sending student data to Education Queensland midway through Year Two. Another type of data came from state-based testing for Year Three students which commenced in 2001 and complemented the annual National Assessment Program (Literacy and Numeracy) for Years Five, Seven and Nine which had commenced in 2000 (Dudley & Luxton, 2008).

2.3   CLARIFYING MIXED MESSAGES

Assessment was one of the central tenets of the *Year 1 – 10 Curriculum Framework* which contained wording that linked assessment to the Core Learning Outcomes. However, particular issues associated with assessment were not addressed. Clarity about assessment was promised in the future:

> *…as part of a continuing dialogue, a taskforce will be set up to establish a robust assessment and reporting framework….and produce an assessment and reporting framework that is agreeable to stakeholders.' (Education Queensland, 2001f, p. 13).*

In October 2001 a task force was finally convened to provide guidance for Education Queensland schools. However, instead of producing an assessment framework as foreshadowed in *The Years 1 -10 Curriculum Framework for Education Queensland Schools* (Education Queensland, 2001f), the taskforce produced a report, *The Report of the Assessment and Reporting Taskforce* (Education Queensland 2002d) that was

published early the next year. This publication was critical of teachers' assessment practices and recommended inservice programs (Education Queensland, 2002d). It also failed to offer clear direction about how to manage the increasing number of outcomes and there was no promised framework. Then, at one point in the document there appeared a section that indicated a shift in Education Queensland's position about the use of core learning outcomes. The document stated:

> *…the core learning outcomes are a device for structuring the syllabus, for planning teaching and for planning assessment. They are not in themselves assessment criteria and may need to be further unpacked to enable consistent judgments to be made. (Education Queensland, 2002d p. 2)*

For those in schools it was a frustrating time because of the absence of an assessment framework and because of this apparent shift in the assessment message.

As an additional complication, differences in messages about assessment began to be discerned in the documentation produced by the statutory body QSCC and the state employing authority (Education Queensland). At this time, the state statutory body (QSCC) continued to encourage teachers to monitor students' progress 'in relation to core outcomes' through the promotion of a key publication *(Position and Guidelines on Assessment and reporting for Years 1 – 10',* [QSCC, 2001c p. 4]) whilst Education Queensland had shifted its position to say that the outcomes were 'not in themselves assessment criteria' (Education Queensland, 2002d, p. 2)

During 2002 the dilemma surrounding the link between outcomes-based curricular and assessment intensified. The QSCC maintained a continuing philosophical stance that promoted and explained that assessment was linked to Core Learning Outcomes (Moderation of Teacher Judgements in Student Assessment, [QSCC, 2002c]; An Outcomes Approach to Assessment and Reporting,[QSCC, 2002b]; Are core learning outcomes 'standards'?, [QSCC, 2002a]). By August 2002, the employing authority, Education Queensland, made its assessment advice clear. The Director General (Education Queensland) issued a statement clearly indicating that outcomes were not the focus of assessment. This was followed by a Newsflash in Education Matters (the Director General's newsletter to all staff in Education Queensland). Included was the message that 'teachers are not required to use syllabus Core Learning Outcomes as

assessment criteria or descriptors of standards' (Education Matters, 18 September, 2002).

For some, who had begun to gather student data using the Core Learning Outcomes as criteria or standard descriptors, this was a disappointment (personal e-mail from the principal of a school that I visited as an Education Advisor). From my perspective, as an Education Adviser – Curriculum who listened to teachers' questions, common sense had prevailed. However, once the Director General's statement was made, assessment again became a topic of some magnitude. *The Report of the Assessment and Reporting Taskforce* (2002d) had written about the development of a strategic plan.

> *For the Assessment and Reporting Framework to be robust, it is necessary to develop and publish an implementation plan. For the framework to become strongly embedded in the system by 2010, the implementation must occur in stages. A staged implementation would emphasise the growing of an assessment culture rather than the grafting of assessment on to an educational community that, according to a recent longitudinal study, is 'assessment illiterate'...(p. 5)*

2.4   THE REFORM AGENDA

2.4.1   *The Assessment Reform Agenda*

Once Queensland's Minister of Education accepted *The Report of the Assessment and Reporting Taskforce* (2002d), Education Queensland's response was to prepare a comprehensive assessment reform agenda for Education Queensland schools (The Assessment and Reporting Framework, [Education Queensland, 2003]), so leaders and teachers could develop and deepen their understanding about quality assessment.

An existing unit within Education Queensland, The New Basics Unit, was given the task of promoting this assessment agenda. The unit was subsequently re-named the New Basics and Assessment Unit (NBAU). This unit was given a mandate to develop assessment understanding in Education Queensland's schools. The theme the NBAU adopted for this initiative focused on Nisbet's (1992) idea of growing an assessment culture. Hence, Newsletter Number One published by NBAU, and distributed to all schools, used the title *Growing an assessment culture* and outlined

Education Queensland's assessment and reporting agenda 2002 – 2006 (Education Queensland, undated). The head of the NBAU traveled throughout the state giving a talk about assessment titled *'Distilling the Essence'*. A video of the speaker was produced for those who were unable to attend live presentations.

Following this launch and promotion, the NBAU approached assessment change in several ways. First, print-text information continued to be developed and disseminated. A newsletter was published in July 2003 promoting workshops developed by members of the NBAU. A Strategic Leaders' program that promoted assessment knowledge and leadership was also developed. Second, assessment trials were begun across that state. Students at particular year levels who attended Phase 1 trial schools completed a centrally devised assessment task. Students' results were submitted to the NBAU.

Third, two assessment workshops (Assessment Workshop One and Assessment Workshop Two) were developed. The aim of these workshops was to deliver the assessment reform message statewide. At this time, the Assessment and Reporting Unit also recruited several former Educational Advisers to assist with the workshops. The expectation was that every education district in Queensland would ensure that teachers attended these sessions. Workshops were held at locations nominated by schools, school clusters and districts. The roll-out of the assessment workshops was a mammoth task. A small number of additional people were recruited to undergo a rigorous training program to enable them to deliver these workshops. I was trained to present Assessment Workshop Two. I spent two days training before being approved as a Workshop Two presenter. Like most trainee presenters, I was observed presenting the two-hour workshop before being fully qualified to deliver it.

Assessment Workshop One focused on introducing teachers to the concept of formative assessment. Activities were developed using resources from the Assessment Reform Group in England. The Assessment Reform Group had recommended that the definition and purposes of assessment be broadened beyond recognition of achievement to include a strong focus on the learning process (Assessment Reform Group, 2002; Black, Harrison, Lee, Marshall, & Wiliam, 2002; Wiliam, 1999).

Assessment Workshop Two was about creating quality assessment tasks. This workshop included interactive opportunities so teachers could consider features of quality assessment, critique some examples of tasks and, if time permitted, create a quality task themselves. Teachers who attended Assessment Workshop Two also received several handouts. These included a Participant's Toolkit of assessment ideas as well as a booklet titled *Guidelines for selecting assessment strategies.* The most significant tool was colloquially called 'the place mat' (Appendix A) which provided teachers with an instrument allowing them to analyse their own assessment tasks for authenticity, accessibility, credibility, and cognitive and affective expectations. All teachers in the state, including the participants in this research project, attended these workshops.

Fourth, key geographical areas across the state were identified and received additional support for particular assessment initiatives. In May 2003, leaders from our local area attended the Strategic Leaders' program in a nearby town so that they could better understand Education Queensland's assessment and reporting agenda. Time was spent at this Leaders' program developing strategies to reach Education Queensland's stated goals. During this time I was an education adviser before accepting a position as deputy principal midway through 2003. An increasing part of my brief as Education Adviser – Curriculum included working to support the local development of an assessment culture. At the same time I was busy supporting schools as they introduced new outcomes-based syllabi and working in tandem with the local Literacy Development Coordinator who was assisting the same schools to develop their school's literacy strategy.

In 2004, Assessment Workshop One and Two continued to be delivered in the local area. In addition, Workshop Three was produced and delivered statewide. This workshop focused on establishing effective criteria sheets and developing skills to write standards descriptors. Another Education Adviser in the local area received the training and endorsement to deliver Workshop Three. The tool that teachers received during Workshop Three was called the green card (Appendix B) and was a handy reference when establishing criteria and developing standards descriptors. During this period the Assessment and New Basics Unit within Education Queensland was renamed the Assessment and Reporting Unit (ARU).

By the end of 2004 local educational leaders were keen to revitalise interest in assessment reform and to develop teachers' assessment knowledge. Early in 2005, schools in the local area were encouraged to participate in the statewide assessment trial and our local area became an assessment-trial district. This provided a dual benefit to the area. Many teachers across the district who were teachers of Year 4 and Year 6 attended two days of Teacher Generated Task Training in 2005 to learn more about developing assessment tasks. This training was an enactment from The Report of the Assessment and Reporting Taskforce (Education Queensland 2002d) that stated "good, high quality assessment involves a range of task formats, a range of response modes…, clear criteria for assessment which are shared with the learner and constructive (and realistic) feedback to the learner" (p. 4). At this training, teachers were given the opportunity to enact the key messages of Assessment Workshops One, Two and Three. They explored the key syllabi concepts to develop an A3 planner that aided the creation of the quality assessment task. This extended assessment training occurred during school hours. An Immersion Program for leaders was also conducted in the district. This 4 day, intensive program, was a parallel program that incorporated the Teacher Generated Task training and leadership development.

Then, midway through 2005, the Assessment and Reporting Unit in Education Queensland ceased to exist and many staff relocated to the reformed QSCC now called the Queensland Studies Authority (QSA). For a while, the work of Teacher Generated Task training continued from that statutory body under the umbrella of a newly mooted initiative that encompassed government and non-government schools called the Queensland Curriculum Assessment and Reporting Framework (QCAR). A preliminary paper was published providing the background and rationale for this new and broader initiative. It summarised findings from *New Basics Research Program, External Evaluation of New Basics, Assessment and Reporting Framework Pilot Study, Queensland Studies Framework Background Papers* and noted that 'there is diversity and uncertainty in the practices of assessment' whilst also recognising that 'the competence and commitment of teachers can be and needs to be supported' (Freebody, 2005, p. 4).

Yet, differing systemic assessment messages continued, even during the period when the Assessment and Reporting Unit was active. Other initiatives such as the Middle

Schooling initiative which was a key element of the Education and Training Reforms for the Future (ETRF) reform, stated that schools needed to assess and report against all core learning outcomes (Education Queensland, 2002b). Table 2.1 demonstrates how changes in the systemic assessment message continued. Tracking the changes and comprehending the intent of the change was not always easy for busy school leaders and classroom teachers. In Table 2.1, the key message for each publication has been bolded.

Table 2.1 Tracking changing systemic assessment messages (1999 - 2005)

Year of Publication	Title	Document Publisher	Key Assessment Message	Assessment Message Summary
1999	Outcomes Based Health and Physical Education Syllabus (1 text; 31 pages)	Queensland School Curriculum Council	Assessment in the first Outcomes Based Syllabus is defined thus: *Assessment within an outcomes framework is the **purposeful systematic and ongoing collection of information about students' demonstrations of learning outcomes** (p. 28).*	Assessment was about collecting information about students' demonstration of learning outcomes.
2001 (June)	The Years 1 - 10 Curriculum Framework for Education Queensland Schools (1 text; 19pages)	Education Queensland	The Curriculum Framework defines assessment: *Assessment is **purposeful, systematic and ongoing evidence for use in making judgements about student learning.** In the context of an outcomes approach to education, the assessment process involves:* ▪ providing students with opportunities to demonstrate core learning outcomes ▪ gathering and recording evidence about students' demonstrations of these core learning outcomes *Using this evidence as the basis for making overall judgements about students' demonstrations of core learning outcomes. (p 13)*	Focus shifted to 'student learning'. Students demonstrated core learning outcomes (CLOs). Evidence was gathered/recorded for teacher judgements about students' demonstration of core learning outcomes (CLOs).
2002 (5th August)	An e-mail message from the Director-General	Education Queensland	A statement in the e-mail contained the following key message: *'**Schools will not be required to provide information to the system about every individual student against every single CLO (Core Learning Outcome)'.***	Schools were not required to provide information to the system about every student against every single Core Learning Outcome' (CLO).

Year of Publication	Title	Document Publisher	Key Assessment Message	Assessment Message Summary
2002 (18th September)	Education Matters (A weekly broadsheet to schools from the Director General)	Education Queensland	A statement in Education Matters about Assessment: *NEWSFLASH* *Curriculum Planning, Assessment and Reporting One Page Guide…Assessment:* **Teachers are not required to use syllabus CLOs as assessment criteria or descriptors of standards.**	Teachers were not required to use syllabus CLOs as assessment criteria or descriptors of standards.
2002	The Assessment and Reporting Task force Report	Education Queensland	A key message about assessment in this document included: *'***The Core Learning Outcomes are a device for structuring the syllabus, for planning teaching and for planning assessment.** **They are not in themselves assessment criteria and may need to be further unpacked to enable consistent judgements to be made (p2 Written Report).**	The CLOs were a 'device' (for structuring the syllabus, for planning teaching and for planning assessment). CLOs were not assessment criteria. CLOs needed to be further unpacked.
2003	Growing an Assessment Culture A3 News-sheet 'Growing an Assessment Culture' #1	Education Queensland	**Assessment should be a powerful tool for learning, not merely a political solution to perceived standards and accountability.** **The purpose of assessment is to improve standards, not merely to measure them….** *(quote on News-sheets 1 from the Assessment Reform Group, 2002)*	(If not assessing CLOs, movement determined new focus) Assessment promoted as a tool for learning, (not just about standards and accountability). Purpose of assessment was to improve standards, not merely measure them.

Year of Publication	Title	Document Publisher	Key Assessment Message	Assessment Message Summary
2003	Proposed Assessment and Reporting Framework for Years 1 – 10 in EQ schools (2pages; A4 Handout at local Administrators day)	Education Queensland	Summary of Key Messages including: *EQ's Assessment and Reporting Framework will eventually be a policy statement that complements the current curriculum framework…* ***Evidence of student achievement will be gathered from nominated curriculum areas,*** *which are not always KLA specific and which include cross-curricular priorities (literacy, numeracy, life skills and futures perspective). In any one academic year, there will be no more than three, but usually 2 curriculum areas.* ***A portfolio of student work will be required as evidence of student achievement.*** *The contents of the portfolio will be specified.* ***The portfolio will contain student responses to standardised tasks (a collection of these is called a Queensland Assessment Task (QAT) and student responses to teacher-generated tasks (TGTs)*** *that complement the corresponding QAT.*	Systemic admission that the Assessment and Reporting Framework was still 'under construction'. System sought data from nominated curriculum areas. Student portfolios were required as evidence of student achievement and contents specified (to include responses to standardised tasks and responses to Teacher Generated Tasks).
2004	The Middle Phase of learning and the core curriculum. (single A4 sheet e-mailed to schools)	Education Queensland	State schools are not required to explicitly teach, assess and report against all core learning outcomes in the eight KLA syllabuses.	(Reiteration of a previous message.)

Year of Publication	Title	Document Publisher	Key Assessment Message	Assessment Message Summary
2005	Queensland Curriculum Assessment and Reporting Framework (1text; 17pages)	Department of Education	*Within the Queensland Curriculum, Assessment and Reporting Framework, **standards will provide the unifying device for connecting the essential learnings to assessment and reporting practices…**Standards will mean a common reference point, a shared language for describing what is expected of students and the quality of student achievement at key points along the P-10 continuum… **Assessment refers to the collection of information about student achievement.** The framework recognizes **the central role of teachers' everyday classroom assessment in providing authentic and valid feedback for ongoing improvement** in teaching and student learning. It also recognizes that **statewide point-in-time assessment provides reliable and comparable information about student achievement** across schools. While each assessment approach provides different information, together they provide a fuller picture of student achievement… p. 6,7*	Focus placed upon setting new standards to measure student achievement. (Standards and accountability central) Emphasis shifted from numerous CLOs to 'essential learnings'. Assessment viewed as a 'collection of information about student achievement'. Central role of everyday classroom assessment mentioned. System foreshadowed statewide point-in-time assessment to collect reliable and comparable information.

The above table indicates school leaders and teachers in classrooms received numerous and changing assessment messages from different authoritative sources over an extended period of time. The fine nuances of all these changes may not have been followed attentively by all classroom teachers, but the impact was felt by many and was a source of frustration. In addition, many primary school leaders were waiting for some stability before making whole-of-school changes to assessment data collection and reporting practices. It was a long and frustrating period for teachers who wanted all their practices to align. Education Queensland recognised these problems and in 2004 issued a 'Schools Reporting Consultation Paper' (Education Queensland, 2004d) seeking advice about the topic. The difficulties associated with mixed messages about assessment were compounded by the need to implement a growing number of new outcomes that contained unfamiliar language and were written for stages of learning rather than particular year levels. These were all factors that impacted upon teachers and contributed to the problem that lay at the heart of this research project.

2.4.2 *Additional reforms impacting upon the life of school*

During these years, a series of additional initiatives were also being launched and implemented in state schools in Queensland (see Appendix C for a complete list of all reforms and initiatives 1999 – 2005). School staff were expected to develop Information Communication Technology (ICT) skills and infrastructure (Education Queensland, 2002c) and tailor programs for students with particular needs such as students at risk (*Building Success Together: The Framework for Students at Educational Risk* [Department of Education, 2000a]) or from particular ethnic backgrounds such as indigenous students (*Partners for Success* [Department of Education, 2000c]). It was a busy and complex time. School leaders were simultaneously developing skills associated with managerial change. During this time Education Queensland produced new frameworks for Managing School Reviews, Annual School Reports and Annual Operation Plans (*School Improvement and Accountability Framework* [SIAF], Education Queensland, 2002e)

There were other seminal documents that were key drivers of the reform agenda in Queensland. The first document was titled *Destination 2010: 2002–2005*, (Education Queensland, 2002a). This text explained the information age and

explored new, 21st century directions for education. It was produced by Education Queensland to contextualise rapid change and to articulate a clear vision for state education in the future. Another important Department of Education document that was published following extensive statewide consultation was Education and Training Reforms for the Future (ETRF) (Department of Education, 2002b). This document contained multiple reforms that targeted key strategic foci for new times including student retention rates to ensure students remained at school as long as possible, the introduction of a preparatory year of schooling, a middle years of schooling focus and the widespread use of Information Communication Technologies (Department of Education, 2002c). Together with the curriculum, pedagogical and literacy reforms, this comprehensive set of documents seemed to be continually setting new directions for schools and classroom teachers.

2.4.3   *Reform in the local area*

In the district where I worked, the impact of these reforms was inescapable. All outcomes syllabi were launched and promoted at every school. The local launch of the Arts syllabus was a significant event with Education Queensland guests, arts and education personnel and university staff and school students all contributing at a gala evening at the town hall. The new Mathematics syllabus was promoted with a district-wide pupil-free event at the local university campus. Again, expert guests travelled from around the state to be present. To follow up with practical, on-site reform work, the Education Advisers – Curriculum worked with teachers at every school in the district. The brief was to support teachers to effectively plan and implement all new, outcomes-based syllabi, support pedagogical and assessment reform. In my role as Education Adviser – Curriculum, I undertook this role with diligence. As I visited each school my request was to work with teacher groups to encourage ongoing professional conversations.

Additional reforms required local teachers' engagement. The ETRF consultation process was promoted widely in the district and the very first whole-of-city professional development day focused upon an ETRF component - middle schooling and what this may involve for the city. In addition, the development and implementation of whole-of-school literacy strategies was important throughout the district. The city where this research project was located had a Learning

Development Centre (Literacy) and a coordinator who worked full-time supporting schools and teachers so they could enhance the development of effective literacy practices and implement them in classrooms. School staff were expected to participate in the development of a whole-of-school literacy strategy that included developing a vision & setting targets (Education Queensland, 2001b) as well as implementing the key components in their classrooms. The school literacy strategies were collected by the local district office and feedback was provided.

The roll-out of Productive Pedagogies for all teachers was also undertaken with district-wide thoroughness. Both the Literacy Development Coordinator and the Education Advisers – Curriculum were key players in the roll-out of this initiative. Pupil-free days and after-school meetings were used to provide professional development so teachers could implement this new knowledge. Throughout this time, the Developmental Continua was diligently maintained, with training and moderation for all Year Two teachers across the district. Finally, towards the end of this period, the assessment workshops were also conducted across the district. It was a very busy time locally and yet, at statewide Education Adviser conferences, when sharing during formal and informal sharing times, the impression was that each district attended industriously to Education Queensland's key curriculum, pedagogic, literacy and assessment reforms.

2.5   THE RESEARCH PROBLEM

The busy reform agenda in Queensland schools just prior to and during this research project placed enormous expectations upon teachers with whom I worked. Assessment was only one element of classroom work that required reform. Other fields included curriculum, literacy, and pedagogical practices. Overarching strategic documents were continually promoting reform and demanding attention. The justification for this comprehensive change came from local research (Freebody, 2005; Lingard et. al., 2001; Education Queensland, 2001; Education Queensland, 2000). Teachers had been judged and perceived gaps were identified in their professional practice. The scale of subsequent reforms increased both the complexity and the frenetic pace of teachers' professional lives.

When the assessment reforms began, the issues of pace and complexity were exacerbated, because the assessment message from Education Queensland did not

remain consistent. For a period the assessment message of the statutory body (QSCC) and the teachers' employing body, Education Queensland differed substantially. The discrepancy focused on whether the outcomes were to be assessment criteria or planning tools (Maxwell, 2002). Both bodies were regarded as authoritative and this added a dimension of uncertainty to assessment reform in the state.

This uncertainty was further compounded because Education Queensland was slow to develop written documents that provided a clear direction concerning curriculum and assessment. The Years 1 – 10 Curriculum Framework that provided details of policy and guidelines was published in 2001, three years after the first outcomes-based syllabi were published. The frustrations associated with assessment were even recorded in the Assessment and Reporting Taskforce report where it stated 'the taskforce sensed the feelings of frustration from teachers, school principals, curriculum developers and Education Queensland officials at the current situation (about assessment)' (p. 5).

Within this context I wondered how teachers were managing in classrooms in schools and how they would implement the assessment reforms that I was trained to help implement. Therefore, the problem that underpins this research is the complexity brought about by multiple and simultaneous reforms and mixed messages as teachers began implementing trial components of Education Queensland's assessment reform agenda (The Assessment and Reporting Framework, [Education Queensland, 2003]).

2.6 THE RESEARCH PURPOSE

The purpose of this research was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms. While acknowledging the importance of teachers' pre-existing knowledge, the central objective was to focus upon changes made by individual teachers over time, studying their processes of change, sources of support and the impact of a systemic reform on their practice.

2.7 CONCLUSION

As I mapped this context, questions began forming: What had other researchers written about assessment reform and teacher change that should be considered in this

research project? How different was my context from that of teachers and leaders overseas? In the next chapter, Chapter Three, the research literature in these areas will be analysed.

Chapter 3:   *Literature Review*

3.1   INTRODUCTION

The purpose of this research was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms. While acknowledging the importance of teachers' pre-existing knowledge, the central objective was to focus upon changes made by individual teachers over time, studying their processes of change, sources of support and the impact of a systemic reform on their practice.   The previous chapter, Chapter Two, provided a summary of the scope and complexity of education reform agendas in primary schools in Queensland from 1999 to 2005. The purpose of this chapter, Chapter Three, is to examine empirical research that provides an understanding of teacher change and assessment.

3.2   THE PARAMETERS AND PURPOSE

The literature reviewed in this chapter is arranged under four headings. The first two headings focus upon the outer and inner perspectives of teacher change. These teacher change headings are 'Teachers' Changing Practices' and 'Teachers' Inner Worlds: Beliefs, Values and Emotions'. These different perspectives of change provide the two major research questions:

- *How do teachers respond and change over time, as they implement an educational reform?*
- *How do beliefs, values and emotions impact on the implementation of reform?*

The third and fourth headings document different aspects of assessment and provide a context for understanding the changes teachers made over time. These headings are 'The External World of Teachers: International Assessment Trends' and 'Teachers' Assessment Understanding and Practices'. Reasons for choosing these headings and selecting each of the sets of literature are subsequently explained.

The central objective was to focus upon how individual teachers perceived and interpreted assessment changes over time and this led to the field of research

literature about teacher change. This broad field of literature was read and compared with literature that particularly focussed on assessment change. Different researchers had mapped changes teachers made to curriculum content, to literacy practices and to pedagogical practices, whilst other researchers focussed upon school-based structural changes. Whilst reading this combined body of literature, key ideas that were the hallmarks of different types of change began to emerge. This assisted the shaping of the themes that frame the first section of the literature review, *Teachers' Changing Practices*

The first theme emerged as researchers documented the importance of time that was required to make any successful educational changes and adjustments (Jones & Moreland, 2005). Time was also significant for teachers undertaking assessment reforms (Hargreaves, Earl, Moore & Manning, 2001). As well as featuring time, the pace of change was an additional, time related factor that indicated the first theme should be the *chronological theme* (Loughran & Kelchtermans, 2006).

The second theme, a *political theme*, emerged from the reading of research from a variety of differing philosophic approaches. A socio-critical philosophical perspective promoted a significant advocacy role for teachers who were viewed as change agents (Kemmis, Cole, & Suggett, 1983). This approach identified the significance of the political undertones accompanying change. Harris and Marsh (2005), when exploring curriculum diffusion theory, emphasised the significance of different types of systemic communication and communication channels. The importance of policy signals was also identified by Spillane, Reiser, and Reimer (2002). However, these researchers noted that policy signals contained underlying systemic assumptions and messages (Spillane, Reiser & Reimer, 2002). Hence the political theme was concerned with uses of communication channels as well as explicit and implicit systemic messages during times of reform and change.

The third theme, drawn from a socio-cultural perspective, highlights the importance of groups as well as individuals. Many researchers featured the importance of working together in cohesive groups (Guskey, 1995; Richardson, 2003; Stoll, Fink, & Earl, 2003). Therefore a *social theme* highlighted the significance of collegiality and included the impact of working collaboratively and the importance of learning together in professional learning communities.

Finally, the fourth theme was named an *intellectual theme*. From a socio cultural perspective, changes teachers made were also about teachers' learning (Gallucci, 2003). Other researchers wrote of the normative-re-educative perspective where autonomous change was undertaken by teachers (Richardson & Placier, 2001). Hence, an intellectual theme embraced teachers' professional learning and identified additional sources of teachers' support when undertaking change.

As the teacher change literature was organised under these four themes, obstacles that blocked teachers' ability to change and catalysts that enhanced teachers' willingness and ability to change were found in each of them. Thus, obstacles that impeded change and catalysts that enhanced change provided a means of formulating a framework for further organising the different sections of the teacher change literature. A powerful cluster of obstacles and catalysts emerged that were more difficult to observe because they emerged as a result of teachers' personal beliefs, values and emotions (Hargreaves, 2004; Nias, 1996; Spillane, Reiser & Reimer, 2002). Thus a closely aligned section for this review was established and named *Teachers' Inner World*: *Beliefs, Values and Emotions*.

An additional major field of literature was associated with assessment and teachers' views about assessment. Teachers' understanding about assessment, in turn, influenced their practices. Particular assessment trends that had international origins are important to this study because they impacted upon teachers' existing assessment views and practices. The differing assessment trends found in international literature are examined in the section titled, *The External World of Teachers: International Assessment Trends*.

Teachers existing assessment views and practices are significant when assessment reform is contemplated, because various types of assessment are associated with different, underlying epistemological values and beliefs. Therefore, it was pertinent to review research literature that probed teachers' understanding of assessment and the alignment between espoused beliefs and classroom practices. This established a closely related field: *Teacher's Assessment Understandings and Practices*.

In summary, the subsequent sections of this chapter are organised in the following way: First, an examination of the larger and more complex literature related to *Teachers' Changing Practices* (3.3) has been organised into themes including the

chronological theme, the political theme, the social theme and the intellectual theme. In addition, *Teachers' Inner World*: *Beliefs, Values and Emotions* documents the role of teachers' values, beliefs and emotions when undertaking changes (3.4). Second, *The External World of Teachers: International Assessment Trends* provides an examination of literature that tracks international assessment trends (3.5). This leads to the final and related section, *Teachers' Assessment Understandings and Practices*, where literature related to assessment practices of teachers is detailed (3.6).

3.3   TEACHERS' CHANGING PRACTICES

A central objective of my research was to focus upon assessment changes made by individual teachers over time, studying their processes of change, sources of support and the impact of systemic assessment reform on their practice. The most extensive and complex body of work was the literature that focused upon research associated with teacher change.

This teacher change literature clustered into several themes used to organise the subsequent section and from which additional research questions were derived. Four themes emerged from the teacher change literature including a chronological theme related to the time and the pace of reform, a political theme that focused upon systemic messages and communication, a social theme that highlighted collegiality and professional learning communities, and an intellectual theme that examined the impact of professional development and learning.

3.3.1   *Chronological Theme: Time and Pace*

The chronological theme was about the importance of time and the complexity and pace of change for teachers. A number of obstacles associated with time emerged from the research literature. These obstacles included a lack of acknowledgement of the importance of time when undertaking reform, insufficient time for reform enactment, lack of understanding of the time required to ensure the sustainability of the reform, and the relentlessness of the pace of multiple and concurrent reforms.

The significance of time as a contributor to reform success is not always acknowledged (Carless, 2005; Jones & Moreland, 2005; Hord, 2003). Even within the educational reform movement, there is a culture that appears to celebrate speed and pace of reform. As a result, the impact of short time frames upon general school

improvement is likened to a ' "microwave oven" theory of school improvement (where you) pop a new program in for four minutes with a hero principal to manage it and improvement is done' (Hord, 2003, p. 3).

Providing adequate time for reform is important if substantial change is to occur because educational "change takes longer than politicians and administrators would like it to" (Carless, 2005, p. 52). Time is necessary to scope reform projects and to undertake the number of tasks required (Jones & Moreland, 2005; Hargreaves, et al., 2001). The importance of providing sufficient time for teachers is particularly pertinent if the change is perceived as difficult (Neesom 2000; Shepard, 1995) or if teachers are transforming new policy into practice (Windschitl, 2003; Black & Wiliam, 2003; Cohen & Hill, 2001). Extended time is required when teachers are changing their practice because they need 'a long period for analysis, re-conceptualization, discussion and dissemination of results. Time gives opportunities to step back from the work and reflect, and grants scope for rethinking and synthesis' (Jones & Mooreland, 2005, p. 196). In addition, further time is required for teachers to consider students' needs when change occurs because both the teachers and pupils are becoming accustomed to a different way of working (Black, et al., 2002). In summary, the need for extended time is captured by Goodlad (as cited in Hargreaves, et al., 2001)

> *Time is one of the scarcest yet most important resources for educational*
> *innovation: time to plan, think through new themes, find resources,*
> *understand outcomes, write new units, experiment with new assessments and*
> *do all this with colleagues' (Goodlad, as cited in Hargreaves, Earl, Moore &*
> *Manning, 2001 p. 170).*

Time is also required to sustain reform so it can be maintained and enhanced beyond an initial focus period (Guskey, 2002; Hargreaves, et al., 2001). The importance of continuing to commit time was seen as vital and 'providing and protecting this time and support is a responsibility that extends far beyond individual schools - to school districts, governments, and those who elect them' (Hargreaves, et al., 2001, p. 174). The two essential components for sustainability include effective, ongoing teacher support as well as planned follow-up (Fullan, 1993; Guskey, 1995, 2002; Hargreaves, et al., 2001). In fact, a three-year time frame is suggested for

successfully 'assisting and sustaining an (assessment) change' (Jones & Moreland, 2005, p. 205). For any reform, there are no quick solutions because lasting reform takes time (Clandinin & Connelly, 1998). In the words of Santo, Coffey and Moorthy (2005):

> *Change in the classroom entails much more than introducing teachers to new ideas and strategies. It needs setting wherein teachers are encouraged to examine the new ideas, try things with their own classes, analyse what they have done, gauge the worth of suggested innovations in the light of their own goals and priorities and figure out how the new practice might be factored into their full range of responsibilities. All this requires time – far more time than is usually provided for educational improvement (p. 185).*

The reward for allowing sufficient time for change to occur and for encouraging effort is that teachers have a more positive approach to adopting new ideas and practices (Guskey, 2002; Shepard, 1995).

When a number of reforms are proposed within a short space of time or even simultaneously, further obstacles to change are created. Edwards (2005) identified a phrase used in the United States that captured the notion of ongoing reforms, calling them recurrent waves. In Australia, when considering teacher resistance to change in the state of Victoria, the term "change fatigue" was coined to account for a reform failure (Edwards, 2005). The result of relentless reform pace meant that teachers felt overloaded and that their efforts were fragmented (Fullan, 1993). The relentlessness of work and the complexity of the tasks have been called "intensification" (Ballet & Kelchtermans, 2009; Ballet, Kelchtermans, & Loughran, 2006; Easthope & Easthope, 2000).

The intensification is compounded even further for teachers when other complexities are added. These include increased scrutiny and higher levels of accountability, less involvement in educational decision making processes, an excess of external demands and an increased workload (Ballet & Kelchtermans, 2009; Jones & Moreland, 2005; Fullan, 2003a). The immediacy associated with implementation of reform provides an additional concern (Jones & Moreland, 2005; Fullan, 2003a). This has been labelled the "tyranny of the urgent" (Clandinin & Connelly, p. 157)

and is quite the opposite of a slow and deliberate pace of change that would contribute to the success of a reform (Black, et al., 2002; Black, 2004; Black & Wiliam, 1998).

In addition to the external demands of intensification, Ballet and Kelchtermans (2009) note that teachers are likely to place increased demands upon themselves when intensification occurs. Teachers tend to experience intensification as a reflection on their performance as a professional person (Margolis & Nagel, 2006) and this, in turn, impacts upon relationships with students (Ballet & Kelchtermans, 2009). When individual teachers feel pressure 'to implement comprehensive and successful change,… (then) little time (is left) for rest, recovery or reflection related to any single challenge' (Margolis & Nagel, 2006, p. 153). As a result, the significant number of internal and external demands together with an accelerating pace of change creates high levels of teacher stress (Valli & Buese, 2007). Stress is described as 'physical and mental exhaustion that increased in relation to the scope and pace of change' (Margolis & Nagel, 2006, p. 150). Stress, together with the complexity of educational reforms, has impacted upon teachers' well-being (Valli & Buese, 2007) and even contributed to deteriorating health of some teachers (Margolis & Nagel, 2006).

Messages about reform and the need for urgency are most probably sourced from an education system that communicates information about reforms and reform expectations. When an education system attempts to communicate key reform messages to a variety of educational contexts, a further set of obstacles is likely to occur. Political undertones are often present in these reform messages. Hence, the political theme that focuses upon communication and systemic messages is an important consideration in a discussion about teacher change.

3.3.2   *The Political Theme – Education systems and systemic communication*

Spillane, et al., (2002) propose that systemic reform problems are associated with either structural dysfunction or with policy ambiguity. These two broad issues provide a framework for organising research literature. Structural dysfunction is an overarching systemic barrier that obstructs reform success. One of the most significant structural dysfunctions is the democratic process itself as it has a dislocating impact upon the continuity of educational reforms (Grundy, 2002). For

example, governments in Australia change regularly. After an election, educational policies tend to change and the focus shifts because newly-elected governments do not want to implement the policies of their predecessors (Grundy, 2002). Over time, this has been problematic for teachers who are expected to adjust and implement incoming governments' new education policies (Grundy, 2000; Hargreaves, et al., 2001).

Systemic dysfunction can also be demonstrated when the system's view of reform roll-out is incomplete or if their view of reform enactment is flawed (Cohen & Hill, 2001). Policy makers 'often act as though they believe that teachers '…do as they are told' (Cohen & Hill, p. 11) and make the assumption that the policy will be implemented when information is transmitted to teachers. In fact, teachers need to have the opportunity to learn about different aspects of the reform and appreciate what the policy looks like in practice (Cohen & Hill, 2001).

Policy ambiguity is exemplified in a number of ways. Ambiguity is created by educational reforms that have several differing value positions embedded within the one reform (Spillane, et al., 2002). The initial purpose of diverse positions within a particular reform is usually to maximise support for the reform. However, this creates complexity (Darling-Hammond, 1994; Hargreaves, Earl & Ryan, 1996) which has several implications for teachers. Teachers are unclear about how to enact new policies (David & Cuban, 2006; Conca, Schechter & Castle, 2004), their trust is eroded (Edwards, 2005), frustration occurs (Conca, et al., 2004), and reform avoidance is inadvertently encouraged (Grundy, 2002). Reform ambiguity also occurs when reform initiatives are ill-conceived or too radical for teachers to comprehend or enact (Hayward & Hedge, 2005). A third example of ambiguity is an education system that fails to articulate clear 'models of learning (that) underpin policy development' (Hayward & Hedge, 2005, p. 57).

Reform policies about assessment provide examples of policy ambiguity. First, assessment reform appears to be closely linked to political power. In fact, assessment has been viewed as the most powerful policy tool in education (Broadfoot, 1999, Broadfoot & Black, 2004) which makes it both newsworthy and contentious. Assessment message clarity is an issue because systemic assessment messages created by educational bureaucracies appear to be prone to complexity (Harris &

Marsh, 2005). For example, messages about assessment are often not consistent (Clandinin & Connelly, 1998; Hargraves, Earl & Schmidt, 2002) or, assessment reforms carry unintended negative messages that are transmitted by the system (Neesom, 2000).

A lack of message clarity has a variety of implications for teachers endeavouring to implement assessment reforms. Teachers' understanding of the benefits of constructivist (formative) assessment cannot be consolidated or is compromised, particularly when the system continues to place high value upon a summative approach (Shepard, 1998; Neesom, 2000). In addition, when the reform messages are not explained to teachers effectively, teachers demonstrate a limited understanding about the source of the issues they encounter and do not know how to minimize the impact of new and challenging situations (Hargreaves, et al., 2001). This is made even more difficult if teachers do not already know about the different purposes of assessment (Cormack, et al., 1998; Earl, 2005; Stiggins, 2002) or if their current assessment knowledge base and aspirations go unrecognised (Hayward & Hedge, 2005). The adoption of new, effective, formatively focussed assessment tools that highlight student learning is a philosophic paradigm shift that, in many cases, has not been clearly explained (Hargreaves, Earl, Moore & Manning, 2001).

De Lange and Romberg (2003) propose that what seems to be lacking, in most cases, is an overall systemic formative assessment framework. A lack of assessment framework and misunderstanding of assessment messages is viewed from a different perspective by Hayward and Hedge (2005) who indicate that both practitioners and policy makers claim similar goals about raising student achievement but use different language and propose different approaches to achieve the stated goal. In fact, there has been limited dialogue between policy makers and practitioners about a shared meaning of learning and success and this has produced negative results. In has not:

> led to the desired improvement in standards… (and teachers) believe
> themselves to be under siege from multiple policy initiatives, research-led or
> not, rendering them unable to practise teaching and learning in ways they
> would find professionally satisfying (p. 58).

However, when the systemic reform initiatives are coherent, integrated and consistent, from a practitioner's perspective, teachers successfully change their

practice (Cohen & Hill, 2001; David & Cuban, 2006; Fullan, 2000, 2003b). Teachers' ownership and understanding of the reform is a most significant factor in successful change (Carless, 2005; Leithwood, Jantzi & Mascall, 2002) and teacher consultation about initiatives is an essential component of successful reform implementation (Darling-Hammond, 1994). In summary, for successful reform, an education system needs to plan the implementation of change carefully, with focus upon personnel, resources and accountability and with an overarching clear vision of what is to be achieved (Leithwood, Jantzi & Mascall, 2002).

Yet education systems are not the only source of reform messages or support. Gallucci (2003) asserted that collegiality affected the way teachers interpreted reforms and provided support during reform implementation. In fact, the significance of teams of teachers working collegially to enact reform was underscored in three of four assertions made in an occasional paper by The Center for the Study of Teaching and Policy (Gallucci, 2003). Collegiality is thus the next theme relating to the social dimension of teaching.

3.3.3 *The Social Theme – Collegiality and Professional Learning Communities*

The next sub-theme, drawn from a socio-cultural perspective highlights the value of groups as well as individuals when undertaking change. Many researchers found working in cohesive groups to be an important catalyst for change (Gallucci, 2003; Guskey, 1995; Louis, Marks, and Kruse, 1996; Stoll, Fink & Earl, 2003; Richardson, 2003). Therefore, I have named this theme the social theme, highlighting collegiality, the impact of working collaboratively and the importance of learning together in professional learning communities. The features of successful learning communities are examined together with the links between collegiality and successful reform. Obstacles associated with collaboration are acknowledged and the impact of no collegial experiences is also documented. Finally, the importance of leadership is considered.

Whole-of-school collegial practices have been described using a variety of labels. These larger, more formal collaborating clusters are usually named professional learning communities (Louis, Marks and Kruse, 1996) or communities of practice (Gallucci, 2003). The importance of such groups has been widely documented because they allow for powerful learning to occur, encourage reform and innovation

and build a strong sense of community (Gallucci, 2003; Guskey, 1995; Louis, Marks, and Kruse, 1996; Stoll, Fink & Earl, 2003; Richardson, 2003).

The features of successful professional learning communities include the sharing of beliefs and values (Nias, 2000) and the de-privatising of classroom practices through frequent contact with fellow teachers (De Lange & Romberg, 2003; Louis, Marks, & Kruse, 1996). In addition, the establishment of norms for professional conversations provide opportunities for critical dialogue within the community whilst maintaining an overall climate of trust and respect (Borko, 2004; Guskey, 1995). Attending to organizational structures as well as the personal and social dynamics of the community are further features of success (Morrissey, 2000). Finally, all members of the community need to commit to common goals such as improving practices, focusing upon learning and being prepared to share leadership roles (Hord, 2009; Morrissey, 2000).

Professional learning communities that exhibit these key characteristics have a positive and powerful influence upon teachers who are considering reform. Teachers are more likely to try reform when working with colleagues (Borko, 2004; Earl, Freeman, Lasky, Sutherland & Torrance, 2002; Fullan, 2000). Collaboration enhances the change process (Hargreaves, et al., 2001; Stoll, Fink & Earl, 2003) and this, in turn, impacts upon the kinds of instructional changes and reforms teachers make in the classroom (Gallucci, 2003).

In summary, notions of collective expertise and collegial support enhance opportunities for reform success (Putnam& Borko, 2000; Senge, 2000; Southwest Educational Developmental Laboratory, 1997), for as Putnam and Borko (2000) explain:

> *…when diverse groups of teachers with different types of knowledge and expertise come together in discourse communities, community members can draw upon and incorporate each other's expertise to create rich conversations and new insights into teaching and learning. (p. 8).*

These findings are also true for assessment reform. Collegiality is one of the most important elements for successful reform (Black, et al., 2003; Wiliam, 2007) because assessment reform occurs when teachers recognise the need for a vision, build on

existing strengths and when they work collaboratively to learn and grow professionally (Black, et al., 2003; Wiliam, 2007).

However, collegial experiences and collaboration may also be an obstacle to reform, especially when collegiality affirms negative attitudes (Guskey, 1995). If a 'critical mass of teachers adopt negative dispositions, (then) collective, negative teacher morale emerges' (Margolis & Nagel, 2006, p. 155). Therefore, if collaboration is to be a positive experience that encourages reform, positive goal setting is required (Guskey, 1995).

Whilst the power of collegiality is acknowledged, there are times when positive collegial experiences may be overridden. These times include when teachers are expected to implement particular, demanding 'high stakes' reforms, and are watched and judged (Gallucci, 2003). Maintaining a positive collegial focus when undertaking reforms is difficult (Little, 1998). Existing teachers' relationships can be a drawback because of teachers' varying levels of enthusiasm for the reform or covert dissent about the nature and the process of the reform (Little, 1998). Yet, a lack of any collegial experience during times of reform also presents problems. Working in isolation compounds teachers concerns (Guskey, 1995) and when individual teachers undertake progressive reforms, they can become more isolated from peers and 'vulnerable to criticism' (Carless, 2005, p. 47).

The role of leaders is crucial in developing a collegial climate (Day, Harris, Hadfield, Tolley & Beresford, 2000; Hargreaves & Fink, 2003; Newmann, King & Youngs, 2001) and when undertaking school reform (Hord, 2003, 2009; Richardson, 2003). A model of dispersed leadership that encourages consensual decision-making within learning communities has been identified as a significant factor when building collegiality (Caldwell, 2003). In addition, teachers need to be acknowledged by leaders, particularly when undertaking complex reform tasks (Margolis & Nagel, 2006). Ideally this acknowledgement is underpinned by empathetic leader-teacher relationships (Margolis & Nagel, 2006). Leadership deficiencies are likely to contribute to reform failure (Spillane, et al., 2002). Thus, leadership training is a vital component of successful learning communities (Margolis & Nagel, 2006).

As teachers work together to implement reform, gaining new knowledge and developing an understanding about reforms is crucial. Teachers' individual and

collective learning experiences have the potential to enhance or inhibit reform success. The next theme is focussed upon teachers' professional development and the optimisation of teachers' learning.

3.3.4   *The Intellectual Theme - Professional Development and Learning*

Professional development is a powerful catalyst encouraging teacher change (Borko, 2004; Boyle, Lamprianou & Boyle, 2003; Darling-Hammond & McLaughlin, 1995). Despite recognising the importance of professional development, this large body of literature is complex and at times contradictory (Guskey, 1995). However, many researchers agree that several features of professional development are significant for the success of a reform. These features include a practical component relevant for the classroom, a reflective element allowing teachers to consider new learning and a focus on the quality of the content and its delivery (Newmann, Bryk, and Ngoaoka, 2001; Hargraves, Earl & Schmidt, 2002; Carless, 2005).

A practical component is an important part of professional development when teachers are learning about new reforms (Cohen & Hill, 2001; Hargraves, Earl & Schmidt, 2002). This practical component can include training and practice in the classroom (Hawley & Valli, 2000) as well as feedback about the implementation of new practices and a chance to deal with emerging issues related to the new practice (Darling Hammond & McLaughlin, 1995; Hawley & Valli, 2000). Thus the concept of active learning is described as a key ingredient of successful professional development for adult learners (Garet, Porter, Desimone, Birman, & Yoon, 2001).

Teacher reflection is another important component of professional development. The importance of being able to reflect critically and re-imagine new knowledge and beliefs is vital for any new reform's success (Darling-Hammond & McLaughlin, 1995). Teachers' receiving feedback about their own new practices and the opportunity to reflect about their practice is helpful when beginning and trialling something new (Hawley & Valli, 2000). Reflective professional development also encourages teachers to consider the impact of new learning upon their students (Darling Hammond, 1999; Richardson, 1998; Hawley & Valli, 2000).

Another major feature of worthwhile professional development is the quality and intellectual rigor of the content and the resources (Garet et al., 2001) and this is best

achieved in a variety of ways. First, external support, including support from academics, curriculum developers and teacher educators is essential, as are opportunities to meet with outside authorities and experts (Carless, 2005; Newmann, Bryk & Ngoaoka, 2001). Second, the process of professional development delivery should be step by step to scaffold teachers' understanding and linked to teachers' practise (Black, Harrison, Lee, Marshall & Wiliam 2003). A focus upon pedagogy improves the intellectual quality of teaching once teachers return to the classroom (Lingard et al., 2001; Newmann, Bryk & Nagaoka, 2001). In addition, providing resources to support professional development enhances the quality of teachers' learning. However, it is important that resources are available over an extended period to provide ongoing teacher support (Darling-Hammond, 1999; Guskey, 1995; Hawley & Valli, 2000; Richardson, 1998).

Action research projects and conversations with other teachers can enhance the professional development experiences for teachers. Several researchers emphasise collegiality during professional development and the importance of teachers working together to implement new practices (Richardson, 2003; Borko, 2004; Haggarty & Postlethwaite, 2003; Simao, Caetano, O'Meara & Flores, 2003). Professional development using an action research model including elements such as planning, action (and collaboration), investigation and theory, reflection and re-conceptualisation has been shown to enhance teachers' uptake of reforms (Haggarty & Postlethwaite, 2003; Simao, et al., 2003).

Similarly, teachers' participation in research trials has resulted in successful reform (Haggarty & Postlethwaite, 2003; Simao, et al., 2003). Data collected during the extended New Basics trial in Queensland (Education Queensland, 2004b) showed that teachers who undertook the New Basics trial (where implementing rich assessment tasks was a key focus), made links between assessment, teaching and learning. This project combined both theoretical and practical elements of professional development and demonstrated that participation in assessment projects was able to shift and align teachers' perceptions about teaching, learning and assessment (Education Queensland, 2004b).

However, if particular elements of professional development are not undertaken thoroughly, these become obstacles impeding reform implementation. For example,

if professional development is not comprehensive and thorough, innovative practice is soon replaced by older pedagogies (Cohen & Hill, 2001). Lack of resources accompanying professional development is an additional obstacle to reform implementation (Borko, 2004) because limited resources make it difficult for teachers who were attempting to implement reform to do so successfully (Borko, 2004; Hargreaves, et al., 2001).

In summary, maximum benefits can be gained when professional development includes both a practical and reflective component, when teachers work and learn together with peers and have access to additional expertise. The importance of professional development was summarised by Borko (2004) who stated that the outcome of high-quality professional development is that it assists teachers to 'deepen their knowledge and transform their teaching' (Borko, 2004. p. 5) and yet Borko acknowledged that professional change for teachers was often slow, complex and difficult.

In fact, professional development is not a panacea that automatically ensures the success of a reform. Roehrig, Kruse, and Kern, (2007) say that implementation of systemic initiatives can fail because unsatisfactory implementation of new practices still occurs even where professional development has also been provided. Margolis and Nagel, (2006) propose that, if professional development does not pay sufficient attention to teachers' lived experiences and their existing knowledge, then problems arise because 'even with the most well funded, well-researched reform effort, (reform) will not succeed without teacher buy-in' (Margolis & Nagel, p. 157).

From my reading of the literature, in particular the research that focused on chronological, political, social and intellectual aspects of teacher change, my research question emerged: *How do teachers respond and change over time as they implement an educational reform?*

However, during data analysis the power of teachers' inner, personal worlds became apparent. Other researchers recognised that additional affective and internal factors such as teachers' attitudes and beliefs, perceptions and experiences are significant in determining how teachers understand new knowledge and reforms (Guskey, 2002; Van den Berg, 2002). These unseen aspects of teachers' lives acted as either powerful catalysts for change or obstacles to change. For example, I had not asked

any questions about teachers' feelings during times of change and yet emotive words and actions were powerfully evident. This necessitated a return to the literature to locate research that focussed upon the internal and affective aspects of teachers' lives, particularly during times of change.

3.4   TEACHERS' INNER WORLDS: BELIEFS, VLAUES AND EMOTIONS

Teachers' actions in the classroom and their responses to change were linked to their professional beliefs and values (Fang, 1996; Haggarty & Postlethwaite, 2003; Hill, 2004; Pajares, 1992) and to their emotions (Hargreaves, 2004; Leithwood & Beatty, 2008; Nias, 1996; Spillane, et al., 2002;). To understand the scope of teachers' values and beliefs, it became necessary to define both values and beliefs in the context of this research before examining their relationship and significance in relation to teachers' capability and willingness to change.

3.4.1   *Teachers' Values and Beliefs*

Definitions of teachers' values varied. Values were either part of the affective domain (Clarkson, FitzSimons & Seah, 1999), linked and aligned with a particular philosophical approach (Butroyd,1997) or were viewed as an essential part of teachers' being (Kelchtermans, 2005). All agree that values are significant and connected in some way to teachers' inner being and related to what they believe and how they act in the classroom (Butroyd, 1997; Clarkson, FitzSimons & Seah, 1999; Kelchtermans, 2005; Loughran & Kelchtermans, 2006; Nias, 1996). If teachers do not have the opportunity to discuss their values or their own educational thinking, this is a likely impediment to change (Haggarty & Postlethwaite, 2003).

Defining beliefs was equally difficult because researchers used the phrase with differing meanings. Pajares (1992) captures this complexity by stating:

> *...Defining beliefs is at best a game of player's choice. They travel in disguise and often under alias—attitudes, values, judgments, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, explicit theories, personal theories, internal mental processes, action strategies, rules of practice, practical principles, perspectives, repertories of understanding, and social strategy, to name but a few that can be found in the literature. (p. 309)*

By implication, all teachers' verbal expressions, predispositions to action and teaching behaviours (Pajares, (1992) are indicators and act like a mirror to reflect teachers' beliefs. In fact, teachers' beliefs influence practice (Fang, 1996), and are shaped by personal experience (Fang, 1996; Spillane, et al., 2002; Vartuli, 2005) and by levels of education (Vartuli, 2005). Their beliefs have a sustaining power when undertaking change (Prosser, 2006) and impact upon their ability to interpret reform (Carless, 2005; Spillane, et al., 2002) and to make reform decisions (Rigano & Ritchie, 2003).

Hence, there appears a significant overlap between definitions of beliefs and values. Spillane, Reiser and Reimer (2002) and Vartuli (2005) claim that beliefs influence teachers' values. Hill (2004) adopts a more definitive approach about the relationship between beliefs and values. He proposes that values are 'dispositions to act on certain beliefs. They are beliefs that we choose to live by…' (2004, p. 62, 63). Whilst a teacher may hold many beliefs, those that teachers act upon indicate their values. It is the enactment that demonstrates values (Hill, 2004).

Hence, teachers' values and beliefs are powerful determinants of willingness to undertake change (Carless, 2005; Fang, 1996; Pajares, 1992; Rigano & Richie, 2003; Van den Berg, 2002) and impact upon teachers' practices as they undertake change (Brown, 2003; Hill, 2004). In fact, undertaking fundamental, conceptual change is difficult, especially if it requires teachers to restructure their existing beliefs. Deep change entails a shift in beliefs in order to change practice and thus teachers' beliefs which are difficult to change can impede reform (Richardson, 1998). Often teachers overlook the embedded educational beliefs that are inherent in an educational reform and this leads to teachers' misunderstanding of the reform (Spillane, Reiser & Reimer, 2002).

One reason that reforms may be misunderstood is that teachers link reforms to existing, familiar ideas and beliefs (Spillane, Reiser & Reimer, 2002). New learning is often a slow process 'because new ideas and practices are typically assimilated into inherited intellectual frameworks and habits of mind' (Cohen & Hill, 2001, p. 84). However, teachers are willing to change their beliefs after they recognise changes are positive for their students (Guskey, 2002; Richardson, 1998; Simao, Caetano, O'Meara & Flores, 2003). In fact, the strong relationship between teachers'

engagement with reform and student responses is well established (Fullan, 2003a; Guskey, 2002). Teachers' preparedness for change often depends upon their desire to achieve better learning outcomes for the students (Fullan, 2003a). Conversely, change was abandoned if students did not demonstrate positive benefits (Guskey, 2002). This links to an underlying belief that teachers view their role as one that facilitates student learning. Teachers hold this as a central belief and change their beliefs about a particular reform only if improved student learning occurs (Guskey, 2002).

Another internal factor, teachers' emotions, featured prominently as teachers recounted their stories of reform. Hence, additional research literature about teachers' emotions was sought in order to better understand this phenomenon.

3.4.2 *Teachers' Emotions*

During the initial process of data analysis, when transcribing the audio tapes, the power of teachers' emotions was surprising. However, I discovered an emerging body of work that recognises teachers' emotions are an essential component of teachers' identity and are particularly significant during times of change (Beatty & Brew, 2004; Little, 1996; Nias, 1996; van Veen et al., 2005). Three key ideas emerged. Teachers' capacity for varied and deep emotions is linked to the understanding that teaching is a moral act (Hargreaves, 2004; Nias, 1996). Connections are made between vulnerability and teachers' emotions (Lasky, 2005; Van Veen & Sleegers, 2006; Van Veen, Sleegers & van de Ven, 2005) because when change is introduced, there is an additional emotional impact upon teachers and their vulnerability is exacerbated (Ballet, Kelchtermans & Loughran, 2006; Reio, 2005, van den Berg, 2002). However, positive emotions also occur during times of change and teachers' employ a variety of sense-making strategies to re-establish personal control when change occurs (Reio, 2005; Schmidt & Datnow, 2005; Van Veen & Lasky, 2005).

Teachers' emotions are linked to the idea of teaching as a moral endeavour. Teachers' moral purpose and emotions are a fundamental part of their being, inseparably linked to their perceptions and cognition (Hargreaves, 1998; Nias, 1996). The art of teaching is viewed as emotional work because it requires commitment, passion and care (Nias, 1996; Clandinin & Connelly, 1998; Lasky, 2005). Teachers'

obligation to their students is part of their moral and ethical responsibility. This provides teachers with deep and satisfying emotional feelings (Lasky, 2005) and a strong sense of fulfilment (Kelchtermans, 2005) or even frustrating, anxious emotions (Sutton & Wheatley, 2003). Teachers' positive and negative emotions are described as passionate, 'hard-edged' and central rather than optional (Nias, 1996). This was confirmed by Sutton and Wheatley (2003) who describe emotions as integral to teachers' lives. Deep-seated emotions emerge in teachers' stories about their work and their recounted narratives contain moral, emotional and aesthetic dimensions (Clandinin & Connelly, 1998).

Many researchers link teachers' emotions and vulnerability. Lasky (2005) defines vulnerability as a 'multidimensional, multi-faceted emotional experience',… 'a fluid state of being' … that 'interacts with (teachers') identity, beliefs, values and sense of competence' (p. 901). It is about 'taking risks' without 'losing face' (Laskey, 2005, p. 901). A sense of threat or loss is added to the definition by Kelchtermans, (2005) who explains that teachers experience vulnerability when either professional identity or moral integrity is questioned. Sources of vulnerability are linked to external factors such as school and systemic policies as well as to relationships with peers (Kelchtermans, 2005). In fact, a constant state of vulnerability is linked to the act of teaching itself (Lasky, 2005; Van Veen, Sleegers & van de Ven, 2005) because of the nature of the occupation (Sutton & Wheatley, 2003).

During times of change, teachers' emotions are heightened and their deep sense of identity is challenged and this impacts upon their emotional wellbeing (Day, Stobart, Sammons & Kingston, 2006; Nias, 2000; Valli & Buese, 2007; Zembylas, 2005). If change is complex or ambiguous or continuous this is likely to heighten teachers' emotional states (Hargreaves, 2004; Schmidt & Datnow, 2005). During these periods of transition, vulnerability is increased as teachers feel their sense of identity is challenged (Day, Stobart, Sammons, & Kingston, 2006; Nias, 2000; Zembylas, 2005) because change requires a redefining of their self-perception as a teacher (Lasky, 2005).

A range of negative emotions occur when teachers feel more vulnerable including anger, uncertainty and anxiety, frustration, powerlessness and guilt (Ballet, Kelchtermans & Loughran, 2006; Reio, 2005, van den Berg, 2002). Teachers' self-

esteem and beliefs are also affected at times of vulnerability and change (Nias, 1996; Reio, 2005; van Veen, Sleegers & van de Ven, 2005) and teachers' professional beliefs about teaching are challenged and sometimes compromised (Lasky, 2005). As a result, teachers may view themselves as being less effective in the classroom whilst their greater workload draws them away from their students (Lasky, 2005; van Veen, Sleegers & Van de Ven, 2005). Overwhelming feelings of powerlessness and loss of efficacy are described as particularly debilitating (Kelchtermans, 2005). Much more is at stake for teachers in terms of their relationships and their emotional well-being during change. All of these consequences can impact negatively upon teachers' desire to undertake change (Reio, 2005; van Veen, Sleegers & van de Ven, 2005).

However, change has the potential to create a range of positive as well as negative emotional responses (Sutton & Wheatley, 2003; Ballet, Kelchtermans & Loughran, 2006). Positive emotions include pride and commitment, joy and surprise (Ballet, Kelchtermans & Lounghran, 2006, Reio, 2005, van den Berg, 2002) when change appears to be successful for learners and satisfying for teachers. Teachers' enthusiasm for their profession is another factor that influences emotions more positively when the change is imposed by others (Oplatka, 2005). Positive feelings are more likely when positive feedback is received from parents and students and administrators (Margolis & Nagel, 2006) or when short term goals are achieved (Leithwood, Jantzi & Mascall, 2002). These positive emotions assist teachers achieving long-term goals even when short-term results are minimal. As well, teachers' emotional histories (Day & Lietch, 2001) have a significant impact on their approach to understanding and managing change. Teachers' ability to avoid emotional suffering during times of change (Zembylas, 2005) contributes towards a more positive emotional state.

The emotional element of change can be described as an emotional lens because it is a particular way teachers view and manage change (Reio, 2005). This means that teachers create emotional scripts through which to self-talk the issues (Schmidt & Datnow, 2005; Van Veen & Lasky, 2005). Such strategies are part of teachers' self-reflection and demonstrate a personal way of managing when change occurs. Recent work by Zembylas and Barker (2007) highlights the importance of this reflective element by proposing the need for a space or place so teachers can manage change effectively when undertaking reform. They write of moving beyond coping with

change to harness emotions to better manage the negative elements of change (Kletchermans, 2005; Zembalas & Barker, 2007). This can be achieved by better understanding teachers' reform expectations and by supporting teachers to ensure they can effectively manage emotional risks (Zembylas & Barker, 2007). Other researchers propose that during times of change there is a need for encouragement and a time for teachers to rest (Hargreaves, et al., 2001; Margolis & Nagel, 2006). If appropriate support is provided, and successful reform is accomplished, a strong sense of pride and professionalism follow (Fullan, 1998).

As a result, a reflective sub-question emerged that contributed to the analysis of the data: *How do beliefs, values and emotions impact on the implementation of reform?*

In my research project, teachers were attempting to improve their assessment practices during a time of great educational change. Thus, in order to better understand the changes made and the ways change was achieved, literature in a further field, that of assessment, needed to be reviewed. Research on current trends in assessment practice and on teachers' ability to perceive and interpret assessment and their understanding of its differing purposes was of importance.

3.5   THE EXTERNAL WORLD OF TEACHERS: INTERNATIONAL TRENDS IN ASSESSMENT

The literature that influenced cultural attitudes and beliefs about assessment revealed a plethora of opinions about what constitutes valid assessment practices (Black and Wiliam, 1998). However, two overarching approaches to assessment are identified (Brady & Kennedy, 2001). The first approach is what Brady and Kennedy (2001) referred to as 'the educational aspects of assessment' (p. 2). This is an approach that uses student data to provide feedback to improve student learning and is known as formative assessment. This was the focus of Education Queensland's assessment reform. The second approach is called the 'instrumental aspects of assessment… (used to) sift and sort students' (p. 2) and is commonly known as summative assessment. This approach to assessment can be related to high stakes testing (Brady & Kennedy, 2001). The literature that explored these differing approaches in various locations of the world is examined in the following section.

3.5.1 *International assessment trends*

An emphasis upon assessment where the chief purpose is to measure student achievement has prompted the emergence of an international test culture (Broadfoot, 1996; Forster, 2000; Shepard, 2000). In Australia, and in other countries around the globe, students today are undertaking an array of international assessments whilst attending their formal years of schooling. These tests include the Organization of Economic Cooperation and Development's Program for Internal Student Assessment (PISA) and Third International Mathematics and Science Study (TIMSS) (Forster, 2000; Le Matais, 2003). The tests measure student success in Literacy, Mathematics and Science (Forster, 2000). The International Review of Curriculum and Assessment (INCA) has drawn attention to the power and the consequences of international tests, noting that governments justify and explain new education policies and policy changes by quoting international assessment results (Le Matais, 2003).

Higher international test results are assumed to demonstrate a particular government's ability to rapidly improve students' performance (Broadfoot, 1999; Rowe; 2000; Whetton, 2004). As a consequence, test results have driven governments to implement large scale reforms to rectify perceived deficiencies (Harris & Marsh, 2005). In summary, the international test results provide governments with a moral purpose for taking an active role in education and education reform and, in turn, legitimise the importance and significance of assessment's summative purpose (Broadfoot, 1999; Rowe; 2000; Whetton, 2004). This, together with the national tests conducted annually across Australia (National Assessment Program [Literacy and Numeracy]), contribute to an emphasis on the importance of instrumental aspects of assessment in schools (Shepard, 2000).

However, some researchers (Sadler, 1989; Black and William, 1998) have indicated that assessment has other purposes, including being a part of the learning process. Academics from a number of countries have challenged the philosophy of a test oriented culture and the international focus upon league-table assessment (Assessment Reform Group, United Kingdom, 2002; Stiggins, 2002; Warman, 2002). Not everyone agrees that test results should play such a prominent role and be the major driver of reform. In the United Kingdom there has been a history of high

stakes assessment (Broadfoot, 1999). National examinations in that country determined student pathways. Vocational education has generally been regarded as different from and inferior to an academic education (Broadfoot, 1999; Lambert & Lines, 2001). The impact of such regimented assessment of learning was examined by a group of academics, the Assessment Reform Group. They recommended that the definition and purposes of assessment be broadened beyond achievement recognition, to include a strong focus on the learning process so that assessment for learning was featured together with assessment of learning (Assessment Reform Group, United Kingdom, 2002; Black, Harrison, Lee, Marshall, & Wiliam, 2002; Wiliam, 1999).

In a landmark review of the assessment literature, Black and Wiliam (1998) reported three particular features of assessment that were beneficial for students. First, they underscored the importance of effective feedback to students, especially when teachers suggested how further improvements could be made. Second, additional learning opportunities occurred when students themselves became involved in the assessment process. Finally, a positive impact on learning occurred when subsequent teaching was informed by student needs that emerged from the assessment process (Black & Wiliam, 1998).

Similarly, in the United States of America both systems of assessment were working in parallel. In 2002, the Bush administration promoted and implemented an educational policy, No Child Left Behind, where testing was central to understanding student progress (Anderson, 2005; Baker, 2002; Le Metais, 2003). However, whilst there was a growing trend to measure achievement in order to access federal funding, particular academics in the United States promoted a broader definition of assessment and spoke of authentic assessment and authentic pedagogy to support it (Stiggins, 2002; Warman, 2002; Wiggins,1990).

Authentic assessment focused on providing a realistic or natural context for assessment featuring problem solving and intellectual challenge. This was so that purposeful problem solving and intellectual challenge in real life situations could provide authenticity (Darling-Hammond & Falk, 1997; Stiggins, 2002, 2005; Warman, 2002). Assessment tasks and explicit criteria were seen to be important as was student engagement and providing students with information about their learning

(Shepard, 1995; Wiggins, 1990). These researchers were keen to establish close links between learning and assessment. As a result, members of the authentic assessment movement valued the process as much as the finished product (Wiggins, 1998; Wiggins & McTighe, 2005), and linked assessment to teaching and learning (Darling-Hammond & Falk, 1997; Stiggins & Chappuis, 2006).

Researchers have connected the varying purposes of assessment to differing epistemological roots. Shepard (2000) proposed that these divergent assessment purposes were driven by fundamentally differing philosophical perspectives. The researcher said that student measurement and tests were linked to behaviorist theorists such as Thorndike, Hull, and Skinner (Shepard, 2000). Alternatively, higher order thinking and an emphasis on process and self-evaluation indicated links to cognitive theories and a constructivist perspective (Shepard, 2000). A constructivist view broadened the purposes to include assessment as a more fundamental part of the learning process (Clarke, 2001a; Earl, 2005; Shepard, 2000).

Similarly, Watkins (2003) linked various assessment approaches to different beliefs about learning. The researcher proposed that if learning is synonymous with teaching, then assessment is likely to test students' knowledge summatively (Watkins, 2003). However, if learning is about students' sense-making and building students' knowledge, then assessment is likely to be explanatory, reflective and even collaborative (Watkins, 2003).

These reform movements and differing epistemological perspectives lead to three important conclusions about assessment. First, there are multiple purposes of assessment (Dietel, Herman & Knuth 1991; Black & Wiliam, 1998; Earl, 2005). Second, assessment has moved beyond the recognition of achievement to include a strong focus on the learning process (Stiggins, 2005; Shepard, 2000, Wiliam, 1999, 2000). Finally, the learner and learning are considered central to the assessment process (Black & Wiliam, 1998; Clarke, 2001a; Hargreaves, et al., 2001).

Other countries such as Canada and Australia were part of this worldwide movement to include formative assessment practices at school sites (Clarke, 2001a; Earl, 2005; Craig, 2004). The shift to consider different types of assessment such as authentic assessment and formative assessment was part of an overall attempt to link learning and assessment and to improve student outcomes. At the same time, some

researchers lamented the ongoing power of high stakes testing and the impact this had for teachers and students (Broadfoot, 1999; Craig, 2004; Sheperd, 2000). Yet, despite a culture that highlights student tests, interest in formative assessment has grown in the last decade and there has been a focus on assessment reform worldwide (Earl, 2005). Thus it is important to see what research says about teachers' understanding and practice of assessment.

3.6   TEACHERS' ASSESSMENT UNDERSTANDING AND PRACTICES

In this section, research literature about how teachers perceive and interpret assessment is examined. First, teachers' views about assessment are recorded, particularly with regard to formative assessment. Next, their assessment practices are described, together with research literature that analyses an alignment between teachers' views about assessment and their assessment practices. Finally, the impact of implementing successful formative assessment reforms is examined.

3.6.1   *Teachers' Understanding of Assessment*

A number of issues emerged from the literature associated with teachers' understanding of assessment. In fact, teachers' understanding was generally limited, (Lingard et al., 2001; Black & Wiliam, 1998; Shepard, 1998) and teachers were particularly uncertain about formative assessment (Black & Wiliam, 1998). As a consequence, their views and their practices often did not align (Black & Wiliam, 1998; Lingard et al. 2001). Researchers Black and Wiliam (1998) noted that 'the tests used by teachers encourage rote and superficial learning (and) even when teachers say they want to develop understanding, many teachers seem unaware of the inconsistency' (p. 5). More recently, a lack of coherent understanding was found in a study that examined the use of Queensland Curriculum Assessment and Reporting products. In this study teachers attempting to use criterion based assessment had difficulties with the language of standard descriptors and in making judgments about students' performance on an A – E scale (Wyatt-Smith, Klenowski & Gunn, 2009).

In particular, new, formatively focussed assessment reforms are not easily understood by teachers (Cormack, Johnson, Peters, & Williams, 1998) or are misunderstood (Black, 2004; Neesom, 2000). For example, some teachers thought that providing students with their test results constituted feedback while for others, portfolio assessment and distributing portfolio results was a suitable formative

assessment practice (Black, 2004). Portfolios may be formatively oriented but, to be a formative assessment practice it requires:

> *Active feedback to change and improve pupils' work as the portfolios*
> *(progress). In general, any test or assessment at the end of a piece of learning*
> *is too late for formative purposes, precisely because it is at the end, so there*
> *is no opportunity to use its results for feedback to improve (the) performance*
> *of the pupils involved (Black, 2004, p. 3).*

This confusion has led to the idea that newer forms of assessment such as formative or authentic assessment would be something extra for a classroom teacher to have to do (Neesom, 2000). Principals have been concerned on teachers' behalf because they worried about teacher morale (Neesom, 2000).

Another difficulty associated with a lack of understanding about assessment is that the socio-cultural influences of competition, systemic testing and league tables exert a very powerful influence on teachers leading them to prefer summative assessment (Cormack, Johnson, Peters, & Williams, 1998; Shepard, 1995). Researchers in the United Kingdom (Broadfoot, 1999), in the United States (Shepard, 1998) and in Australia (Rowe, 2000) all make this particular point. They suggest that the power of an external testing regimen encourages teachers (and others) to hold the view that summative assessment is of greater value than formative assessment (Black, 2004; Edwards, 2005; Shepard, 2000).

3.6.2 *Teachers' assessment practices*

Given teachers' misunderstandings about the purposes of assessment and the preference for competitive systemic testing, it is not surprising that locating excellent formative practices was difficult. Freebody (2005) explained that "there is diversity and uncertainty in the practices of assessment… (and) the distribution of formative expertise across Queensland schools, is highly uneven, and seems mostly located among teachers of the senior high school years" (p. 7). Other researchers have been critical of further aspects of teachers' assessment practices.

First, the assessment tasks created by classroom teachers were generally not intellectually challenging (Lingard et al., 2001). Finding 7.14 of the Queensland School Reform Longitudinal Study (Lingard et al., 2001) states that "even when

teachers may believe in the importance of productive pedagogies…they often set (assessment) tasks that are low in demand, disconnected from the world and intellectually unchallenging" (p. 147).

Second, assessment tasks were often mismatched with curriculum and pedagogy (Lingard et al., 2001). What was taught and how it was taught did not match what was assessed. In fact, 'most teachers do not necessarily see good assessment practices as an integral element of good classroom practice' (Lingard et al., 2001, p. 8). In addition, there was evidence of a misalignment between assessment tasks and pedagogical practices (Lingard, et. al., 2001). Although teachers could identify the need for excellent pedagogical practices, their assessment tasks often did not reflect this belief (Lingard et al., 2001, Black & Wiliam, 1998) and teachers seemed unaware of the central role of assessment in good pedagogy (Lingard, et. al., 2001).

A consequence of this was evident in research undertaken in the United Kingdom and Australia indicating that teachers viewed instruction as more significant than assessment (Lingard et al., 2001; McCallum, 2001). These findings suggested that, for teachers, instruction and assessment are seen as separate tasks with a limited connection (Lingard et al., 2001; McCallum, 2001). Another related issue is that assessment tasks and assessment conducted in the classroom only addresses a small component of the curriculum (Hume & Coll, 2009; Cormack, et al., 1998). For example, this mis-match between curriculum and particular types of test-oriented assessment practices was found to be true for science teachers in New Zealand (Hume & Coll, 2009).

Third, students were not provided with clear information about how they might improve, but instead were compared with one another (Black & Wiliam, 1998; McCallum, 2001). Specific, task related feedback was the most helpful for students (McCallum, 2001) and yet there is an overemphasis upon 'the giving of marks and the grading functions' (Black & William, 1998, p. 4), whilst 'the giving of useful advice and the learning function are under-emphasised' (Black & William, 1998, p. 4). The power of competitive practices and the negative effect these had upon students was noted:

> *The use of approaches in which pupils are compared with one another, the*
> *prime purpose of which appears to them to be competition rather than*

personal improvement. In consequence, assessment feedback teaches pupils
with low attainments that they lack 'ability', so they are de-motivated,
believing that they are not able to learn. (Black & Wiliam, 1998, p. 4).

Fourth, the teachers focused on 'marks'. In the primary sector of schooling there was an additional focus on both presentation and quantity (Black & Wiliam, 1998). Where assessment reform had begun, teachers' marking did not match the sophisticated learning undertaken by students (Cormack, et al., 1998; Lingard et al., 2001), and teachers began to recognise that numeric processes for grading students work were inadequate. Cormack, et al., (1998) noted that "a challenge …emerged from teachers' trialling of assessment practices which promoted complex thinking and problem solving…Teachers…realised that (marks, grades and other kinds of ratings) could not adequately represent the complex learning processes in which the students had engaged" (p. 238).

The majority of research findings present a bleak picture. Additional explanations for teachers' difficulties are provided by Hargreaves, et al. (2002) who propose that the contradictions evident teachers' practices are 'embedded in the assessment policy itself' (p. 83). They explain that formative assessment reform has been promoted as 'an essential part of learning… to shape (teachers') actions for the next stage of learning' (p. 82) and yet parents and policy makers demand greater accountability and preparation for summative test success. Hargreaves, et al. (2002) said 'it is hard to expect teachers to harmonize their assessment practices when policymakers and the wider public cannot' (p. 83)

Despite the array of difficulties concerning assessment practices, local and international research indicated that, when certain factors are present, a change to formative assessment practices can occur (Black, et al., 2003; Education Queensland, 2004).

3.6.3   *Successful adoption of formative assessment practices*

There are several common factors that enhance teachers' ability to enact assessment change and often these factors appear to be linked. Teachers require substantial time to make transformational changes in assessment practices (Shepard, 1998; Lingard, et.al., 2001). Providing coherent professional development, providing opportunities

for teachers to work collaboratively, building on teachers' existing strengths and developing a clear understanding of formative assessment are key factors in successful change (Black, et al., 2003; Broadfoot & Black, 2004; Education Queensland, 2004c; Wiliam, 2007). In addition, when teachers focus upon students' learning and students' learning progress, they demonstrate a greater understanding of formative assessment (Wiliam, 2007; Black, et al., 2003; Clarke, 2001b). However, excellent subject area and pedagogic knowledge are necessary for the implementation of successful formative assessment practices (Jones & Moreland, 2005).

When the concepts of formative assessment are clearly understood and implemented by teachers, the benefits include improved learning outcomes for diverse groups of students (Clarke, 2001b; Newmann, Bryk & Nagaoka, 2001) and a whole of school improvement in learning (Black, et al., 2003; Le Metais, 2003). As a result, teachers are fulfilled and their confidence enhanced (Black, et al., 2003; De Lange & Romberg 2003; Le Metais, 2003). In addition, teachers experience a role transformation from teacher and imparter of knowledge to facilitator of student learning as students take a greater responsibility for their own learning (Black, et al., 2003; Clarke, 2001b). Similarly, local researchers found that assessment reform projects are able to shift and re-align teachers' perceptions about teaching, learning and assessment (Education Queensland, 2004b).

3.6.4   *Using the literature to shape my research questions:*

I wanted to understand how teachers' perceptions about assessment were formed and reformed during a period of change in a particular location in the state of Queensland, Australia. A key feature of this project was to listen to the teachers and document their own explanations about current assessment practices, understanding about assessment and how their practice was changing as a result of a mandated move towards using formative assessment in classrooms. Thus, I inquired about teachers' current assessment regimes and their purposes for assessing students because I sought insights about teachers' understanding of assessment and their existing practices (Earl, 2005; Fang, 1996; Guskey, 2002). This led to the formation of the final research sub-question: *How do teachers understand and use assessment in their classrooms before the reform process begins?*

In summary, the central objective of this research project was to focus upon how individual teachers perceived and interpreted assessment changes over time and this led to a wide and complex field of literature that shaped my research question: *How do teachers respond and change over time as they implement an educational reform?* There were many obstacles that impeded teachers' ability to make successful changes and there were also some catalysts that enhanced the change process. The teacher change literature clustered into several themes, the chronological theme, the political theme, the social theme and the intellectual theme.

As the importance of teachers' inner worlds of their beliefs, values and emotions became apparent, an additional reflective question was added: *How do beliefs, values and emotions impact on the implementation of reform?*

Finally, the literature that examined the topic of assessment and this provided a context to understand how teachers changed their practice over time.

3.7   CONCLUSION

The central objective of this research project was to focus upon a reform process with an emphasis on the personal experiences of three teachers. Through a cyclical rather than a linear process, two key fields of literature were initially identified for this literature review; the fields of teacher change and assessment. The literature associated with teachers' inner worlds emerged after analysis began.

The findings of others were diverse and sometimes contradictory. I found that the philosophical perspective and researchers' purpose were significant elements to consider when reading others' research findings. In addition, reading others' research required both diligence and openness. Whilst searching and reading about change and assessment, I had not understood the importance of particular references to the affective aspects of teacher change until I listened to the passion of the teachers who participated in this study. Subsequently, the literature field of teacher emotion was reviewed. Finally, this diverse literature that provided me with a richer understanding and deepening respect for the teachers who were prepared to participate in my research project as they implemented assessment changes in their classrooms.

In the next chapter, Chapter 4, an epistemology and a methodology are identified as a platform to listen attentively and document how participant teachers in this project implemented systemic assessment reforms in their classrooms in regional Queensland, Australia.

Chapter 4:   *Methodology*

4.1   INTRODUCTION

The purpose of this research was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms. While acknowledging the importance of teachers' pre-existing knowledge, the central objective was to focus upon changes made by individual teachers over time, studying their processes of change, sources of support and the impact of a systemic reform on their practice.

This purpose guided choices for the research design and data gathering. Recording and documenting teachers' stories was central (Stake, 1995) because the project would explore how three individual teachers reconstructed meaning at a time of complex change (Crotty, 1998; Neuman, 2000). Whilst detailed data were expected, the task of data analysis needed to be approached so holistic patterns was recognised (Merriam, 1998; Sturman, 1997). Listening to and recording experiences in a relational way would assist me to write a coherent narrative of change (Clandinin & Connelly, 1998).

In this chapter the philosophical alignment of the research from the selected epistemology to data gathering procedures and analysis is explained. First, the underlying epistemology (4.2) is identified and the choice of an aligned theoretical perspective (4.3) is shared. Then, the appropriate methodology (4.4) is described. Information about the participants (4.5) is detailed. The diverse data-gathering procedures (4.6) are outlined and key data sources listed. A summarising table identifies the stages of data collection. The next section of the chapter shows how data were analysed (4.7) and a variety of analytic processes such as cross-case analysis procedures and chain of evidence are described. The ensuing section considers legitimation (4.8) and discusses the key ways this research's trustworthiness and credibility are assured. The ethical considerations (4.9) for this research project are outlined and clarified.

4.2   EPISTOMOLOGY - CONSTRUCTIVISM

Epistemology is related to the key assumptions that underpin research and identifies the scope and foundation of knowledge (Crotty, 1998). The epistemological stance that underpins this research project is constructivist (Guba & Lincoln, 2001). Individual teachers would be organising their experiences to construct meaning at a given place and time and would be influenced by a range of social realities (Guba & Lincoln, 2001). During the project, I expected that teachers would construct and reconstruct their new assessment knowledge from the same systemic sources in diverse ways. Therefore, I sought to document how teachers developed new and different understandings about assessment and reflect upon how their old perceptions would be challenged (Denzin & Lincoln, 1994, 2000). If teachers' knowledge was not something that was objective, but instead constructed by the teachers themselves, then a constructivist epistemology would be appropriate.

4.3   THEORETICAL PERSPECTIVE: INTERPRETIVISM

A perspective within the constructivist paradigm was sought that best reflected the purpose of this research. If I was to better understand change processes from the perspective of three primary teachers, then the nuanced, personal and collaborative elements indicated an interpretivist perspective. (Neuman, 2000; Sarantakos, 1998). Features of this approach such as establishing and narrating reality from the participant teachers' point-of-view linked directly to the purpose of this research (Chase, 2005). Similarly, listening to the voices of the participant teachers would provide me with insights about the meanings these teachers attached to reforms from the 'inside', because the participant teachers would be living the assessment reform experience in their classrooms (Sarantakos, 1998, p. 36). My role was to seek to understand the participant teachers' lived reality (Neuman, 2000).

An interpretivist perspective gives recognition to the researchers' role when narrating the words of others. The choices I would make when compiling each teacher's story were, in fact, a re-storying process (Clandinin & Connolly, 2000). The researcher's craft of selecting the participant teachers' words and phrases to make meaning for the reader is like that of a weaver. The colour and vibrancy of the weaving is created by the individual threads and yet the patterns of a woven piece are created by the weaver. On the one hand, experiences of individual teachers would be valued whilst

on the other I would gather threads to create generalisations and themes (Clandinin & Connolley, 2000). Together the teachers and I would seek to better understand assessment reform and change and yet we approach this same end with individual roles and views of reality.

An interpretivist approach includes reflexivity (Creswell, 2002) and accommodates the fact that the narrated story and the selected dialogue would also be my story (Clandinin & Connolley, 2000). Each teacher's narrative would reflect my own "stance and perspective" because this "revealed the place from which…(the research narrator) observed and recorded the action" (Lawrence-Lightfoot & Davis, 1997, p. 105). It was envisaged that the participating teachers would construct and re-construct their new assessment knowledge and I would construct and re-construct a narrative through my choice of quotes, examples and literature. My involvement would be as another passionate participant (Guba & Lincoln, 2005) who was supporting and encouraging the classroom teachers as they made transitions. My own story, told in Chapter One, was a motivating factor for supporting teachers as they transitioned to a broader, formative understanding of assessment practices. This study is an example of multi-voiced meaning-making (Candy, 1989; Guba & Lincoln, 2005) in which I act as an interpreter, actively engaged in the research and making meaning from it, taking care to authenticate the narratives of my participant teachers by sharing aspects of their case stories with them and by re-visiting and reviewing the work samples they shared with me (Neuman, 2000). Whilst my voice is present, I would include 'extensive quotations from…(each participant teacher's) story, (so as to) …make room for readers alternative interpretations' besides my own (Chase, 2005, p. 665)

4.4 METHODOLOGY- NARRATIVE CASE STUDY

Methodology provides a framework for conducting research and also a model for incorporating theoretical principles (Sarantakos, 1998). Hence, methodology provides the overarching rationale for the selection of various research methods (Sarantakos, 1998).

The selection of narrative as a methodology was natural because of the personal tone of the anticipated interview data (Creswell, 2002) would be in keeping with a both a constructivist and interpretivist approach and would lead itself to the construction of

stories. At a more fundamental, epistemological level, the power of narrative would provide the participant teachers and me with a reflective tool for making sense of classroom life during a time of rapid change (Forrest, Keener & Harkins, 2010; Pajares, 1992). The use of narrative would assist us, as together, we revealed what it means to be a teacher during such complex times (Forrest,e Keener & Harkins, 2010).

There are a variety of additional features of narrative that were attended to in conducting this research project. To enable particular people and places to emerge for a reader, attention is given to narrative features such as character and setting. The participant teachers are carefully introduced as they share their story about educational reform (Lawrence-Lightfoot & Davis, 1997). Accuracy and insight, are important so a 'signature tone' for each participant (Clandinin & Connolly, 2000, p. 148) is attempted. This means I carefully recorded participants' words and phrases as well as attempting to capture their correct tone and feelings. For example, in Chapter Five, there are substantial quotes from transcribed interviews and conversations to enhance the emergence of the teachers' voices. Whilst I have selected the quotes and the organising structure, the teachers' themselves narrate their individual stories of change. In addition, there is information about location and context to provide a clear picture of the setting, however, the context does not dominate and detract from the people who featured in the narrative (Clandinin & Connolly, 2000).

Research narratives contain movement, providing a way of documenting progression and experiences with empathy (Clandinin & Connolly, 2000). Frequently a metaphor is used to connect a series of complex scenarios so as to create "common ground between the writer and the reader" (Clandinin & Connolly, 2000. p. 26). I adopt this device in Chapter 6 when the cross-case analysis is presented using a journey metaphor.

Finally, the narrative involves relationship (Clandinin & Connolly, 2000; Forrest, Keener & Harkins, 2010). Recognising this relationship is significant because this research project is, in reality, an intermingling of my voice as researcher with that of the voices of the participant teachers (Chase, 2005). Hence, narrative provided me (as researcher) with the obligation to recognise and acknowledge my influence and

role as author (Wallace & Louden, 2003), and provide teachers with an opportunity to narrate their own perspectives about assessment reform.

Within narrative methodology, case study provides a means to organise the stories of individual teachers in an empathetic manner (Stake, 1995, 2005; Sturman, 1997). Definitions of 'case study' focus on boundedness and an holistic approach whilst at the same time attending to the particularistic (Merriam, 1998; Neuman, 2000; Stake, 1995). The boundaries of this research project were clearly identifiable. There were three teachers at three geographically close schools in Central Queensland (Stake, 1995). Individual case studies will be written to document important, particularistic features of each case (Merriam, 1998) and to avoid a reductionist approach. In essence, case study is the best way to organise the teachers' lived experiences (Stake, 1995). In this paradigm teachers are acknowledged as knowers with practical and personal knowledge (Clandinin & Connelly, 1998). Insights and reflections will be provided in the first instance by the teachers themselves as well as by me as the researcher (Bassey, 1999).

Having three teacher participants provided an opportunity to explore their individual stories in great depth and detail (Neuman, 2000). There was much to record as teachers recounted their understanding about the assessment changes they were introducing in the classroom. As each teacher had a different story to tell, each became an individual case study and the research project developed as multiple narrative case studies, a variation of case study design (Yin, 2003). Whilst my primary focus was on individuals' stories, I was aware that issues associated with assessment reform were likely to be common (Merriam, 1998) and repeated in school sites across Queensland. Thus, the lived experiences of these three classroom teachers are re-storied, in cross case analysis, to show holistic patterns (Merriam, 1998; Sturman, 1997) about assessment and reform.

4.5 PARTICIPANTS

The participants were volunteers who worked at different school sites within a limited geographic location in Central Queensland. Following approval to conduct research, local school principals read a prepared statement that invited teachers to participate in an assessment research project. The invitation was for participants who wanted to make some changes to their assessment practices over a period of time.

The changes were teacher-nominated but aligned to the employing authority's assessment reform and philosophical approach. Principals then provided me with the names of those who volunteered. Initially four teachers from four different school sites indicated a willingness to be part of this study. Only three teachers completed every aspect of the research project. All three were female and had been teaching between 10 and 17 years. Two had been at a single location for the duration of their career. One teacher was currently employed at her third school. All three had joined the profession as mature age entrants.

To ensure privacy and follow the ethical guidelines outlined by Education Queensland and Australian Catholic University, pseudonyms were adopted for the participating teachers. Betty, Joan and Naomi, had been teaching in Education Queensland schools continuously since graduation and all were teaching children in the middle phases of learning in a primary setting. One teacher, Betty, had a composite class of Year Six and Seven students when she introduced her assessment reforms. Joan taught a single-age Year 7 class and Naomi taught a single-age Year 5 class during the data collection period.

4.6   DATA GATHERING PROCEDURES

In order to create portraits of active, assessment-reformer teachers, three data sources were used in this study (Yin, 2003); written documentation and artifacts, interviews, and a questionnaire. Data were collected in a variety of modes and this included paper and pen (questionnaire, assessment planning samples and student work samples supplied by the classroom teacher), printed materials such as system documents and audio tapes that recorded one-on-one interviews with each participant. Researcher notes were kept to clarify particular points and to record my thinking. Interviews occurred with each individual teacher on three separate occasions. These provided an opportunity to explore issues and engage in conversations about educational change over time. A culminating focus group meeting was also held. This gathering of all participants together provided each teacher with the opportunity to meet the other participant teachers and to share their individual change journeys as well as to present their own significant artifacts, such as assessment tasks and student log books.

4.6.1 *Written Documentation*

Both formal and personal written documents, as well as artifacts, were collected (Guba and Lincoln, 2005). The formal documents consisted of an array of assessment literature published by the state education department (Education Queensland, 2003) and the state statuary body (Queensland Studies Authority) immediately prior to and during the research data collection period. A range of assessment artefacts was also collected. These included assessment videos and official workshop handouts of Assessment Workshop One, Two and Three. These artefacts and formal documents were important data sources informing the writing of Chapter Two and assisting in a fuller understanding of the life world of the participants.

Personal artefacts, including copies of teachers' planning documents, task sheets, criteria sheets, samples of student learning logs and teachers' professional folders were collected. When joining the research project, each teacher supplied samples of her curriculum and assessment planning. Teachers also supplied copies of students' work samples as the project progressed. During the interviews, teachers referred to these documents. Their explanations were part of the unstructured elements of our interviews. The documents provided teachers with a means of clarifying elements of their stories. Using teachers' assessment documents demonstrated my respect for their work and shed light upon their perspectives of change (Clandinin & Connelly, 1998).

4.6.2 *Interviews & Questionnaire*

Before commencing the interview process, each teacher completed a questionnaire (Appendix C). To capture the stories of the participant teachers and identify their realities, face-to-face interviews were the most significant data source for this research project. The interviews represented a significant element of my purpose - capturing teachers' stories as they implemented assessment reforms in their classrooms. A series of three in-depth, semi-structured interviews with each teacher framed the data collection period (Burns, 2000). Each participating teacher was asked questions based on the themes that emerged from the research literature so the cases could be compared. Yet an informal, conversational tone was established and

teachers were encouraged to respond and share individual items of interest, ask questions themselves or comment on other current assessment topics of their choice.

An empathetic tone was important as it created a conversational space where the participating teachers could question, express their views and feelings and, if necessary, lead the conversation and reflect 'out aloud' in my presence (Charon, 2001). Teachers were invited to select a suitable and convenient interview location from a range of options. Whilst I identified myself as interviewer, rapport and respect was conveyed to the participating teachers by my questions and my questioning style (Dimmock & O'Donoghue, 1997; Yin, 2003). If a realistic understanding of their circumstances was to be documented, I needed to demonstrate a keenness to learn about their lived classroom experiences (Fontana & Frey, 2003). Listening was a key quality required of me as researcher (Yin, 2003). During these interviews, there were opportunities for teachers to explain, reflect and share elements of their assessment transition with me. One participant brought student work to share, another brought a professional reading to question whilst a third shared her assessment data collection methods. All three shared written personal documents such as assessment tasks, criteria sheets and trans-disciplinary unit planning.

The timing of the interviews was negotiated with the teachers and the end-of-term time periods were deemed to be the most appropriate, providing ample opportunity for teachers to undertake their agreed assessment changes. The time frame for data collection extended over nine months in 2005. The data collection period concluded with a focus group session attended by all three participants. This session provided the individual teachers with the opportunity to share their personal learning and celebrate aspects of their assessment change by interacting with others (Charon, 2001; Fontana & Frey, 2003; Sarantakos, 1998). It provided me with an additional opportunity to understand individual teachers' meaning-making processes. A summary of the data gathering strategies is listed below in Table 4.1

Table 4.1 Summary of Data-Gathering Strategies

DATA TYPE	DATA GATHERING STRATEGIES
Written Documents	▪ Formal Documents (e.g. official publications, letters & memos from the employing authority), ▪ Personal Artefacts (e.g. teachers' planning, researcher's diary) (Guba & Lincoln, 1985) ▪ Workshop Artefacts (e.g. workshop handouts) ▪ Questionnaires
Interviews	▪ In-depth semi-focused (individual participant teachers) ▪ Focus Group (participant teachers together)

A summary of the dates and location of the data collection is recorded in the Data Collection Summary in Table 4.2. All data collection occurred between 17th March, 2005 and the 11th October, 2005.

Table 4.2 Stages of Data Collection

Data Collection Phases	Stages of Data Collection	
Introductory Phase	Step 1	Formalised the ethical clearance to conduct the study Invited classroom teachers already interested in assessment across 3 school sites to participate (as protocol required this request was managed through the school principals)
	Step 2	Provided briefings to all participating teachers about requirements and research processes
	Step 3	Finalized interview resources and established flexible timelines for individual interviews and the focus group meeting
	Step 4	Co-verified document and artefact collection and sourced any 'missing' documents
Data Collection Phase	Step 5	FEBRUARY, 2005 Questionnaires distributed to participant teachers and returned prior to interview 1
	Step 6	Interviewed all participant teachers (Interview 1) BETTY: 26th March, 2005 at Betty's school JOAN: 17th March 2005 at my home NAOMI: 21st March, 2005 at my home
	Step 7	Collected copies of teachers' integrated unit plans, task sheets and criteria sheets for term 1, 2005
	Step 8	FEBRUARY – JUNE, 2005 Provided support or resource material requested by participant teachers (Delivery of resources/professional development associated with Assessment)

Data Collection Phases	Stages of Data Collection	
	Step 9	JUNE/JULY, 2005 Conducted individual mid-transition interviews with all participant teachers BETTY: 21st July, 2005 at my home JOAN: 15th June, 2005 at our school site NAOMI: 9th June, 2005 at my home [documentation (including unit planning) received by individual participant teachers]
	Step 10	Received documentation (including unit planning) received by individual participant teachers
	Step 11	SEPTEMBER, 2005 Conducted individual interviews with all participant teachers BETTY: 23rd September, 2005 at Betty's home JOAN: 2nd September, 2005 at my home NAOMI: 7th September, 2005 at my home
	Step 12	Received documentation (including unit planning) received by individual participant teachers
	Step 13	Conducted focus Group Session (all participant teachers – Share assessment journey stories) 11th October, 2005 at my home

4.7   DATA ANALYSIS

4.7.1   *Processes for Data Organisation and Analysis*

During the initial processes of data organisation and analysis, I endeavoured to develop tools that provided clear linkages to source material and allowed me to develop themes and patterns from the data sources (Bassey, 1999; Maykut & Morehouse, 1994). Prior to initial coding, all interview transcripts were typed. This process enabled me to recall and re-live conversations with participants and helped me to gain a deeper understanding of the nuances of their oral discourse. A folder for each teacher was established to contain all transcripts, teachers' artifacts and completed questionnaires.

For the first set on interview, a hand-analysis (Creswell, 2003) was used. During this initial coding process, duplicate copies were made of each initial interview transcript. One was the master copy and the other was used to colour-code particular key words or statements linked to themes from the literature. Sections of the transcript were then cut and pasted together on A3 sheets of paper using key words and statements as organisers. Annotations were made as the assembled material was cross-referenced

from both my own notes and the participants' questionnaires. This exercise was repeated for each participant within a short space of time. Subsequently, participants' statements and statement clusters were compared and a number of new themes were developed directly from the data by a process of constant comparative analysis (Guba & Lincoln, 2005). This process had a dual purpose. First, thoroughness and cross-referencing was ensured and second, the coding process enabled me to begin to sift carefully though my initial conversation with each teacher in interview one to examine early themes in the light of the research question about teachers' initial understanding of assessment - *How do teachers understand and use assessment in their classrooms before the reform process begins?*

For the interviews two and three, an electronic coding process was developed using the "comment" tool in Microsoft Word. Next, a matrix was used to assemble individual teachers' comments about a particular topic to develop themes across the nine-month research period. These themes included feelings, emotions and values, new practices, dilemmas, collegiality and pace of change. When analyzing, the research question concerning teacher change - *How do teachers respond and change over time as they implement an educational reform?* - was used as a guide.

Analytic processes were cyclical in nature. Figure 4.1 represents my process diagrammatically. The dotted line indicates the initial themes that were maintained as Interview Two and Three and the Focus Group interview were analysed. Themes from the literature were re-investigated and new literature was sought at different junctures during the analysis. This established a cyclical process as I engaged and re-engaged with the literature and the collected data.
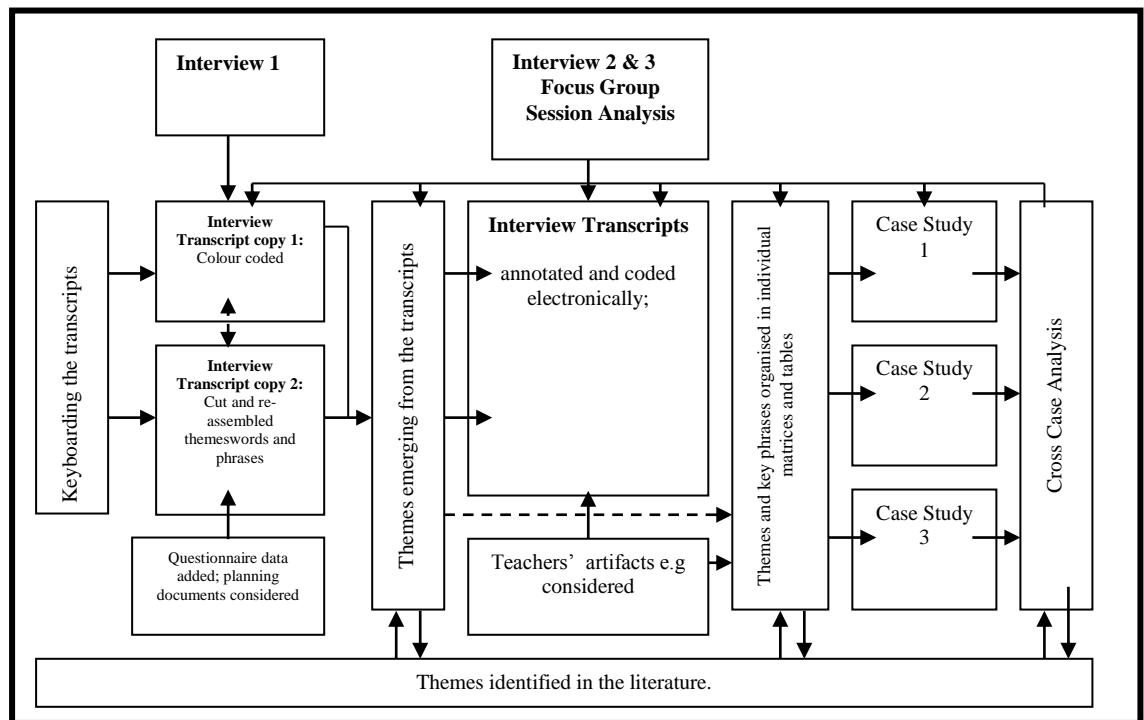
Figure 4.1   **Data Analysis**

4.7.2 *Chain of evidence*

Establishing a clear chain of evidence provided confidence in the process of analysis (Anfara, Brown, & Mangione, 2002). Table 4.3 demonstrates the development of a matrix in a horizontal manner to illustrate Betty's growing understanding of aspects of collegiality. At first she sought 'more professional sharing' and by Interview Three she was networking with fellow staff members. Betty did not comment about collegiality at the focus group session.

Table 4.3 Mapping Themes Matrix (Sample)

CASE STUDY 1 – MAPPING COLLEGIALITY

INTERVIEW 1 - 26th March, 05	INTERVIEW 2 - 21st July, 05	INTERVIEW 3 - 23rd Sept, 05	FOCUS GROUP – Pupil Day Term 4
Learning from others: *P5. I think I need more professional sharing That's really where I'm at. I need to see now. I know our school ran a little afternoon workshop using Excel in the classroom and I was unable to go cause I had another meeting. So... I have asked that teacher if she is running another session and she said she is trying to. So I need that one. OK. I can use Excel to a point. And umm. I have spoken to P about this session about a teacher at Clinton. He does the 3 way reporting.*	**School supportive and encouraging** The school's been very supportive. They were happy to send me to the multi age conference. And they're encouraging.. and um… and that way… p12	**Collegiality for TGT process and refinement** *And also the school supports me in that and these other members on staff. A and BC have been well trained in it as well. So I can be going to them and saying... getting support with that… p9* I've been running it by them. And and also the other.. two other teachers on staff who did the year 4 TGT. P10 Getting with them and sharing it with them. As An' sharing with them.. as.. and they've been good. We helping each other…and….p10 *Oh! Definitely! Having..Yeah… having someone else who knows what you are going through (chuckles) knows the process. And so you can say... 'Oh yeah! I'm really glowyed down with my aspirational response. Oh Yeah! What are you up to?' You know…that those professional conversations. And are really helpful p10*	

Such matrices had multiple purposes. First, they ensured the words and phrases of individual teachers were considered and the most appropriate selected for quotation. Second, the words and phrases could be easily cross-referenced back to the original, annotated transcripts to clarify and verify narratives as I re-storied the change processes in both the individual case studies and the cross-case analysis. This was a way of re-affirming participant voices and establishing trustworthiness. The matrices provided key statements that assisted with the definition of particularistic themes for each individual case and were then ready references allowing for identification of inter-related and common themes that occurred across the different cases (Creswell,

2002). Finally, I was able to track teachers' change over time which was particularly helpful as the individual narratives were written chronologically.

The analysis outlined above was used for two purposes, first to accurately recreate individual case studies (Chapter Five) and second as a foundation for the cross-case analysis (Chapter Six). Over time, as part of the cyclic process, larger themes that were consistent across all three cases began to emerge and these themes informed the cross-case analysis. These larger themes also shaped Chapter Seven where key aspects of teacher readiness for change, teachers' changing practices and their inner journeys during change are described. As an example of the way these themes emerged, the affective aspects of teachers' change journeys are captured in Figure 4.2. This diagram provides a snapshot of the analysis process of the affective theme, values feelings and emotions. To view this theme in relation to the other themes, see Appendix G. The differing coloured fonts in the first and second iteration represent the different participant teachers.
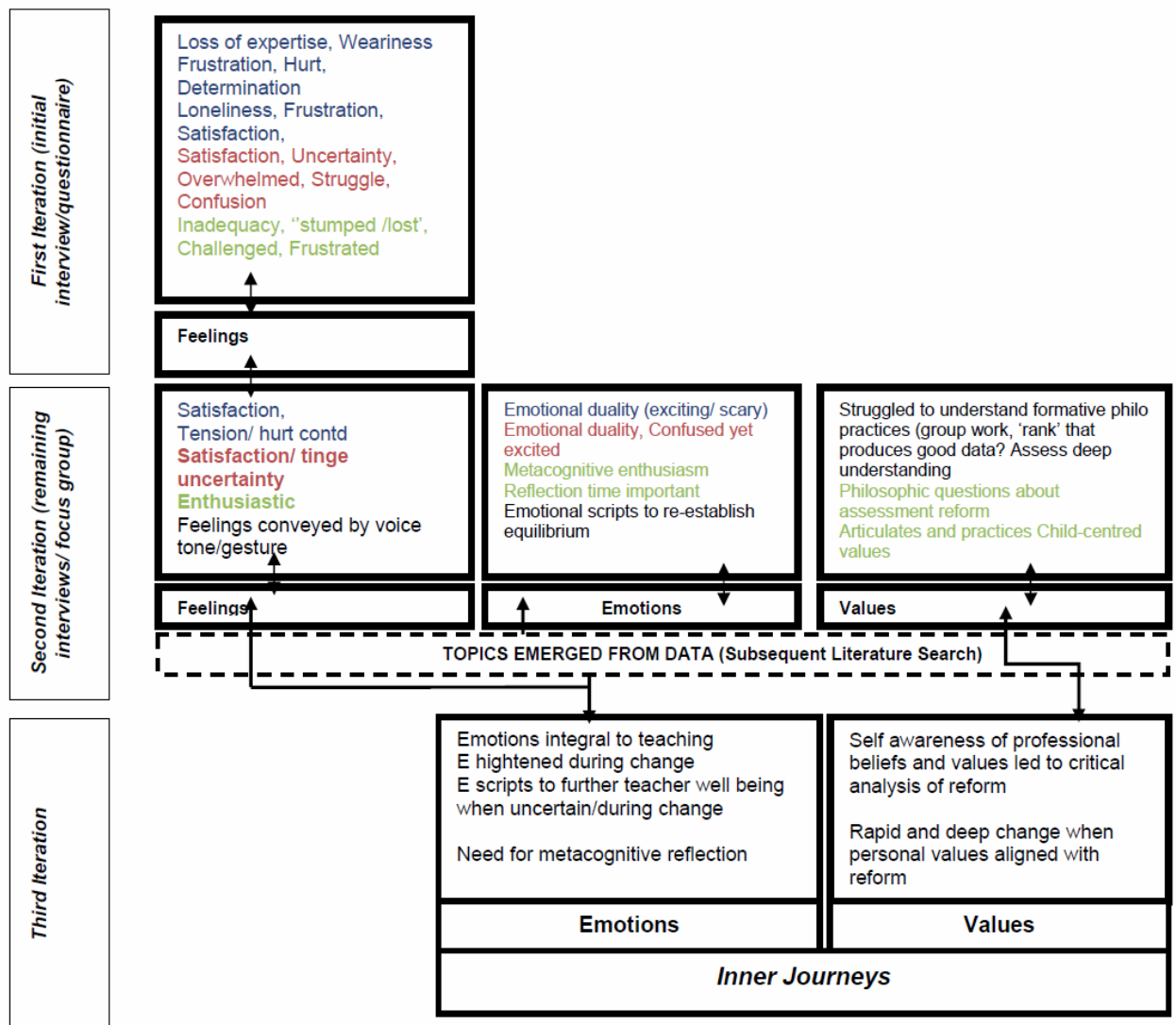
Figure 4.2 Building the Themes - Inner Journeys

4.7.3 *Strategies to Enhance Re-storying*

As I became immersed in the analytic process, I was not always at my computer to document my ideas and reflections electronically. To organize these notes I began scrapbooking as a way of tracking ideas (see Appendix E). Times of reflection occurred in varied places and my ideas and concepts were noted on pieces of paper of varying sizes and shapes. My often scribbled notes and concept maps were sorted and pasted together with my more intentional, electronic analytic processes. Highlighter pens, boxes and coloured arrows were used to connect, synthesise or reject thoughts that occurred to me at seemingly random times. This became a visual

representation of both my intentional analysis as well as a collection of my 'aha' moments. Scrapbooking became a method of synthesising concepts and ideas and an important part of analysis.

The final analytic process was the act of writing itself (Stake, 2005). Writing was a way of clarifying my thoughts and developing insights as I examined the spoken and written texts. I chose to narrate the case studies chronologically. Deciding the common themes and identifying particular features of individual cases was a challenge. The writing of the story sent me back to the data to consider further links, connections and images to create a holistic narrative (Merriam, 1998).

The cross-case analysis required several drafts as I sought to develop common themes and find a metaphor that could be sustained throughout the chapter (Lawrence-Lightfoot & Davis, 1997). I needed a unifying image that would capture the colour and diversity of three complex stories. The picture also needed to convey movement and empathy. The idea of weaving was first considered as a way of bringing the separate threads of differing stories together, but the notion of movement was absent. Next, the image of a parade suggested by Clandinin and Connolley (1998) was considered. Whilst a parade contained both colour as well as movement, the accompanying noisy sounds and clamor did not align with the internal, affective elements uncovered in the data.

The idea of a parade provided me with the impetus to choose a journey metaphor to frame the analysis and to amplify the teachers' voices. One participant teacher had used this image to remind me that we had previously been fellow travellers. The use of 'journey language' enabled me to explore holistically the significance of individual responses. Additional journey symbols contributed to the image of change and movement over time. Undertaking a new and substantial journey always required preparation. Carrying a map and studying the guides were part of the necessary preparation. Listening carefully to the experiences of fellow travellers, what they had already experienced and why they had chosen this journey would be a helpful beginning. Documenting their experiences and knowledge could be helpful for others who might follow. This was a journey of assessment reform on which there would be at least four travelers. I would be a fellow traveler with the three participant teachers, learning and changing as I travelled.

4.7.4 *Researcher Role*

The way multiple roles taken by a researcher during the research process could be perceived, lies at the heart of the problematic aspects of qualitative research (Denzin & Lincoln, 1998). The positioning of myself as researcher places me, as researcher, in the frame with the participant teachers (Clandinin & Connolley, 2000). I was part of the research project and an active participant in reform events in the district where the project was conducted, so tensions associated with my various educational roles as well as researcher roles need to be acknowledged (Fontana & Frey, 1994). This included my awareness of my influence upon the way the data was collected, analysed and narrated (Eisner, 1991). Hence, whilst I strived at all times to listen and reflect the teachers' voices, the case study narratives, in fact, are also my narratives because, as I was learning to understand how teachers' adjusted and changed their practices, I was influenced by my own personal experiences of educational reform and assessment (Fontana & Frey, 1994).

My primary task was to capture the colour and complexity of teachers' stories of change. However, my role throughout the data collection period was not a passive one and my differing roles both as researcher and educator contributed a layer of complexity to the research. My existing educational roles in the district need to be acknowledged and the participant teachers' perceptions concerning my educational and research roles explored. Finally, I recognise and document the impact of the researcher's presence upon the reform process itself.

Each participant who volunteered had known me as an Education Adviser – Curriculum or as a professional development leader. All were aware that I lectured part time at a local university. However, at the time of data collection, one teacher was a staff member where I had become deputy principal. In addition, during the data collection phase, I delivered Assessment Workshop Two on behalf of Education Queensland's Assessment and Reporting Branch and I had previously worked in the district as a trained facilitator of the pedagogical reform, Productive Pedagogies (Education Queensland, 2001c). The role of deputy principal and the role of sharing Education Queensland's pedagogic and assessment messages had the potential to contribute to an asymmetry in my relationship with the participants 'with power disproportionately on the side of the researcher' (Glesne & Peshkin, 1992, p. 117).

Three important contextual features occurred to lessen this imbalance of power. First, a number of educators in the area were trained as district educational leaders to lead literacy, pedagogic and curriculum change so my role as a person who delivered professional development on behalf of Education Queensland was not an unusual one in the local area. Second, my role as deputy principal involved curriculum support for staff rather than performance management so my role as a school leader was primarily a supportive one. Finally, as I established myself in the role of deputy principal, I encouraged staff members at the school to undertake a range of professional responsibilities, thus modelling flat-line management principles and emphasising my desire to be part of a self-motivated staff team. Yet I was alert for any indications that suggested my roles had impacted upon information that teachers supplied.

To minimise the impact of my district educational roles I attempted to ensure that the participant teachers made a conscious effort to understand the research context at each of the interview sessions. Participants were invited to choose the locations of the semi-formal interviews so these could be in places where each felt most comfortable. In addition, I clearly articulated the researcher role at the beginning of all meetings and deliberately clarified the purpose of this project. This was done so that teachers could focus on my desire to listen with empathy and record their stories accurately. However, I acknowledge the fact that, as case studies in the next chapter show, some participants chose to join the project in order to be recognised as progressive, enthusiastic teachers. Two teachers began their reform journeys prior to the first interview, which once again may be interpreted as a desire to impress.

To emphasise my listening stance and show that I was not going to be judgmental about information offered to me, questions and statements from teachers during interviews were re-shaped or re-worded so that the teachers' own understanding and reflections about the topic under discussion were clarified for all of us. This included my use of phrases such as "Could you explain?" (Participant Three: Interview One) and "What do you mean?" (Participant 3: Interview One) and "I just need to clarify…" (Participant 2: Interview Two). Finally, in each interview I endeavoured to establish a tone of informality and to take the role of participant in a professional conversation, where views of all were of equal value.

However, there were other researcher roles to consider. I had emphasised my task as a listener and attempted to minimise the impact of my other educational roles and yet, by implication, there was an understanding that my task was to be a witness (Lawrence-Lightfoot & Davis, 1997) and thus other roles such as supporter and advocate arose naturally from this role. I was prepared to offer the participant teachers assistance by supplying extra readings and by listening to concerns and reflections about newspaper articles and curriculum planning, so fulfilling a supporting element of the researcher role. Lankshear and Knobel (2004) refer to this as the concept of reciprocity when undertaking research. I chose this path, rather than striving to be an objective observer. I was aware that this choice would increase the possibility that the participants would seize the opportunity to have their voices heard and explain their perceptions and experiences in a frank manner. Thus, the teachers themselves might become advocates, speaking out about their concerns and difficulties as well as highlighting their achievements (Kemmis, Cole, & Suggett, 1983).

I believe the participant teachers did take the opportunity to advocate a teachers' view of change in a most forthright manner. They did not appear to withhold information from me as researcher; the stories that the teachers told were enriched with details of the complexities of change and its impacts upon them. They seemed to trust me to be a channel to convey their perceptions more widely through the educational system. This posed dilemmas for me as an interpretive researcher, as I was challenged by the choices I needed to make about how to criticise a system that, at the time, was my employing authority. However, this also indicated that, of all the researcher roles, teachers primarily viewed me as a co-advocate who was prepared to narrate their stories and they were particularly willing to voice their observations and triumphs as well as their frustrations and complaints.

4.7.5   *Legitimation*

Legitimising the research findings was addressed in ways appropriate for qualitative research (Merriam, 1998; Yin, 2003). Therefore an overarching framework suggested by Mulholland and Wallace (2003) was chosen. The framework identified three sets of criteria when judging claims made by researchers within the qualitative field. These three criteria sets focused upon strength, sharing and service. The

strength criteria-set was associated with the truthfulness of claims made during the research and the thoroughness and integrity of the research process. The research processes and the methods of documentation needed to be trustworthy (Guba & Lincoln, 1989). There were several processes that provided evidence of both trustworthiness and credibility (Guba & Lincoln, 1989). To ensure trustworthiness multiple data sources were used. Both written and oral texts were collected on four occasions. The process of analysis included re-checking a number of times using analytic modes such as paper and pen and electronic devices. Hence a cyclic process was established to cross-reference emerging themes with both the literature and participants' own words. This provided an audit trail to corroborate and triangulate emerging evidence and to ensure dependability and trustworthiness of the themes generated (Yin, 2003). Diagrams and tables, such as Figure 4.4, ensured transparency of the analytic process (Anfara, et al., 2002).

The creditability of the collected data had to be assured (Glesne, 1999; Guba & Lincoln, 1989). The topic of assessment had been of particular interest to me and, through my work as curriculum leader, deputy principal, Education Adviser and University lecturer, my knowledge and experience had been gained in the field in a wide range of ways over considerable time. This, together with the nine-month data collection period was considered a credible time frame by the participants who negotiated data collection times with me and re-confirmed information documented in previously transcribed interviews (Creswell & Miller, 2000). Finally, an external audit was sought (Creswell, 2002). My supervisors and members present at annual University progress reports provided this valuable feedback.

To satisfy the sharing criteria, this research needed to resonate with the experiences of other educators in a convincing manner (Guba & Lincoln, 2005). By choosing narrative and through use of metaphor, the world and struggles of the participating teachers were illuminated in an honest and interesting way. The use of thick description (Stake, 1995) provided an opportunity for the reader to enter the world of teachers undertaking assessment reform and journey with them.

Service to the education community was demonstrated because this research could contribute to the improvement of assessment reform processes as well as provide insights about how teachers manage change. Whilst the teacher sample was small,

findings from these cases illuminate wider issues related to reform, change and intensification (Ballet, et al., 2006; Easthope & Easthope, 2000) for teachers in the classroom. By seeking teachers from different school sites during a systemic assessment trial, I was able to document very different assessment reform journeys. New insights into the lives of teachers who undertake reform were provided as well as information about how they transition to new practices. This broader and useful application is a benefit or a 'service provided to an area of human endeavour by research' (Mulholland & Wallace, 2003; p. 9). In the case of this project, new information has the potential to change the ways in which professional learning opportunities are offered to teachers (See Appendix F)

4.8 ETHICAL ISSUES

This research was undertaken following the ethical guidelines of Australian Catholic University and Education Queensland as data were collected, recorded and analysed. Some the data gathering occurred on Education Queensland school sites with particular teacher participants who are Education Queensland employees. Thus, this research was bound by the ethical guidelines outlined on Education Queensland's web site at

http://education.qld.gov.au/strategic/accountability/docs/research-information-kit.doc.

Features of these guidelines include privacy, protection from harm and informed consent (Fontana & Frey, 2000). Written permission was obtained from all participant teachers and school principals. Staff at the site where one participant and I both work were informed about the research project being undertaken during 2005. The local University sub-dean was also informed.

Since I was known to all three participants prior to undertaking this research project, care was taken to ensure that the ethical guidelines were followed throughout the project and were demonstrated in a number of ways. All teachers volunteered to participate. The research project was explained and the intended process was clarified over the phone and face to face. Explanations were provided about the agreement they were signing, indicating their option of withdrawal (Creswell, 2002). At all times my researcher role was identified by beginning the interview sessions with information about the project and ensuring the participants were comfortable.

To ensure the participant teachers' rights such as the right to privacy and protection from harm, processes and procedures were carried out according to the Education Queensland guidelines. Pseudonyms were used for all written records and in all recorded notes and school research, sites remained unnamed. All research data were stored and examined at a site removed from the school in accordance with the Australian Catholic University documents.

4.9   CONCLUSION

This chapter has explained the philosophical alignment of the research from the selected epistemology to data gathering procedures and analysis. The research project's purpose guided the choices I made about research design and data gathering. In the next chapter, Chaper Five, the narrative case studies of each participant teacher will be documented chronologically.

Chapter 5:   *Individual Case Studies*

5.1   CASE STUDIES - AN INTRODUCTION

The purpose of this research was to understand how individual teachers perceived and interpreted an educational reform, against the backdrop of multiple systemic reforms. While acknowledging the importance of teachers' pre-existing knowledge, the central objective was to focus upon changes made by individual teachers over time, studying their processes of change, sources of support and the impact of a systemic reform on their practice. In this chapter, the emphasis was upon the chronological, personal experiences of each teacher as they grappled with different aspects of the assessment reform. To capture voices, every teacher participated in three, in-depth, semi-structured interviews and conversations. The data collection phase concluded with a focus group session where all teachers were present and shared their individual reform narrative.

In this chapter, the participant teachers, Betty (5.1), Joan (5.2) and Naomi (5.3) are introduced in individual case studies. Within this academic frame, I endeavoured to capture the lived experiences of these three teachers from primary classrooms in regional Queensland, over a nine-month period. My goal was to present Betty, Joan and Naomi's stories with accuracy and insight. As much as possible, I used their words, their emotions and their images to narrate chronological stories of change processes while undertaking systematic assessment reform (Clandinin & Connolly, 2000; Forrest, Keener & Harkins, 2010; Lawrence-Lightfoot & Davis, 1997).

Each case study includes an introduction to the individual participant teacher, followed by the assessment change each wished to make - *Reform Goals*. Their existing assessment practices are acknowledged early in each narrative, *Early Assessment Views and Practices*. The subsequent headings used are: *Concerns, Issues and Dilemmas; Making Change Happen; Consolidating Change and Personal Reflections and Realistic Understandings*. However, as each journey of change is individualistic, different themes arise under these headings. Each case study concludes with a summary of the assessment reform journey.

When an open invitation to participate in this project was issued through local school principals, four teachers volunteered. After conversing with each teacher's school principal, all four teachers received a personal invitation to participate in the research project. Each teacher came from a different school. However, one teacher could not attend all the interviews and so was omitted from this report. All schools were located in a regional city in central Queensland, Australia. All participants expressed an interest in research and wanted to make changes to their classroom assessment practices. One volunteer was a teacher in a school where I was the deputy principal and curriculum leader. We had worked together in an extended and collaborative manner prior to the commencement of this research. I had met the other two participants when I was working as a local Education Adviser providing on-site support and systemically organised professional development.

Just prior to the first interviews, local school leaders in the education district agreed to participate in a trial of significant components of Education Queensland's Assessment and Reporting Framework (Education Queensland, 2003). This meant that selected teachers across the district who taught Year Four and Year Six would undertake three days of assessment training. At this training they would produce an independently accredited Teacher Generated Task (TGT) drawn from outcomes statements from two key learning areas. One teacher in this project was selected to attend this training, and another was chosen to participate in a parallel immersion program for curriculum leaders.

The teacher-nominated changes that participants wished to make aligned with the wider systemic assessment reforms outlined in the Assessment and Reporting Framework (Education Queensland, 2003). Two participants chose to experiment and introduce the assessment reforms outlined in Assessment Workshops Two and Three - task based assessment that featured assessment tasks and accompanying criteria sheets. The third participant chose to explore a key feature of formative assessment (one element suggested in Assessment Workshop 1), peer and self-assessment.

Selecting case study for this research project meant that any re-storying of assessment and change was also my story (Clandinin & Connelly, 2000). I ensured my views of reality were explicit (Crotty, 1998). My goal was to establish a

supportive climate where a range of opinions could be expressed openly and frankly. However, my role was not merely a passive one. During the early data collection period I supplied literature requested by participants. This included furnishing a draft copy of the outcomes-based English Syllabus for two of the participants and two readings about assessment to one of the participants. I also conducted the two-hour Assessment Workshop Two that was attended by one participant and facilitated a curriculum planning session with another participant. All participants attended additional professional development during the data collection period.

5.2 BETTY

5.2.1 *Introducing Betty*

Betty began her career as a mature age tertiary student. She attended a regional university to gain her Bachelor of Education Degree. After the completion of her degree 17 years ago, she returned to her home town in Central Queensland where she began teaching at a local state school. Five years later Betty shifted to her current geographic location where, over time, she has taught in three different schools. She has been at her current school for the past four years. In 2005, Betty taught students in the Middle Phases of learning in a primary setting. She had a composite class of 26 students in a single teaching space in an older style permanent building. The class consisted of nineteen Year Seven students and seven Year Six students.

For Betty, her students were central. She spoke often about her child-oriented philosophy (p. 8: i. 1; p3, p. 4: i. 2; p. 21: i. 3)[1] and stated, 'My philosophy is very much a child centred approach. Children's needs and interests (are) first and then… the curriculum fits in with the children' (p. 8: i. 1). Negotiation with students represented a significant part of her classroom culture (p. 1: i. 1). Her mantra for this research project was 'keep them in the picture' (p. 12: FG)[2].

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[1] *Transcript references:*

p. 8 refers to the page number of the transcript; i. 1 refers to the number of the interview;

[2] *FG refers to the focus group session transcript*

5.2.2 *Reform Goals*

Betty was keen to develop her understanding of assessment. She explained that currently, 'The assessment all comes from me or is driven by the unit of work. And the kids aren't probably that much involved' (p. 1: i. 1). Betty wanted to change this and explore ways of increasing student involvement so 'they've got (the) picture all the way' (p. 2: i. 1). Betty was keen for her students to move from merely receiving their results to a position where they could analyse their own learning progress (p. 2: i. 1). Therefore, at the beginning in March, Betty nominated the development of peer and self-assessment practices as her goals for this project. She also expressed interest in developing a three-way reporting process to parents. This entailed students being at parent interviews to explain their assessment results to their parents. She commented, 'I've seen that. I'd love to get into that. I think that is excellent' (p. 2: i. 1). For Betty, participating in this project meant she could increase her students' involvement 'a bit further…with some self assessment, some peer assessment and a little bit of managing their own work samples' (p. 8: i. 1).

5.2.3 *Early Assessment Views and Practices*

Betty recognised that assessment was important as it assisted teachers to 'see where the kids' needs are' (p. 3: i. 1). However, she acknowledged that her feedback to her students only occurred 'informally' (p. 3: i. 1). It quickly became evident that Betty's current understanding of assessment was summative and report-card driven. Up until now, Betty had largely ignored Education Queensland's assessment announcements. When I asked her about designing assessment tasks and criteria sheets using the assessment terminology of Education Queensland's assessment trial, she admitted to being 'stumped' by the assessment language. She explained that for her it was all 'quite challenging' (p. 11: i. 1).

> *I haven't embraced that (new assessment practices) because it's the only place I'd be doing it and it doesn't have a lot of meaning for me (p. 9: i. 1). If the report card was using those terms, I would use those terms. Again. Being a survivor. (p. 13: i. 1).*

Instead, students had a portfolio of work that linked directly to the school's reporting framework. Students selected and collected work samples that were submitted to

Betty for marking. All Betty's current assessment practices focused upon gathering necessary evidence required for the students' report card.

> *It (the report card) drives your whole approach…There is limited value in assessing a component of the student's work which I am not going to report on (in) the report card… that's what I'm going to put on my assessment criteria. So that controls that. (p. 4: i. 1)*

> *At the end of the day that's what I'm accountable to. I've got to write to that report card. I'm going to make my assessment work for that. I have to be practical (p. 5: i. 1).*

And yet Betty was also frustrated by her school's reporting practices. She recognised a mismatch between the school's report card and the school's current outcomes-based planning practices because the report card did not refer to the outcomes. Her perception was that 'the school is loathe to sort of go ahead and do anything with the report card in case they have to turn around and change it' (p. 4: i. 1). As a classroom teacher trying to align these mismatched components of reporting she explained she was trying 'to make them all work' (p. 5: i. 1) and jokingly referred to it all as 'a bit of a juggling act' (p. 5:i. 1).

5.2.4   *Concerns Issues and Dilemmas*

As Betty considered her proposed assessment changes, she expressed uncertainty about a couple of issues. She wondered about the possibility of collecting students' work electronically but felt hampered by her own ICT skills. She expressed concern about being 'totally out of sync with (her) school' (p. 7: i. 1) if she introduced 3-way reporting practices. Her strategy was to use a 'trial and error' process to monitor the assessment changes she intended to make (p. 7: i. 1). She also shared her personal requirements to facilitate change and 'get the kids more involved' (p. 6: i. 1).

> *I think I need more professional sharing. That's really where I'm at. I need to see (3-way reporting) now (p5:i1)…The only other thing is probably just myself and making the time to get into it. It's the time factor isn't it? (p. 7: i. 1)*

And yet Betty was sure that her students would appreciate additional peer and self-assessment strategies. They were already familiar with the concept of peer assessment, as this practice occurred as part of her assessment of oral language. Betty's natural optimism had returned as she stated, 'I think they'll take to it like a duck to water' (p. 12: i. 1).

As we spoke about linking her child-centred philosophy to the assessment practices she intended to make, Betty recognised a dysfunction between her philosophy and her current use of summative assessment practices. She stopped mid-sentence and exclaimed in surprise.

> *I believe that to get children motivated to learn…They've got to have the ownership and they've got to see purpose and meaning ,…So. I believe that the children can see where I am going. And it makes them more aware of…something missing here*
>
> *GEE!…I really have been bombing out in this area!.. I can see that!…(p. 12: i. 1)*

5.2.4.1   *Education Queensland's reforms*

From the start, Betty demonstrated a keen interest in a variety of Education Queensland's systemic reforms. After we concluded the more formal aspects of the first interview, Betty offered her perception of Education Queensland's various educational reforms. I asked for her permission to continue taping as I recognised that she was an astute observer and commentator of educational trends. She gestured as she spoke and explained her view about the delivery of reform and the expectation by the employing authority that administrators are competent when implementing change. She asked rhetorically, 'Have all administrators …felt comfortable enough with it (new reforms) to take it to their staff?… Its new stuff to them too' (p. 13: i. 1). For her, there were implications for classroom teachers if the general process of reform was based on incorrect assumptions. Betty made reference to a seminal Education Queensland reform document that had been published several years before:

> *(The) 2010 document. This is the vision. This is what we are aiming for. That's great. But then - how is it coming to schools? How are the*

administrators hearing it? What's expected of them? How are they delivering it to their staff? How is staff then implementing that in their classrooms? …And that's got to be monitored, I think. The whole trial Because as soon as the department goes, "Oh well. We've delivered that to school. Phew! Good. That one's happening. Ummm. Is it? Know what I mean? (p. 12: i. 1).

5.2.5   *Making Change Happen*

In July, mid-way through the project, Betty's perceptions about assessment had been transformed. She was animated and enthusiastic. She had certainly moved on from 'being a survivor' (p. 12: i. 1) whose assessment was limited to the school report card. She explained, 'I feel as though I've had a big shift there. I think self and peer assessment has become …the most important part of (my) assessment' (p. 2: i. 2). For Betty, her new views about assessment were a professional revelation, her chosen reform was consistent with the heart of her beliefs; it was about student control. She explained, 'The kids have to understand what they're doing and have control. So I just feel as though I've given the kids a bit more control' (p. 7: i. 2) 'They've got to have control of their learning for life. For all time' (p. 3: i. 2). In an excited manner, Betty sought to capture the magnitude of this shift and the impact that this had on student learning and teacher planning.

So to me - self and peer assessment particularly - has to be totally integral and vital to all their learning… So now I feel as though that's become like BOOM! I think it's got to be… THE WAY I plan…The children TOTALLY involved with their learning. That's become for me…a huge big shift, a huge focus (p. 2: i.2)… It's about them. And them understanding what their needs are. That's been the big shift for me. Which I sort of fiddled around with all these years. And I really realized 'sit down – this is what it is all about!' (p. 3: i. 2)

5.2.5.1   *Change catalysts*

When Betty discussed the catalysts that facilitated her change she nominated professional development and professional readings. Additional catalysts became evident as we conversed. These included the support of her school and her peers as well as her own reflective processes.

Professional Development experiences were particularly significant for Betty. Between March and July, she had travelled to the state's capital city to attend a two-day Multi-Age Conference. In addition, she also attended two days of Teacher Generated Task training that was conducted at a local University campus. During this period Betty also participated in Education Queensland's Assessment Workshop Three.

She expressed unqualified enthusiasm for the Multi-Age Conference. Betty explained that it was, 'Different. Wonderful… You walk away with your mind (laughing as talking) bursting with ideas of things you want to go and do' (p. 3,4: i. 2)'. She added that 'Generally the main thrust there was child centredness' (p. 3,4: i. 2). During our conversation Betty also explored the philosophical juxtaposition of her Teacher Generated Task training and the Multi-Age conference she attended. She searched for common messages and consistency.

> *(The two conferences were) a little bit contradictory in a way… but I think I can marry the two… Teacher Generated Tasks… gives you the feeling that i'ts all about the teacher… generating the task… but then when I go to my multi-age conference…they say…. 'Don't get so hung-up on your unit that you've put … your life and soul into'…I think that's something to be very aware of when you've (written) a 'teacher generated task'. You just don't say, 'Hey! Sorry. This is 30 hours work…This is exactly what you are going to do' (p. 4: i. 2).*

> *The multi age thing with the child centredness and the deep understanding and the Teacher Generated Task training. Though the (assessment) workshops…(are) all giving us those same sort of messages of how the learning has to be meaningful to the children. The assessment has to be meaningful. And the assessment and the learning of course are all inter-related. (p. 6,7: i. 2)*

The second significant professional development opportunity for Betty arose when her school nominated her to attend Teacher Generated Task training. This training was part of the district-wide initiative to trial and implement Education Queensland's assessment reform. After the initial training, Betty identified both positive and negative aspects associated with the Teacher Generated Task training. She longed to

hear a philosophical explanation of Teacher Generated Tasks and task-based assessment when she attended this training. For her, that was crucial.

I was a bit disappointed at first. I needed a more explicit explanation of the philosophy behind it. Why are we going to Teacher Generated Tasks? What's the purpose? I didn't (get) enough of that to get started. Maybe I wasn't ready to hear it. I don't know. So I have been.. working it through… and trying to find where it fits…(p. 3: i. 2)

Betty was even prepared to be subversive because she was sure that Teacher Generated Tasks would preclude student involvement, and the process of creating tasks during the training challenged Betty's philosophy of student negotiation. She struggled with the idea that the Teacher Generated Task (TGT) may be 'set in concrete and the be all and end all' (p. 4: i. 1). However, Betty was not prepared to compromise her child-centred values.

You have to be prepared to say, OK…The kids' interests are heading off this way…Let it go there. That doesn't mean that deep understanding can't still happen. Maybe it's BECAUSE of deep understanding that children will take it off on a different tangent… When I go to teach my TGT next year…I'll certainly be running it by the students and saying 'This is it, guys. This is what we've got. And if they say, 'Oh! Yeah! But we can do this and this – straight away I'll be ready to modify the unit and go with that… you've got to be willing to keep it flexible and let the children give you input at the planning stage' (p. 4: i. 2)

Yet, Betty was able to positively support particular elements of the Teacher Generated Task training. She appreciated the opportunity to engage with the syllabi documents in a meaningful way (p. 1,12: i. 2) and she expressed a new appreciation for the usefulness of Education Queensland's assessment tools. She recognised new purposes for the handouts she had received when attending Assessment Workshop Two and Assessment Workshop Three (the 'place mat' and the 'green card').

I think the tools they're giving us are REALLY useful…Bring them under your arm when you're doing your assessment and refer back to them. Don't just file them. File them away in your head as well as your filing cabinet! There's

some really good stuff in there. All this sort of philosophy. (It's) like a
checklist. Does my assessment do that? (p. 8: i. 2)

Initially, when Betty had attended Education Queensland's Assessment Workshop Three, she had not been impressed. In particular, the timing of this workshop was not popular with the staff. It had occurred as an after-school professional development activity at Betty's school. She explained that perhaps this was not the most effective time to attend professional development.

Unfortunately the last workshop was late afternoon when we were all pretty
weary…But the main benefit is having those tools and keeping them with me
for planning (p. 8,9: i. 2).

Professional reading was another change catalyst that had a very positive impact upon Betty. She referred to all the texts she had recently read and she indicated that the peer and self-assessment readings I provided were 'very, very helpful'. For her, it confirmed the messages she was hearing in other places. She recognised the syllabi contained a similar philosophic perspective.

Because in the syllabus and everything I'm reading - it's talking about
children having control of their learning and life-long learning, that deep
understanding and all these terms all come back to children understanding
what they've learnt (and) what they need to know… (p. 1: i. 2).

The support of her school was valued by Betty. This motivated her to consider becoming a change agent to take further action to align reporting and new assessment initiatives.

The school's been very supportive. They were happy to send me to the multi-
age conference. And they're encouraging…(p. 12: i. 2)

Where are we going with our report card? Cause I really feel… its something
that the school needs to address… and I think it's getting so way out of step…
I think (it's) being… let sit there… (to) see what's happening with all these
changes… we don't want to have to re-invent the wheel too many times… I
think it's come to the point where it's so far out of step with what's happened
with all the curriculum documents… I think the time has come when we've
got to look at it (p. 13: i. 2).

Behind all these visible supports lay other processes that facilitated Betty's changed demeanour and practices. Betty attempted to capture the essence of these other, unseen processes that provided reasons for such rapid change.

It did all really come together at once… the Teacher Generated Task training was followed fairly closely by the Multi-Age conference and then the last (assessment) workshop all on top of each other. And I'd done the readings (supplied by the researcher) a few weeks earlier. So it was all in my head anyway….And I had time at the (Multi-Age) conference too to sort of think…what is this all meaning for me… It did seem to suddenly come together. I was thinking all the time, "My focus is self and peer and assessment'. And you needed time. Like weeks. That's sitting in your head. And that's mulling it over. You are gathering. You're adding and you're gathering… (p. 11 & 12: i. 2)

5.2.5.2   *Intended Assessment Changes: Self Assessment*

Between March and July, Betty had explored how she could best implement her new assessment insights and knowledge in a child-centred manner. She developed a number of new assessment tools and strategies for her classroom that enhanced her students' peer and self-assessment skills. Betty was particularly proud of the student self-assessment journals that lay at the heart of her new approach. Journaling was established so students could reflect on their learning. Betty continued to develop and refine the students' journal for the remainder of the data collection period.

I really feel as though I've brought all my experiences together…and I've totally come up with a new technique which I'm in the early stages of using…What I've developed is a children's self-assessment journal. (p. 5: i. 2)

Betty detailed various features of the journal as she showed me a sample. In the front section of the journal, students were provided with the opportunity to record and reflect upon what is learnt 'any time they like…if they feel they've learnt something' (p. 5: i. 1) in the front section. They were encouraged to collect 'work samples in it' (p. 6: i. 2) along with the 'assessment criteria which we've (collaboratively) developed' (p. 6: i. 2). At the back of their journals, students pasted a report card

checklist that Betty had developed. '(Then) the kids can collate it. So there should be no mysteries about what the report card is going to be like'. (p. 24: i. 2) Betty discussed the purpose of the self-assessment journal with her students. This was subsequently recorded on the title page of their journals. Betty hoped that this book would become a catalyst for conversations at home with parents and carers (p. 6: i. 2). She recognised this innovation had great potential.

> *We've talked about how the main purpose is for them to understand their learning and to know where they need to go for their learning.' (p. 6: i. 2)*

> *'I'm pretty excited about my journal and (how) it is going to fit in with what we are doing here. (p. 15: i. 2)*

To enhance success, Betty emphasised trialling, negotiating and flexibility. As she introduced the journal she constantly kept an eye upon the purpose of this tool for students.

> *This (the reflection journal) isn't set in concrete and the be all and end all. This is driving good teaching practice. But the main focus is … letting the learners … (be) aware of the learning.. in control… And I think that is the important thing. (p. 4: i. 2)*

Betty watched her students keenly to see how they would respond to the journal. She also expressed personal satisfaction with the changes she had made.

> *They're (students) dead keen. When I first started doing it… the children were so keen…. They really like it… 'Yeah! (And) I'm pretty excited about it (reflection journal). 'Cause I really feel… I'm on track with this. .. (p. 6 & 7: i. 2)*

5.2.5.3   *Intended Assessment Changes: Peer Assessment*

Other additional changes had occurred in Betty's classroom. As part of enhancing peer assessment skills in her classroom, she realised that engaging the students in the assessment process from the beginning was important. Betty understood this from her readings.

> *Another big thing is…that the assessment tool you're going to use (it's vital it's) is given to the children at the early stage. (not) whipped up the night*

before you go to assess them…The reality is if you're going to really

…(assess) properly, you always have to get the children involved earlier (p.

5: i. 2).

This insight about early student engagement was an inspiration for the inclusion of two additional classroom assessment practices that emphasised teacher-student negotiation from the start. The first practice was to negotiate the assessment matrix that included criteria to demonstrate learning. The second strategy provided an opportunity for the whole class to participate and use their collaboratively designed matrix to assess their peers' performance and product. Betty also refined the feedback process to affirm individual students.

We talked about the most important aspects we needed to learn about and

what we are going to assess this (item/presentation) on…(I asked) what

would be a HA for each of these things?'…'So we looked at that! Oh! OK

We've solved that! '(Following the procedure) everyone gets a copy of the

matrix'…They (the students) are pretty good at judging (their peers)…We'll

talk about that….They hear my thoughts as well…we vote…and so we are

talking about why that is assessed (that way)…we have the conversation. (p.

11: i. 2).

5.2.5.4 *Additional systemic reforms*

Mid-year a new systemic initiative (Queensland Curriculum, Assessment and Reporting Framework [QCAR], 2005) was announced by the Department of Education. Again, Betty's interest in wider systemic assessment reforms came to the fore and she commented upon this new initiative. She had read about this new initiative in the centre-page spread in the July, 15 edition of the fortnightly statewide newspaper, *Education Views*, and she wanted to express her apprehension about the assessment component of this initiative during the interview. Betty suggested that if there were to be 'measurements' and 'standardizing' she would have difficulty aligning this philosophy with 'developmental learning' and 'child centeredness' (p. 14: i. 2). Betty read the text out loud (Field notes: 21st July, 2005) and added some personal comments.

I just sort of have some questions on the educational philosophy behind this.
Is it totally in alignment with what we are saying in our syllabus documents?'
(p13:i2).

It looks a little bit like we've got two different philosophies trying to push
together… I don't know how it's going to work…So that's my question.
That's where I want to see how this is going to pan out. Big standardised test
which is you know… caters for individuals… Hmmm. (p. 14: i. 2).

The promised assessment tools were queried by Betty. She was concerned that the announcement was made prior to viewing these tools. She also expressed disquiet about the idea of 'set tasks' and the level of teacher input. She worried that teacher judgement was being under-valued and minimised.

Basically I'm worried about it. It says the teachers 'will have access to high
quality assessment tools for collecting valid and reliable evidence of student
achievement. I'm concerned. I'd like to see what these high quality
assessment tools are going to be…it'd be giving us the task. How is that
catering for the children's interests and (their) needs. I'd just like to se' (p.
14: i. 2).

(Teachers do) assessment over a long period of time… (we) have many
samples gathered over a long period of time…Any one test on one day… has
to always be looked at in perspective…The teacher judgment aspect is the
most essential and vital part…teachers and students talking to each other and
parents… all together and understanding and knowing the child… Can't beat
that… (p. 15: i. 2)

Betty was also anxious about the impact this initiative would have on students. She struggled to align the statements about assessment with individual student needs and shared her personal perspective.

Whether you are in the county or the city, as you know, there are so many
aspects that affect their learning. I just worry if those things are getting left
behind. (p. 14: i. 2)

(I) wonder what's driving this? Is it more 'the big accountability'? I don't
know. The political side of it? What we're all about are children and

children's learning and if that's not driving it (QCAR) I think it's going to be flawed. (p. 15: i. 2)

5.2.6   *Consolidating Change*

As the project continued from July through until October, Betty's creativity blossomed. She was able to provide additional insights about the student reflection journal. She was still excited and enthusiastic but issues had arisen where she had to demonstrate flexibility. For example, as the amount of content in the journal increased, Betty recognised the need for order within the journal. She revealed an increasing understanding about the importance of focusing on 'how to learn'.

> *We report all our good things together. Then I realised I needed some way of organising this. Cause I don't know what's in here. And so.. we've got a report card checklist and that they're… They're the headings of the report cards… Their reflections - that's for their own personal growth and learning. This (report card checklist) is purely just for me to manage the report card. But also the children can see…and before the report card's written they can actually go and look at it and talk about judgments.(p. 14,15: FG)*

> *I probably would change how I have written up the statement at the beginning (of the journal) …So the children are really clear in their mind. 'This is my purpose of my journal'. I think I focused too much on what we're learning. That's good…I also think I need in my reflection talks a lot more of how I learn and opportunities to put that in here. (p. 24: i. 3)*

As the students engaged with their journal, Betty acknowledged that it was the process of reflection that was important. In addition, some students were keen to talk as well as write in their journals. Hence oral reflection and self-questioning were also introduced. Betty commented that she wanted the students to 'be meta-cognitive' about problem solving and be able to ask 'How (do) I solve problems. 'What do I do when I'm stuck' (p. 10: i. 2)? She explained that 'we do reflect in our journal but not all our reflection needs to be there' (p. 10:i. 2).

So Betty worked to develop a successful balance between oral and written reflection for her students. She recognised that oral reflection had become increasingly significant for many of her students, so she developed a classroom strategy to

legitimise its importance. As the data collection drew to a close, Betty refined a series of reflection questions and these questions were written on the board and were the focus of 'oral reflection time'. Betty explained that the key questions for the students to ask themselves were, 'What am I strong at? How will I find that information? How did I do that' (p. 14: i. 3; p. 12: FG)? Betty stressed that the significant factor was '(I am) helping them generate (the questions) themselves rather than just coming from me' (p. 12: FG). Yet, Betty continued to ponder upon the appropriate balance between oral and written reflection time for students and was unable to arrive at a satisfactory conclusion to this dilemma by the end of the data collection period in October. She acknowledged that her focus was to provide options for her students.

Betty also made adjustments to the collaboratively designed matrix so students could use the matrix to judge their peers. Through trial and error, Betty found that negotiating all aspects of the matrix became too tedious for her students. So she compromised and adapted the strategy to suit her students. Betty now called the matrix 'success criteria'. She summarised the students' response:

> And so …hearing those conversations and hearing my judgments…they always feel that's fair. You have to have a pretty supportive .. classroom to do that as well. But I'm finding the kids love doing that. And they're really getting a Deep understanding of those expectations. (p. 13: FG) Developing a success criteria and developing an assessment rubric is really valuable. (p. 15: i. 3)

In addition, Betty introduced a variety of additional formative assessment practices and substantially refined an existing assessment practice that focussed on student observation. Betty commented upon one of her current assessment strategies she used prior to this research project. She described how her growing assessment understanding impacted upon the way she conducted her student observations and how she provided student feedback. She explained that she had now developed a more focussed approach when observing her students and her comments now emphasised student learning. She highlighted the need for using explicit language. She stated, 'That sort of talk (to students) needs to be explicit, rather than me just observing and going, "Oh! Yes. No. He's not onto it yet' (p. 16: i. 3).

Her recognition of the need to use explicit, learning-focused language resulted in her introduction of another strategy. Betty explained another simple strategy she had begun to use called WALT (We Are Learning To). Betty was amazed by the impact this had on her learners. She referred to this strategy at the focus group session.

> *Another thing.. I've learnt so much… I've learnt how important (it is) to give learners the visual explanation of what they are about to learn. Writing up on the board. 'This is the object of your learning'. Not just saying it… We've got kids (moving) from.. thinking 'what is she doing to us today' - to this sudden ownership of the lesson and self-motivation.. Yeah… I can't believe that. It's such a motivator. A simple thing like that. (p. 3 , 4: i. 3)*

> *I start a new lesson with 'We Are Learning To' (WALT) which I just write on the board. (p. 13: i. 3)*

> *So. The kids go… "OH! OK!"…. "OK I can get an HA." Or "I bet I can do that." You know. It's just brought them on board. Straight away. I couldn't get over the change it made in them. (It) focused them on the teaching… it REALLY made a difference. (p. 12: FG)*

In September, Betty sought my opinion about what she considered the most radical of all the new assessment practices she was considering; giving students the opportunity to write their own test. Betty explained her rationale for considering such a strategy.

> *I know the process of going through the children's workbook and analysing all their work (is) really a wonderful learning experience for me. I come away with a really deep understanding of all that stuff. (both laughing) Why aren't the children going through that process? (p. 18: i. 3)*

However, Betty discovered the outcome of the introduction of this classroom innovation was very different from her initial expectations. At the final focus group session in October she reported what had happened saying it was 'very interesting what I learnt' (p. 17: FG).

> *Now if I just whipped up (that) test… And gave it to them. I'd think 'gee those children have trouble transferring their knowledge from that to an assessment piece'. But what (it) really showed me (when the students*

attempted to design a test) was .. they didn't have a deep

understanding…They'd showed me how I taught that. And so that challenged

me… (p. 18: FG)

Betty acknowledged that, for her, another way of uncovering her students' deep understanding about a topic was to allow them to write the assessment task instead of completing an assessment piece that had been written by the teacher.

In September, Betty returned to discuss the ongoing frustrations she encountered as a result of attending the Teacher Generated Task Training. She continued seeking an explicit, philosophic explanation for task-based assessment that no one seemed able to provide.

> *I don't know how much of it is me as a learner and how much is just the*
>
> *system. But sometimes I feel as though I miss the understanding of Education*
>
> *Queensland's intent. What's driving it?... I think… we need to understand*
>
> *that. It helps you to do the job. Because I think (Education Queensland's)*
>
> *intentions are right (but) if you don't understand ..We tend to get a little bit*
>
> *frustrated….I feel as though you've got to go fishing a little bit for what's*
>
> *driving this. (p. 11,12: i. 3).*

Betty also returned to the issue of student negotiation. Between July and September, Betty had been informed by Teacher Generated Task trainers that the task she was writing was not to be changed once her critical friend had provided feedback and the task had been authorised for classroom use. This dilemma continued to rankle Betty. She worried that the title 'teacher generated task' focused too much on the teacher.

> *I've got a problem with the name of it. 'Teacher generated task'. And I've*
>
> *said this to (the leaders) too. I said, 'Look. I come from a background of child*
>
> *centred approach. (p. 21:i. 3)*

Throughout the rest of this research project Betty continued to wait for further assessment reforms and she watched for the new assessment framework (QCAR) (p. 4: i. 3). She again mentioned the complexity of 'new terminology' and 'new concepts' (p. 4: i. 3) embedded in Education Queensland's assessment reform.

Despite all these dilemmas, Betty maintained an overall positive stance. She said, 'I am really glad I went through the process (of participating in Teacher Generated

Task Training). It was really worthwhile' (p. 7: i. 3). Betty was a keen collaborator back at her school site as she worked with other teachers to produce her quality Teacher Generated Task and criteria sheet. This enhanced her already positive attitude towards her school and her peers. She spoke about the level of support supplied by her school and she noted the importance of her peers.

> *The school supports me in that…I can go to (other trained teachers and leaders) and get support …I've been running it (her Teacher Generated Assessment Task) by them…getting with them and sharing it with them…we're helping each other…Having someone else and (having) those professional conversations are really helpful' (p. 9,10: i. 3)…She (the curriculum leader) REALLY supported us through that process. Yeah! That's made a BIG difference. (p. 10: i. 3).*

5.2.7   *Personal Reflections and Realistic Understandings*

Betty was becoming increasingly aware of the magnitude of the shift in her use of assessment between March and the end of September. She was able to describe her transformation with considerable clarity. Whilst the student reflection journal was still a significant tool, her chief purpose for assessment now focussed on the process of 'how to learn' and the development of students' 'self questioning' techniques.

> *But what I HAVE learnt is …how little self-assessment I was giving the children… What I thought was sufficient for the children to understand about the learning was nowhere near enough. And now I've got a whole range (of assessment strategies) not just little reporting ideas. A whole range of strategies I'm using to get children involved and explicitly aware of their learning and having control and analysing their learning… 'What can I do? What can't I do? How do I learn? How don't I learn?' So that's… I feel as though I've really moved off far better than I expected to (p, 1,2: i. 3).*

In September Betty expressed her ongoing enthusiasm and commitment to her new learning. She was keen to continue implementing her array of new and refined assessment strategies and practices. She would have no more 'secret teachers stuff' (p. 20: i. 3). Betty collected her assessment resources and readings in a Professional Learning Folder that she shared at the Focus Group.

*And I'm very excited about it and I think it's very much an ongoing process.
Which I'm looking to getting into again next year with a new class and
getting that.. that up and running. So. Yes. I think I've come to a different
outcome (through participation in this research project) but probably a
Deeper, richer one than I expected (p. 2: i. 3)*

*My goal through all this now is to get the children (involved) …(shows cover
of her personal learning folder) I've put my new mantra on here (indicates
cover) - 'Keep them in the picture'. (To) keep the children involved in every
stage of the assessment. So it's a **total** flip. Now it's totally their business and
I'm involved with it and directing it and facilitating that (p. 12: FG).*

Whilst Betty was working and discovering the importance of peer and self-
assessment for herself, she did not share many of these discoveries with her peers.
She explained, 'I haven't shared a lot of this experience to be honest…I've put all
these ideas together…I'd like to try them in my room first and see how I am going'
(p. 12: i. 2) She also noted that she had 'a little bit of a share with a few teachers'
during the systemic 'Assessment Workshop Three' and 'little bits' in 'incidental
conversations and that sort of thing' . However, in both Interview Two and Three
Betty commented that sharing her ideas is 'probably something I need to think about
doing,' (p. 12: i. 2) noting that, 'I want to. I want to share it' (p10:i3). At the end of
the data collection period, Betty reflected upon her selected focus upon peer and self-
assessment.

*I've had other professional development. Gone off and learnt how to do that.
And I've gone off to a multi-age conference. Or I've gone and done a reading
on this. But to have one area (peer and self assessment) that you're saying
'This is the area I want to improve on'. How all these (supports) fed into that
then… that is probably the most beneficial. (p. 13: i. 3)*

Betty also explained the breadth and depth of the changes she made. She summed up
her new views about assessment that included her understanding of both formative
and summative assessment. She explained the elements that assisted her movement
towards greater student engagement.

And now I've got a whole range of strategies.. not just little reporting ideas. I'm using (these) to get children involved and explicitly aware of their learning and having control and analysing their learning. (They) say, 'What can I do? What can't I do? How do I learn? How don't I learn?' So I feel as though I've really moved off far better than I expected to… I think I've come to a different outcome, but probably a deeper, richer one than I expected (p. 2: i. 3).

I had professional development. Professional readings. And then I (knew) I was meeting with you….Sitting and reflecting. And THAT is where the real growth comes - because we are busy teachers, we tend to keep running around doing, doing, doing, working, working, working madly teaching and being wonderful teachers. But really stopping. And looking back. Applying what I've learnt. What I've heard. How do I want to change it (assessment practices)? You know. That reflection time. I've learnt that's REALLY important. (p. 3: i. 3)

For Betty, the central focus continued to be her students.

*I **really** feel as though I've had growth. Assessment (is)…not just going to help one subject or one group of children. I think it's going to improve my teaching practices... my student learning…and (all will) generally be greatly improved. That's what I'm hoping for. …(By) doing this the children's motivation is going to be heightened and hopefully it'll demonstrate the (students') ability to know themselves as learners. They're the great gains, I feel, from doing this. That's why I am pretty motivated by it. And I think it's been a REALLY worthwhile process. p. 13: i. 3*

Figure 5.1 below presents a summary of the changes Betty had made to her assessment over the period of this research project.

Existing Assessment Practices (March 2005)	Planned Assessment Practices	New Assessment Practices (October 2005)
At the beginning Betty:	Betty planned to:	Nine months later, Betty:

1. used students' portfolios to provide data for their report cards.
2. allowed students to select work samples for their portfolios
3. already practiced peer assessment when assessing oral language
4. only collected data for the school report card. Limited student involvement acknowledged
	5. explore and implement 3-way reporting involving teacher, carers and student.
	6. develop peer assessment practices
	7. develop self-assessment practices
		1. established a Student Reflection Journal so students could:
		   a. reflect upon their learning
		   b. summarise their learning (SELF ASSESSMENT)
		2. developed Oral Reflection and self-questioning strategies (SELF-ASSESSMENT)
		3. developed student Negotiation (Collaboratively Designing Success Criteria) (PEER ASSESSMENT)
		4. developed student negotiation (refining Peer Assessment using success criteria) (PEER ASSESSMENT)
		5. conducted focused observation and provided comments that emphasise learning
		6. started lessons with WALT (We Are Learning To) and recording what an HA looks like
		7. trialled student-designed tests
		8. developed a Professional Learning Folder to collect readings and professional development handouts (*'Keep them in the Picture'* was the title on the cover)

Figure 5.1   Summary of Betty's assessment reforms

In brief, Betty moved from viewing assessment through a purely summative lens to a teacher who adopted an array of formative assessment practices. These practices ensured students had a much greater understanding of their own learning progress.

5.3   JOAN

5.3.1   *Introducing Joan*

In 2005 Joan celebrated becoming a senior teacher. She is a teacher who had been teaching for ten years and was recognised as an active contributor to school life. She is very involved in school activities and had been recognised as an environmental leader. Joan completed her education degree as a mature age student at a regional university. Joan was appointed to a nearby school where she taught for ten years. In 2005, Joan had a single year seven class in a room designed as a 'double' teaching space. Her class of twenty students included students with diverse social and learning needs. Joan commented that her students 'love doing real life things' (p. 10: i. 1).

5.3.2   *Reform Goals*

Joan quickly volunteered to participate in this research project and she settled on two goals. One goal was to refine and develop her understanding of quality tasks and the

second was to improve her ability to produce an accompanying criteria sheet. The task and criteria sheets she developed were to be added to her school's bank of assessment tools. During 2004, Joan completed all three of Education Queensland's assessment workshops. As a keen innovator, she had already begun experimenting and making some assessment changes. She endeavoured to capture her mixed experiences as she commenced on her assessment reform journey. Her overall enthusiasm about being a reform participant was evident.

> *I am feeling really excited by it (new assessment ideas)… I think it's making me think more about why I'm teaching and…it's giving me more of a lifelike thing…you are starting to think about getting things that the kids really like…something that is valuable to them…you are starting (planning) from that other end…OK I've got to think about the assessment. I'm thinking about the criteria. And then it's just growing into all these great and fabulous ideas and the kids are being really involved. And it's exciting and it's fun. And the kids love it (p. 9: i. 1).*

5.3.3 *Early Assessment Views and Practices*

For Joan, the links between planning and assessing were strong. She noted early in our conversations that she felt confident when planning trans-disciplinary outcomes-based units that aligned with syllabi. This confidence evaporated as she discussed assessment. She stated bluntly, 'What I have trouble with is the assessment' (p. 1: i. 1). However, she spoke positively about her ability to create quality assessment tasks and highlighted the importance of her personal quality of creativity.

> *(I am) happy that the tasks are meeting the intent (of the outcomes based syllabi) …I am happy with that and I feel that there's a variety' (p. 1: i. 1)*

> *To do a task sheet is creative. I can be creative… I can do (create) the task sheet… I get the task sheet and I can relate it to the outcome or the intent' (p. 6: i. 1)*

Joan had adopted a flexible approach to planning so as to include students' questions and ideas where possible. Hence, the timing of assessment during the unit was not pre-planned. Yet Joan had been able to devise interesting tasks for students that reflected this responsive approach. She explained what responsive practices were by

stating 'when you start a unit and plan it and then you get into it (and) something happens and you just steer a bit here' (p. 2: i. 1).

Joan's current student data collection relied upon a numeric recording system. She carefully marked student work and recorded significant student achievement data in a whole-of-class mark book. She explained, 'you teach something and then you assess it and you get 10 out of 10 or 9 or whatever' (p. 9: i. 1). For Joan, the initial emphasis appeared to be upon collecting information about her students' expanding knowledge. And yet Joan was also able to reflect in a powerful way about the difference between 'knowing' and 'understanding'. She clarified this difference by sharing a personal story associated with her university training. She explained the revelation she had had in a Maths lecture when she realised that she 'actually understood it' whereas before she 'knew the answer' because she had 'memorised it, way back when' (p. 9: i. 1). In addition, Joan had recently begun experimenting with differing modes of assessment, but her experimentation had created uncertainty about her current assessment practices. She questioned rhetorically, ' 'Does it matter if the science (assessment) is only oral? Or does it have to be written? I need to know. I struggle with all of that' (p. 8: i. 1).

5.3.4   *Concerns, Issues and Dilemmas*

Joan expressed her concerns about a number of issues and tensions. She explained that she had problems creating the task criteria sheets. From the beginning, she appeared very hesitant and uncertain about the content and the processes associated with their development.

5.3.4.1   *The Language of Assessment and Time Management*

Joan was keen to produce quality documents and her early concerns were associated with how to begin (p. 4: i. 1) to develop criteria and the associated specificity of the language that was required.

> *You can't just have – like a broad statement? I don't know…Can you have a broad statement? Like a broad statement about what a really good task would look like…this is an average, this is 'not so good'. Or do you have to write specifically?' (p. 1: i. 1)*

The notion of pre-established standards was another dilemma for Joan as she struggled to create appropriate standard descriptors at the commencement of the unit.

> *I'm watching the children now as they are doing those tasks and I can, in my mind, say 'Yes. That person is achieving at above…This one (student) hasn't really got it at all. But when I went to write it… Before I can see it …I couldn't work out what I really needed. (p. 1: i. 1)*

At other times, Joan appeared to recognise that the tension she experienced was related to a more philosophical and internal struggle as well. This tension was related to the flexibility she had previously used effectively to respond to students' interests. Now it appeared to Joan that the end-point of her unit would be fixed. With the creation of tasks and criteria sheets, Joan was confronted by the idea of recording the essence and quality of what was required at the end of her unit right at the start and this clearly limited her previous flexibility. However, Joan was prepared to accept what appeared as a limitation for her and attempt to make task-based assessment a success for her students. She reflected, 'now when I am planning I am looking at this end over here and I am saying 'OK. I've got to think about the assessment. I'm thinking about the criteria' (p. 9: i. 1).

Timing and time management were becoming critical dilemmas for Joan. She explained that she had a new class at the beginning of the year and each new term she was working with new syllabi content. Therefore the preparation of a quality task sheet took 'a couple of weeks'. She said 'I (had) in my mind where I was going and I knew what my culminating activity was and then I had to do my task sheet for the students' (p. 2,3: i. 1). This led to additional, personal pressure because the term had commenced and yet Joan was still attempting to create assessment tools that had been required at the start of term.

> *We are really struggling to get through it…(the children) needed to be able to be given a fair chance to achieve as high as the can (therefore) they need to be given that task sheet and criteria sheet the very first day of term (p. 2,3: i. 1).*

5.3.4.2   *Practical Difficulties*

A series of practical, classroom issues began to emerge. Joan recognised that there were key concepts associated with Education Queensland's assessment reform that she needed to implement. Yet this recognition contributed to hesitancy about how to initiate and manage these elements. One that caused angst for Joan was the notion of deep understanding and its linkage to assessment and pedagogic practice. She returned to this issue throughout our first conversation.

> *How do you assess a 'Deep understanding' (p. 5: i. 1)*

> *It was hard for me to tell what deep understandings are… and I still struggle with that…I don't know where that goes. (p. 10: i. 1)*

Joan also recognised the need to link deep understanding to particular Key Learning Area domains. Joan found this to be complicated, confusing and difficult (p. 6: i. 1). She explained she intended to assess science outcomes. Instead, she realised she had created an assessment task and 'all of a sudden all I have done is assess the language. I (hadn't) assessed the science outcome' (p. 5: i. 1). Joan commented in frustrated tones.

> *And then I got confused…What if they don't get the generic structure (of a brochure) but they have some (scientific) information. It just got bigger than Ben Hur (p. 7: i. 1)!*

Joan's struggle to develop formative assessment practices was also highlighted as she compared new expectations with her existing, numeric processes for collecting student data. She explored this philosophic issue of assigning numeric values to assessment tasks. She also returned to ponder the relationship between deep understanding and numeric assessment practices. 'You can't assess deep understanding. It's not tangible. Like if they get it right. That's tangible. It's there. They've got 10 out of 10' (p. 6: i. 1). Joan's search for deep understanding was a struggle, but not an insurmountable one, 'we do need to …get a deep understanding of things so that we can then build on it. And I see that's shifting…(p. 9: i. 1).

However, Joan's difficulties with assessing students' deep understanding in different content areas created other dilemmas in the classroom as she endeavoured to formatively assess students. She queried the understanding of individual students

when group work was in progress. Whilst observing a group of students who were 'all working busily', she wondered if a 'particular child in that group…(had) got understanding' (p. 5: i. 1)? Joan also pondered the link between 'hands-on (practical) tasks' and understanding as well as 'levels of enthusiasm' and understanding.

(if students) do three experiments…three lovely experiments and you have them nicely produced. How do I get to know whether they really know why they're doing that?......That worries me. All the time' (p. 5: i. 1).

And a student who's very enthusiastic…does that student have that (understanding)? And then I worried that my tasks didn't draw out that deep understanding and then I was getting myself so bogged down. (p. 6: i. 1).

Joan was able to acknowledge quite early in the journey, that, despite significant challenges, she had already made substantial changes.

To be honest I think from when I started (teaching), my whole idea of assessment has completely changed…I assessed to see what the kids knew…But I don't think I ever assessed as part of my planning…And I think the whole thing now is…making me focus on why I'm planning. (p. 8,9: i. 1)

Joan recognised that these assessment changes she was undertaking were considerable. 'It's bigger than Ben Hur at the moment to me and I find I'm struggling with that' (p. 9: i. 1).

Joan explained that she sought support from fellow professionals. She consulted with a teacher with whom she had previously worked and on a number of occasions she also visited me in my role as the school's curriculum leader. And yet Joan noted that, in spite of her dilemmas, her students demonstrated a positive attitude towards learning. As they set up a display to report about litter to the 'whole of school' assembly she observed:

They just went, 'This is the best day we've had this term Ms P.' They didn't see it as…hard work. They were all involved….There's not all the notes…in (their unit) book. But the information they've got is fantastic. It was just…wonderful (p. 10: i. 1)

5.3.5   *Making Change Happen*

By June, Joan had dealt with a number of issues whilst other issues remained. She no longer considered task writing and criteria writing at the commencement of a unit as being 'brand new'' (p. 2: i. 1).

5.3.5.1   *Change Catalysts*

Joan had become an active participant in a local Science Network that was developing an innovative middle schooling project. As part of this project, Joan accepted a day's classroom release to plan a trans-disciplinary unit that featured science. Her class unit plan for term two grew from an existing Year 8 science unit. The local high school Head of Department supported Joan by offering advice about the unit, and providing use of the High School science laboratory, high school teachers and resources to support particular scientific experiments. This Science Network, and in particular the mentoring role of the Science Head of Department and the additional scientific resources in the High School laboratory, all acted as change catalysts for Joan.

During the unit, students were expected to complete a series of tasks that culminated in a showcase evening. Students conducted a series of experiments that featured chemistry, physics and biology. This was designed to provide students with an overview of three significant fields of science. Then students selected a field of science they found particularly interesting and an eminent scientist from that field. They prepared a biography and a display that highlighted the life and contribution of the eminent scientist to his or her particular field of science. For the showcase evening, students came in role as their selected eminent scientist and stayed in that role for the whole evening. Parents and members of the community including Science Network members were invited to attend the showcase called, *The Night of the Notables*. Each student-scientist had an individual display that included his/her (auto) biography, an experiment from their field of science, and a set of ten questions anyone from the public could ask.

From the beginning of the term the students were aware of this culminating activity. Joan was very positive about the task sheet she had created. She explained the impact this had for both her and her students.

I did a sheet for the children. And it actually said what they would do. And I found this really helpful. 'Cause the kids seemed to work. They knew what they were working on and that worked well. It also let me think about what I was looking for right from the beginning…It made me think about what I was doing and why I was doing it. (p. 1: i. 2)

Joan reflected upon the difference this detailed task sheet had made to her classroom practice and to the students in the classroom. She recognised the benefits of a clearly written task for students who may not be the most intellectually able. She commented upon the improved performance of one student. Joan explained a student, D, 'did very well for his level and he pushed himself beyond what he would do and he didn't realise he was doing that…He has lifted himself heaps' (p. 8,9: i. 1). Joan also recounted the benefits of her new task sheet for all her students including increased ownership and a greater clarity of purpose. Most rewarding of all for Joan was the level of motivation her students displayed.

I feel that they've got that ownership because they got this task sheet'… 'This way, by doing this (task sheet) I knew exactly (and so did they) what they had (to do). (p. 6: i. 2)

Oh! Look! I just feel so excited about it because I've never seen my best kids and the kids that don't want to be at school…ALL engaged! (p. 10: i. 2)

Joan was both excited and impressed by her students' demonstration of their learning. She spoke enthusiastically of their ability to stay 'in role' when parents and guests were present during their *Night of the Notables*. Due to the success of this evening, Joan invited all the other classes in the school to her classroom to view the displays and meet the 'scientists'. This occurred the following day. Her students subsequently demonstrated their ability to expand their role as scientists and to incorporate a teaching role as well.

When you watched them with their parents (on the culminating evening), they WERE scientists. They stayed in role (as their eminent scientist) which I thought was fantastic. Most did not go out of role the entire time. (p. 5,6: i. 2)

(When the classes visited) they weren't just the scientist. They were then explaining every science experiment that we had done. So I thought 'Now that's really good…I was very pleased with the results.' (p. 6: i. 2)

Joan showed me a note one of her students had written to her to thank her for the unit. The note read, 'Thank you very much (Teacher's name) for teaching me about science. I wasn't the best scientist around but now I think I am getting good' (p. 5: i. 2). Joan provided this note as an example of student ownership

5.3.5.2   *Ongoing Issues and Dilemmas*

However, Joan still had ongoing issues associated with the development of an accompanying criteria sheet. She had seen an exemplar at High School whilst she was working on her science unit but had rejected this as 'not enough' (p. 13: i. 2). Joan admitted, 'The actual criteria sheet. I didn't do that till right towards the end and that was a mistake.' (p. 2: i. 2) Although she retracted the idea of a mistake, she confessed that the language of criteria and standard descriptors remained a problem.

…in my heart I knew what I was looking for but when I went to write it down, I found it hard to write that down. (p. 2: i. 2) It's the words. What are the words I am looking for to say 'OK. That's really good. Cause in my mind I knew what I wanted to see for a good one... I was trying to put that down on paper. And I struggled with that. I struggled with that… (p. 2: i. 2) But when I went to write it down, I couldn't think of the right words that I felt covered it… that 'it would be good if someone just gave me those words.' (p. 3: i. 2)

In fact the criteria sheet was not completed until the final weeks of the term and this tempered Joan's observations about the unit she had just completed with her students. As an alternative to a written criteria sheet Joan spent time discussing expectations with her students. She also noted that particular students took careful notes for further clarification and reference. However, as she recounted each positive observation about her unit and her students, Joan had a 'criteria sheet' rejoinder. When considering 'ownership' she said, 'hopefully if I can get it (the criteria sheet) done properly I predict that the children will have even more ownership (of their work) in the next unit.' (p. 8: i. 2) When she spoke of being 'so excited' to have her

unit plan, she added 'Now…I've got the criteria sheet (to do) (p. 10: i. 2). When she referred to her enthusiastic student (J) who struggled with learning she said,

He probably could have done better had I had down exactly what I wanted to say. He would have grabbed hold of that. He so wanted to be part of being excellent…if I could do that (the criteria sheet) these kids will rise that bit further. (p. 9: i. 2)

Joan laughed nervously and said, 'It puts you under a lot of pressure to sort of keep trying to work it through, I suppose (p. 10: i. 2). She then made a prediction that by the next unit she would have both the task sheet and criteria sheet written at the commencement of the unit and 'I feel like the kids will be really out there. Doing their bit' (p. 11: i. 2)!

To take the place of a criteria sheet for the science unit, Joan invented her own complex tally sheet that she used to track students' performance. She explained this system in some detail and presented a copy of the document to me. Joan observed the students during their preparation for their culminating evening event. She questioned them 'in role', she listened to their explanations of the experiment they had selected to demonstrate 'on the night' as well as tallying the final number of experiments they completed. They also received 'a little tick for their costume…and for coming on the night' (p. 4: i. 2). At the conclusion of the explanation to me, Joan appeared to look at her recorded assessment with new eyes, 'But then you sit there and you think 'Oh! Well. Like it's all my flick and ticks… ' (p. 5: i. 2). She concluded her explanation by stating 'Yeah. I just need to get that criteria sheet. I just need to know how to word it. (p. 6: i. 2)

Despite nominating criteria sheets as the main on-going issue, Joan was also able to reflect upon how she was managing change. She explained that her personal strategy was 'to keep building on what I have done' (p. 15: i. 2). She suggested that it is important 'not to be scared to have a go…or find that it's going to be wrong' (p. 15: i. 2). Joan also suggested that 'you've got to have a few failures. Sometimes I think it has to go wrong a bit…and you focus in and think, 'now what…why did it go wrong.' (p. 16: i. 2) Then she noted:

you've got to keep working on it…I don't think I ever feel like I'm ever on top
of it… as I think its always, ever growing…every time you do it…you'll just
get that …one step further.' (p16:i2)

In addition, Joan commented about the past, stating that she 'never really
knew…WHY I am really doing it (assessment).' She recognised that her assessment
changes were part of a process suggesting that 'it's a work in progress, isn't it' (p.
15: i. 2)? She expressed her feelings at this point by commenting, 'I do feel more
confident with it (task-based assessment). And I think because it was so successful
with the kids, I think it makes you feel, 'Yes! It's working!'' (p. 15: i. 2)

5.3.6   *Consolidating Change*

In September, Joan reported further assessment changes she had made and the goals
she had achieved. She celebrated the completion of a satisfactory criteria sheet and
the subsequent focused conversations she had with her students.

This time (this term) I had the criteria sheet ready when we started the unit…
We looked at the criteria and we talked about what was going to be a good
one. I knew what the children had to do. I had their task sheet… For me…I
thought it was really powerful because I … I don't think I have started a unit
in week 1 on day 1. You know, straight into it… Yeah! That was really good…
I think the criteria sheet is good. (p. 1: i. 3)

I actually…did the criteria sheet. When I handed it out straight away, we
spent a lot of time talking about each different criteria and what that really
means… (p. 25: FG)

By distributing both the criteria sheet and the task sheet at the beginning of the term,
Joan recognised a number of benefits for her students. There was an impact upon the
quality of classroom conversation. She found that the specificity of language used to
create particular standards descriptors provided clear learning goals for students.

(last term) I didn't have those conversations with the kids. I had no one
coming to me. Whereas this time they got their task sheet and their criteria
sheet day 1….And then we've been having the conversation… They've
(particular students) come and said… Now Ms P…Does that mean I could

get a high achievement. And I said 'Well. If you do that, you'll get a high achievement. And they've said, 'Wow! I've never got a high achievement.' (p. 2,3: i. 3)

I found (the students) have been coming back to me – 'Now Ms…… Do we need to do this or would I need to add this?' ….That was kind of exciting, that discussion. (p. 25: FG)

These conversations provided scaffolding for all learners in the classroom as they focussed upon understanding their new culminating task. Joan recognised that she needed to reassess the perceptions she held about particular students.

I just have to get out of my mind…in the past when you have done a lot of testing…rarely do they move (improve)…I think I have got to get that out of my mind now and think. All right. This child could have a Deep understanding (of) this specific thing because they're particularly interested so therefore they could be a high achiever…not just boxing them in one little slot.(p. 7,8: i. 3)

Joan also indicated that using both a task sheet and accompanying criteria sheet would better prepare her students for high school because this type of assessment is prominent in high schools. Following a visit to the High School, Joan noticed that the teachers assumed that students were already utilising these tools to understand the 'set benchmarks'. By observing a number of students already at High School, Joan wondered if this assumption about students' assessment knowledge was, in fact, an accurate one. It certainly strengthened Joan's resolve. Her students' experience with task sheets and criteria sheets would support them 'when they get to high school and they get one (criteria sheet)' (p. 9: i. 3). She noted an added advantage. 'That's got to make the (transition from primary to High School) gap less' (p. 9: i. 3).

Joan recognised that several factors contributed to her achieving her goal of completing both the task and the criteria sheets in time for the start of the new term. She benefited from the examples she obtained and the process she used.

I had some examples. I found people who had criteria sheets. I talked to (curriculum leader) and a couple of other people just to find out…I had a

look at some others, I...used their wording but changed it to suit my unit. (p. 1, 2: i. 3)

Joan spoke highly of collegial support she received and the current supportive school climate. She mentioned professional development opportunities including hearing an international expert on assessment speak at a local university. With prompting, she mentioned the science network but her highest praise was reserved for her peers and the discussions in which they had engaged. Referring to particular fellow teachers she noted, 'We have that discussion going all the time' (p. 15: i. 3). Joan also mentioned that it was important that administrative personnel adopted a non-judgmental approach towards teaching staff during times of change.

The fact that administration don't expect you to be 100% right. I think it's the fact that they're supportive and there's a culture amongst the staff that's non-competitive. It's OK to say I don't understand. I still don't understand and I've done it 3 times and I've done it wrong again! (chuckle)...I think that whole feeling of 'have a go'...Like that open door. 'Come in any time and we'll work on it.' (p. 16: i. 3)

5.3.7   *Personal Reflections and Realistic Understandings*

On a more personal note Joan reflected upon the importance of 'practising it (creating assessment tasks and criteria sheets)' (p. 14: i. 3). She explained, 'The more often you do it, you've got to end up…a much better teacher…This is early days and I'm learning every time I go' (p. 8: i. 3). It was this same approach that Joan took when considering ongoing assessment change required by Education Queensland. She said, 'It's always going to be changing. I'm never going to get on top of it. Never…What I'm going to do is keep building'. (p. 30: FG)

However, Joan explained that she still encountered difficulties. She was able to elaborate upon the difficulties she continued to encounter. She found the mismatch between the exemplars she obtained and the school's report card disconcerting.

I found because my assessment is in 3 levels to suit our report card. This (exemplar) had 4. I think (this) is where I struggled…when I looked at the other sheets that I had. (p. 2: i. 3)

She noted that she still had 'awful trouble trying to write it (the standards descriptors on the criteria sheet)' (p. 1:i. 3). She still experienced difficulties when trying to capture words to represent her thinking. 'The thing that was in my mind…just getting the wording' (p. 1: i. 3). Joan was also frank as she identified a deeper issue associated with 'finding the words'.

> *I feel like that criteria… once you can get your head around the wording - you have (to say) exactly what you want to see before you've seen anything. And I think that's got to be better for me as the marker. I don't know…You wonder…sometimes you have a class (where the students may not reach the benchmark and) heaven forbid! We can't have NO high achievers!' (p. 4: i. 3)*

Joan explained that she was very uncertain about establishing expectations for 'grade appropriate' and for 'high achievement' without first seeing how her students would manage the tasks. The most deep-seated concern was that no student would be capable of achieving a high achievement.

> *I just kept thinking, when I'm writing it (standard descriptors) and comparing it to the others (exemplars) That 'grade appropriate' is where I thought my high achievers were…Well now! I really should write the 'high achievement' so I can get someone to do it…And then I'm looking…Wouldn't it be awful if I didn't have anyone getting high achievement. (chuckle) Then I thought, 'Oh! Well! I'm going to (write) it as they did it! (exemplars) (p. 4: i. 3)*

Joan also revealed that she had ongoing personal doubts associated with the kind of data she was collecting. She said, 'I'm still feeling a little bit nervous, insecure. The fact is, I haven't got the 25 questions and this person has got 22 out of 25' (p. 6: i. 3). The limited number of marks in her mark book also 'worried' her a bit'. However, Joan sought to reassure herself by stating 'I know that it's going to be working out better but it's just because I'm not used to it. I feel like I need to have all these test papers to say "Here, this is what this child is doing"' (p. 6,7: i. 3). She adds, 'I think I've got a bit of work to do. Because it's still a bit insecure. But I can see where it's much more beneficial' (p. 7: i. 3).

In fact, Joan acknowledged that developing task sheets and criteria sheets had impacted positively on her philosophical approach and her relationship with her students.

It's turned me completely around. (It) makes me more focused on what I want the kids to learn. I think the kids themselves are more motivated… I don't know whether that's because I'm more enthusiastic…This has got them motivated about their assessment….I just feel like that turned it around….Its made me more focused on their learning rather than a theme. (p. 5, 6: i. 3)

I think assessment it's probably what drives your unit. Whereas…I don't think assessment ever drove my unit in the past. I think I just assessed because I thought I had to. I think my whole thinking has changed. I feel assessment is exciting. (p. 16, 17: i. 3)

Joan summed up the magnitude of her assessment changes between March and September by saying, 'I think I've come a long way in a short time.' (p. 15: i. 3). 'I'm teaching for a real purpose.' (p. 26: FG)

Figure 5.2 presents a summary of the changes Joan had made to her assessment over the period of this research project.

Existing Assessment Practices (March 2005)	Planned Assessment Practices	New Assessment Practices (October 2005)
At the beginning Joan:	Joan planned to:	Nine months later, Joan:
8. used a numeric marking system to record student progress	1. develop quality task sheets ready at the commencement of term	9. develop an effective task sheet for Term 2, 2005. Developed an effective task sheet for Term 2, 2005 (QUALITY TASK SHEET)
9. conducted tests to check students' knowledge	2. write an accompanying criteria sheet with standards descriptors ready at the commencement of term	10. Developed a criteria sheet to accompany the task sheet by the end of Term 2, 2005. Developed an accompanying criteria sheet ready for the commencement of Term 3, 2005 (ACCOMPANYING CRITERIA SHEET):
10. referred to marking procedures where the best student's work was selected as the benchmark for excellence		11. Shared students' learning with parents and peers at a culminating evening
11. already had begun to develop task sheets that focused on 'real life' and 'life-like' learning		12. developed real-life scenarios as components of the assessment task
12. already had begun to develop a criteria sheet with helpful standard descriptors.		13. relocated significant learning experiences to the local High School to utilise additional scientific resources and facilities.

Figure 5.2 Summary of Joan's assessment reforms

In brief, Joan had moved from a numeric marking system to a teacher who developed skills writing quality assessment tasks and producing an accompanying criteria sheet at the commencement of a unit of work. Utilising existing resources in an innovative way and watching student engagement were highlights for Joan.

5.4   NAOMI

5.4.1   *Introducing Naomi*

Naomi has been at the same school for 12 years since graduating as a primary school teacher. She chose a teaching career as a mature age person and explained her determination to become a teacher. 'You don't travel to Uni every day for three years… to get your (teaching) degree and then not be enthusiastic and motivated to get 'in there' and have a go' (p. 8: i. 2). Naomi recognised she demonstrated other personal attributes necessary to be successful, namely being an innovative teacher who particularly valued creativity.

> *I'm motivated and creative and I don't mind a challenge. So I am quite happy to have a go at these things. (p. 1: i. 1)*
>
> *I am a very creative person and these tasks just suit me down to the ground. I am a task person… That creative streak in me is being fed by these activities. (p.14:i1)*

Whilst teaching brought satisfaction to Naomi, students were her chief focus. She valued their input and encouraged them to be positive risk-takers.

> *(I) enjoy teaching and (am) personally motivated to provide interesting content so students have the opportunity to reach their potential. (Questionnaire 21.03.05).*

5.4.2   *Reform Goals*

Naomi considered several goals for this project. At first she wanted to link the project goals to particular syllabi. As we negotiated different possibilities, Naomi warmed to the idea of task-based assessment. From her point of view, writing assessment tasks would develop her understanding at 'another level' (p. 13: i. 3) and synthesise her existing knowledge and practices.

Over this time I've been (gathering) building blocks. And I have these (building blocks) in place. It just has to be pulled together. (p. 16: i. 1).

Naomi appeared more uncertain about developing accompanying criteria sheets. She needed to know that essential aspects of literacy and numeracy were also being addressed.

…(when you develop) a broad criteria sheet - I guess this is my feelings coming in here…and my concerns are… how do you know that you have addressed those underlying core things like the reading the writing and the arithmetic?…(p. 1: i. 1).

I still think you have to do skills-based learning anyway. I …mean do it and see how that (new practice) fits in (p. 13: i. 1).

She wondered out loud about having standard descriptors 'pre-written'.

…(it) might be a bit easier (to pre-write standards descriptors)… If you had those key (words) in there. You would highlight them (referring to a place on the criteria sheet where you could write standard descriptors instead of making notes) ..This leads to highlighting more than ...writing. (p. 14: i. 1)

Another goal for Naomi was changing her record-keeping. She stated, 'I think what will be new, is the way I record the assessment. At the moment it's the markbook (p. 14: i. 1)' Instead, she recognised the value of tracking 'students as learners to measure success' (p. 1: i. 1). Naomi explained she did not want 'a closed view' of assessment and learning. She explained carefully that assessment change was a process for her.

What will be changed is - I will be able to assess a child in a broader view. I will be able to see certain things - like I mean - we are getting there at the moment. (p. 13: i. 1)

5.4.3   *Early Assessment Views and Practices*

In March, it became clear that Naomi's view of assessment was inextricably linked to the implementation of the outcomes based syllabi at her school site. She explained the basis for this understanding in her questionnaire: 'Education Queensland is aiming for an outcome-based assessment approach' (questionnaire 21.03.05). Naomi

acknowledged that the process of syllabi implementation at her school site was complex. She was also mindful that eventually there may be a link between outcomes-based syllabi and her school's reporting process.

We've been so bogged down with Science Outcomes and SOSE outcomes and HPE outcomes and then we wrote separate units for the SOSE and separate units for the science .. Now we are finding you can't teach 25 units in a year. You have to get a unit with a task…that addresses many outcomes - because otherwise we are not getting there. And that is the key issue I think. How to get there. You know, how to get there. It's a long road' (p. 2: i. 1).

We are eventually going to have a report card that says outcomes. So you need to immerse yourself in them (the outcomes). At least a little bit. (p. 7: i. 1).

Naomi used other metaphors to help me understand current gaps in her curriculum and assessment knowledge. She said, 'it's not a picture. It's not whole' (p. 1: i. 1). Later she referred to hessian and linen. 'You might have lots of holes and have (it rough) like hessian. (Rather) than linen (p. 7,8: i. 1). She referred to the 'yet to be released' English syllabus and her lack of knowledge about its content. 'I'm like a sponge that's yet to be filled' (p. 9: i. 1), she explained and she expressed surprise at the writing style of the most recent, new Mathematics syllabus.

I was amazed. They have one outcome that you have to address. My goodness! One outcome! That's all I have to address! (p. 9: i. 1)

Naomi took her responsibilities seriously when implementing the new outcomes-based syllabi. She called it the 'content challenge' (p. 6: i. 1). She spoke of 'gazillions' of outcomes. For Naomi, management of a large number of outcomes created the dual problems of coverage and how to manage assessment.

Here, my big issue with the outcomes is.. You've got (a) written test that gives you (information about) an outcome. (I know) it's not the best way (p. 2: i. 1).

I need to know I am covering everything with my conscience. (p. 3: i. 1).

Naomi had already begun exploring pedagogic options to assist her to manage these difficulties. However, instead of solving her problems, Naomi found that she had

created further professional dilemmas associated with making on-balance judgments, and assessing group work and practical tasks.

> *And then, the outcomes are very broad – and if you don't cover all of (it), what bit have you covered? Can you cover just a bit?...And is it balanced?.. If I say to you that John can do outcome such and such, is it a balanced view?...Like – Is it balanced?... 'You (assess) a hands-on activity and start orally doing something - as soon as one person has got it, 10 have got it. So how do you assess who knows it and who doesn't?...I've tried this... I find that 'hands-on' very difficult (p. 2,3: i. 1)...*

> *At the end of the day....teach the kids the hands-on style and assess it with a bit of written work and do the best you can. That's what I find is the balance in that (p. 3: i. 1)*

Even as we talked, Naomi appeared to be thinking aloud, considering the relationship between outcomes and tasks. She spoke of 'pulling it (outcomes and assessment) together' (p. 7: i. 1). She spoke in an animated and enquiring manner as she considered linkages. 'It'd be task driven but outcome informed…wouldn't it? Would that be it (p. 15: i. 1)? But the dilemma of linking tasks and outcomes was complex. Naomi became more uncertain almost straight away. '(then) the Outcomes will no longer be your major focus…I can see I will get better at it and I'll see the links (between the tasks and) the outcomes there (p. 16: i. 1).

There was also the issue of Naomi's existing and very popular assessment practices. She enthusiastically referred to her students' responses as she showed me an assessment matrix. As well as creating new tasks, Naomi was keen to continue to develop and use these pre-existing tasks as well.

> *Love it. They love it. See when I do…this one here (reference to task)... We actually call this 'our 100 points' and the children aim to achieve 100 points and then they get to McDonalds for breakfast because they have earned 100 points. (p. 17: i. 1)*

5.4.4   *Concerns, Issues and Dilemmas*

Early in the study Naomi indicated that resourcing, professional development and working with peers were important issues for her.

5.4.4.1   *Concerns about resources*

When I inquired about current impediments of reform, Naomi explained the resourcing issues at her school. She struggled with using aging maths and reading books. She spoke about 'gaps' and 'holes'. Her expectation was that appropriate funding was a government issue as well as an issue for her school. For Naomi, resources and pedagogy were closely related. She spoke highly of contemporary resources and the impact they had had on her classroom practice.

> *I need to know I am going modern with the outcomes…We are using antiquated books to do modern work.' (p. 3: i. 1)…'Resourcing and of course budgeting – It's huge isn't it? Some year levels are really well resourced and (then) the money ran out. It seems to be our area that is not as well resourced'…The school has to address it to a degree. But I think also if the government wants these things in place - they should also provide the bucket of money…If you don't have the resources, then you can't teach the new 'you beaut' way. You go back to the old way (as) you pull bits and pieces from (old resources). (p. 4: i. 1).*

5.4.4.2   *Professional Growth*

Keeping informed about reform and innovation was important for Naomi. She saw this research project as one way to keep abreast. This was, in part, because she felt that 'teachers are the last in line to get information but the first to have to make (systemic) changes'. (questionnaire:21.03.05). Attending seminars and conferences was another avenue that enabled teachers to stay informed. Naomi was always keen to volunteer to attend these opportunities. She explained, 'I think that shows your personal enthusiasm' (p. 12: i. 1). An essential part of the learning process for Naomi was implementing and practicing new knowledge back at her school site.

> *If you haven't done what the seminar has shown you, then you've not learnt from it… (p. 2: i. 1) See what I say…Don't use it, you loose it. (p. 11: i. 1)*

Naomi attended professional development events locally and in other regional cities. At times Naomi found the new knowledge presented at these events was difficult to comprehend. When I explained that her school would soon be attending an Education Queensland assessment workshop that I was conducting, Naomi confirmed she had already attended this workshop. However, she appreciated the opportunity to attend again.

> *And that probably is good for me. Because you have heard it the first time and the second time it will start to maybe make more sense because I have made more inroads into this planning…It'll probably make a little bit more sense in that situation as well (p. 12: i. 1).*

Naomi also sought new knowledge from other people. She worried that currently 'there's no one to feed off' (p. 6: i. 1) and share ideas with her. She described how much she had appreciated the practical work we had undertaken together when I was invited to work at her school as an education adviser. As we talked, Naomi expressed her hopes for our collaboration on this new project.

> *I have got you as my outlet now. Do you know what I mean? I have got someone who's going to feed me a little bit. I am not on my own now because you can see where I have been and you've taken part of the journey with me, having been with me at the other workshops as well. So you know the sort of person that I am. (p. 12: i. 1)*

> *We did that lovely work with you and then it stopped. And if someone individually grabbed a hold of it when you are there, well then (we) were fine. But if (we) didn't grab a hold of it… (we) just went back to the old process - then (we) lost a little bit of (our) momentum (p. 16: i. 1).*

5.4.4.3   *Working with peers*

Naomi was keen to locate like-minded peers at her school site. She expressed disappointment at her inability to make these connections. She called this 'the people challenge' (p. 6: i. 1). Naomi expressed frustration that she was unable to influence others in a positive way to enact curriculum change. She spoke in a wistful tone: 'Like (my) job? Love (my) job. …Can't make a difference' (p. 7: i. 1). And yet Naomi had responsibilities at her school site and she explained that she was a

member of the curriculum team with the task 'to get this (syllabi implementation) up and running' (p. 5: i. 1). She spoke of the difficulties of working cohesively as a team and the impact this had on her ability to share her skills and knowledge.

I've got my strong personality…You've got these people that have their strong personalities and they are on the curriculum team…You're not the guru you could be. Because people don't allow you to be that guru. (p. 8: i. 1).

Naomi felt that her new knowledge had isolated her from other staff members. She was also unable to clarify her own attempts to introduce new innovations.

When there is no one else on board with you it's very difficult to know if you are on the right track or not' (p1:i1). 'Sometimes I feel in a way… a bit before my time. You know. You know how some people are before their time (laughs). (p. 8: i. 1).

Naomi expressed a range of feelings towards her peers. She began by empathetically recognising the impact change had had upon others as well as herself. She began by speaking in third person, but, by the next sentence she began to use first person as she spoke about her own, overwhelming feelings associated with change. She conceded that some teachers may feel threatened by change because change challenged their existing practices.

The teachers almost don't value this assessment because you know like every time you start something, something new comes along. And it's almost like…well what's the point of learning this. Because the minute that I get a hold of this it's going to change to that…A lot of the comment is 'what is wrong with the way I do it already?' (p. 1: i. 1)

At another point Naomi was frustrated and disdainful. She suggested that a few teachers 'probably don't even know what the outcomes are' (p. 4: i. 1). Other teachers had actively resisted change. Naomi identified these teachers by their unwillingness to attend pre-arranged official meetings. Naomi's disappointed and bewildered response was, 'you just think there is no point' (p. 6: i. 1). Finally, Naomi acknowledged that amongst her peers on a large staff there was a continuum of attitudes towards reform. She conceded that a few staff members were making a

real effort to implement reforms associated with the new syllabi but others required an extended time frame to do so.

> *I guess I shouldn't be (judgmental). It just takes a longer time to get some people 'on board' there.' (p. 9: i. 1) 'She is good' …(another) is 'sort of starting to come on board' and another is 'slowly coming there. (p. 12: i. 1)*

Naomi also longed for leadership that would insist on change for everyone. She spoke positively about the new position of curriculum leader at her school. Yet, she reflected upon a previous era at her school where expertise lay with the administration team. Naomi compared this with her present circumstance.

> *I don't think the focus has been strong enough yet. You know the focus on outcome- based education. I don't think it has been owned from the top to the bottom. (p. 4: i. 1).*

> *There is no way now that we've got that feeding from the top down' (p. 6: i. 1).*

Being innovative at a site where many others did not appear to value the same innovations was hard for Naomi. She commented, 'I don't actually challenge the system. I don't overly rebel' (p. 7: i. 1). However, Naomi did not give up. She identified newly graduated staff members, University practicum students and others beyond her school as like-minded peers because these people were keen to discuss new ideas. Naomi explained they were 'the only resourcing I can get'. (p. 6: i. 1) These people provided Naomi with excellent opportunities for professional growth and conversation. Naomi commented on her collaboration with a much younger teacher.

> *I feel she is very much like me…We could pretty much could feed off each other. She is creative. She's interesting. She's exciting. She wants the best for the kids. She's got the kids at heart. And (she) likes things to flow… We found that we balanced off each other which was a good thing. (p. 5: i. 1)*

5.4.5   *Making Change Happen*

In June, Naomi confirmed that she had made changes to her classroom assessment
practices. She used emotional language to describe what had happened. She
exclaimed, 'It's exciting but it's scary. And it's challenging' (p. 1: i. 2).

5.4.5.1   *Change Catalysts*

Participating in Professional Development and the need to practice were key
catalysts for Naomi. Her impetus for the change was enhanced when she attended
Assessment Immersion Training. This four-day program was offered locally for
school curriculum leaders in the district. This training incorporated Teacher
Generated Task training as well as additional components to develop leadership
skills. Naomi was her school's representative at this training. This event had a
significant impact on how Naomi approached classroom assessment changes. It was
an intense four days. Naomi commented that she found by the end it was 'too much'
(p. 11: i. 2).

> *I've put so much in here (indicated her brain). Please just let me go away an'*
> *shake (it) down in…Hang on. I haven't used what I've got to know. What I*
> *want next…I know I need that criteria sheet. (p. 11: i. 2).*

Naomi described in detail her new knowledge about outcomes based syllabi. She
now 'knew how to read the syllabi' (p. 2: i. 2) and she 'knew curriculum intent' (p.
2: i. 2). For her this meant 'looking at the outcomes a little bit deeper than I did
before' (p. 2: i. 2) and gaining greater control. Naomi developed two subsequent
strategies when trialling her new knowledge associated with outcomes. She said,
'I've had to wipe out some outcomes that I've put in units of work…'(p. 2: i. 2)
Another strategy she used she called 'tethering'. Tethering meant that similar
outcomes were clustered to create a single task. Naomi returned to metaphors to
express her growing but 'not yet complete' understanding, 'I think it's a growth thing
for me…I'm not perfect at it'...'The light switch (is) going on. It's only half on, you
know' (p. 2: i. 2). However, she now recognised that her prior understanding about
outcomes-based education had been quite limited. She commented on behalf of the
teachers at her school,

We've pushed and shoved those around (Key Learning Area Outcomes) but
we haven't understood them' (p2:i2). (The syllabi) came out in dribs and
drabs. We were shown '...a cut and paste'. But (that demonstrates) there is
not that full understanding (p. 2: i. 2)'

Assessment Immersion Training also featured the creation and development of assessment tasks. Here, Naomi recognised alignment with her previous practices because she had previously created assessment tasks. She explained that creating tasks as part of the Immersion Training 'addressed the creativity in me' (p. 2: i. 2). Later she returned to this theme. 'I find I am good at a task. That's not new to me. Cause I've been creative ever since I've first stepped into the classroom' (p. 9: i. 2).

Naomi again demonstrated her enthusiasm to practice her new knowledge. She described a recent task she trialled with her class in enthusiastic detail. The topic was Australian history. She brought samples of students' books for me to examine, and she pointed out the progress of an individual student who entered her class as 'illiterate'. Naomi spoke about a model that her students enjoyed creating. She excitedly exclaimed that 'it's come together REALLY well' (p. 4: i. 2) and 'it's quite splendiferous actually. It's looking really good' (p. 5: i. 2).

Naomi commented that this 'new' task was actually a modification of an existing task she had written. Then she asked me 'you know what's missing?' She reduced her voice tone, sighed and admitted 'I didn't have (an) assessment criteria sheet'. (p. 6: i. 2) She explained, '(I) sort of started doing this task orientation. I got so excited when I saw them mapping' (p. 6: i. 2)' and so she did not return to complete a criteria sheet to accompany the task. Naomi's infectious enthusiasm about her students and the unit tasks quickly returned. She reviewed this task using a tool she had received at Assessment Workshop Two (the 'place mat').

It (the place mat) was very powerful and quite enlightening... It (the unit
task) had credibility. It had cognitive and affective things. It was very
authentic and was very accessible to the kids.(p. 7: i. 2).

Naomi demonstrated that she had developed a new understanding about task-based assessment. She was able to explain new purposes for the task she created. She

agreed that 'when I write a unit, I will probably start with the task ' (p. 7: i. 2). She returned to address this new approach later in the same conversation.

> *The task now is my initial focus. The task in the past was my final focus…So now I know where I'm going (at the beginning)… THAT's what I have to teach. (That) is the Deeper understanding that the kids will need. And that's developmental. And you keep adding things in there thinking, 'Oh! they need to know that. And they need to know that.' (I write it down) because you don't always walk everything through in your brain. (p. 10: i. 2)*

Naomi's careful attention to detail and her enthusiasm for trialling what she had learnt at Immersion Training confirmed that professional development was particularly important for her. Naomi acknowledged that she was searching for professional enrichment rather than seeking promotion. She saw her age and inexperience as a barrier to promotion. For Naomi, being a leading innovator was what 'addressed the inner me' (p. 15: i. 2). It was her own initiative and open-mindedness that ensured she learned and practiced new knowledge. During the interview, when I asked Naomi to identify resources and supports, she nominated herself. She said, 'I suppose the best support I have had is myself. Because I'm motivated. And so I'm prepared to change. So that has been my best support' (p. 14: i. 2)'. As we continued, it became clear that Naomi welcomed new educational perspectives. She reflected upon the relationship between listening and practicing, saying, 'I'm a bit of a sponge. Give me something and I will absorb it. I'll go away and use it…I think that it's a good place to be (p. 15: i. 2).

> *I'm a need-to-know person. I need to be (an) informed person. So once I've got the information, I can use it. If I don't have it, I can't use it… I work from the known to the unknown. I take a risk. I write copious(ly). Books. Pieces of paper lying everywhere… (p. 14: i. 2).*

5.4.5.2   *Ongoing issues and dilemmas*

Naomi recognised that she still needed 'to work on a couple of things' (p. 9: i. 2). Designing criteria sheets and writing succinct standards descriptors still required attention. Naomi re-focussed upon this and she worked hard to align her assessment

knowledge about tasks and criteria sheets with all her classroom practices. She spoke of her success as well as noting dilemmas that needed further work.

I can develop a task. It can be a bit airy and a bit hairy. But I can do that. I can see the outcomes. I can see the Deep understandings. I can walk myself through that. But to write that criteria sheet…Whoa! (expels air as a sigh) That's the real…stumbling block. (p. 11: i. 2)

Naomi's new learning gained from attending Immersion Training had created other dilemmas too. She now appeared uncertain about making judgements about student learning. She acknowledged her existing practices but recognised she had 'a gap' as she tried to reconcile new learning with current practice.

I have to know… I mean I do know. I track the kids. I've got a checklist. And I know who's done what. And things like that. But as far as to the level of their ability; I don't have that now. And I know it's a gap now. Whereas before … it's an A… it's a B a C or something. I know now that's not satisfactory… you panic that you haven't got evidence… or you panic that you know you are not doing the thing…I can see that now probably. (p. 16: i. 2)

Her new knowledge also meant she reconsidered her approach to report card writing as well as a change in her teaching style.

*It's really hard writing my report cards. **Really** hard writing my report cards cause I had to change my words… I know something within me says 'No. That's not right…*

So… I think it's changing my teaching style a little bit too. And I think in a way it's bringing me up to enjoy the children… It's probably allowed me to access some of the children better…. I can still see something being done….So… it has liberated me a little bit… It's not as hard as it looked in the first place. It seemed like this huge big thing hanging over your head. (I think of it as if I) were addressing it to parents. How could you tell them? Now I think (I) can tell them. Now I think if you've got those criterion… written to the outcomes and this is what it looks like. I think that's pretty obvious. You know. It's just a matter of drafting them to be effective. And that will drive it. It's my missing link. (p. 16: i. 2)

This new knowledge created further distance between Naomi and her peers back at her school site. She spoke in wonder about the current order of things. She saw herself as 'the little underling in the classroom and I've got the training' (p. 8: i. 2). She now realised that her school would need to address the issue of trans-disciplinary units and assessment. Naomi worried that 'I know it's going to hurt some people's feelings' (p. 9: i. 2). Her response to this conundrum was to emphatically tell her school leaders that 'We need to do it (the Teacher Generated Task training)!' And Naomi acknowledged that her administrators listened.

> *Luckily the school has come on side for the Teacher Generated Task*
> *(training) and (are) sending two teachers (to up-coming training). (p. 8: i. 2).*

> *The issue (is)…number 1; I am the only person trained in the school…(I) am*
> *very isolated (p. 8: i. 2)… '(I've) been the thread and I've seen all of them*
> *(professional development opportunities). So that's been good for me*
> *personally. (p. 15: i. 2).*

5.4.6   *Consolidating Change*

By September, Naomi was very keen to share a wide range of planning and student exemplars she had assembled. She was enthusiastic and very keen to reveal demonstrations of her assessment successes. Naomi produced the documentation she created to arrive at a quality task. She outlined her most recent work with tasks and explained her personal modifications. She also showed me samples of student work 'coming from those TGT type tasks' (p. 8: i. 3). For Naomi, this affirmed her task writing skills.

> *I did a TGT task…But I realized then the task wasn't rich enough (sigh). So I*
> *changed it as I was going along. I haven't 'tracked' how we were told on that*
> *immersion day. You know, the outcome to Deeper understanding…BUT I feel*
> *I have made a reasonable impact on what I was doing. (p. 2: i. 3).*

As Naomi detailed the work she had undertaken during the past three months, it became clear that an important part of change was personalising the reform. Careful consideration of existing practices was part of this process. Over the years Naomi had developed a series of successful classroom activities that were also assessment tasks. These included the production of a newspaper, building of a 'giant Australia

map', a 'TV live show' and 'the games'. Naomi recognised these rich activities worked well. A feature for students was sharing their work with others (including parents). Naomi cited her 'Games event' as a rich activity that the students appreciated. She explained her idea of developing these successful activities into an assessment-based task. She said, 'our games will fit. With a bit of a shape and a shove' (p. 6: i. 3). She also spoke of 'getting that mesh happening' (p. 9: i. 2).

> *I've got (the) work that (I) did last time… But I can see where I have*
> *changed. And that's what pleases me; the changes I've made. And I've made*
> *use of the (Immersion) training that I've had for my own personal goals (p. 5:*
> *i. 3). 'We don't need to throw out what we've got. So. How do you make the*
> *two mix? I've mixed it for me' (p. 10: i. 3).*

As Naomi strove to align existing successful classroom projects with her new assessment knowledge she acknowledged the complexity of this endeavour.

> *It's really hard to use those outcomes and record the assessment on them. To*
> *make sure my outcomes align with the work I'm doing. And that my*
> *assessment …will tie in with it. (It)… is quite challenging. (p. 1: FG)*

5.4.6.1   *Creating new tools*

As further demonstration of personalising this assessment reform, Naomi presented a student's 'learning log' as well as examples of the newspaper that each student published during Term Three. She was particularly proud of her students' work. For Naomi, this learning log was a useful assessment tool to 'go back to see what they are saying and this was interesting' (p. 7: i. 3). Naomi had also developed an outcomes tracking folder for herself. She saw this as an important tool that ensured effective management of the reforms she was undertaking. She enthusiastically demonstrated how she had begun to track Key Learning Area outcomes and link these outcomes to her quality tasks. Alterations, adaptations and ownership of new assessment reforms continued to be the key for Naomi. She explained the purpose of her tracking folder at the Focus Group session.

> *I photocopied what was essential to… have at my fingertips. To be able to*
> *make that link that I needed to make from all the different areas (of different*

syllabi)'…'Here I can highlight it…I can put scribble on it. I can put these pages through it… I can flag it (p. 14: i. 3).

I tracked it (the outcomes) ..to the big task…Once I'd completed the task and done all that work there, (I knew) I'd addressed the outcome(s) which was a good way to go (p. 9: FG).

5.4.6.2   *New and Continuing Dilemmas*

By September, new dilemmas were continuing to emerge for Naomi. She became even more aware of mismatches between her school's planning and her new knowledge. She acknowledged 'it's a challenge' (p. 1: i. 3) as she considered whether to continue using the school's existing planning methods or to continue to implement her personalised, new learning. In the end, whilst being cognisant of all the issues, Naomi made a decision to continue to trial and pioneer these new approaches. She explained how she arrived at this decision.

I have to be fair to my school. 'Cause I'm a part of the school and I have to be seen to be doing (the school's units)…I found the (school's) units don't fit. (The ones) that we are currently teaching. And that's a challenge because our school has set these things in cement. These are the 4 units you'll teach a year. And they don't fit outcomes… 'I also I have to be fair to me with the knowledge that I'm gaining'… I personally, for me, have to make changes. (It) doesn't matter if the school doesn't make the changes. The school is quite happy to run with that. Why? Because there is no one else but me in the school (that's) TGT immersed. I know the changes. So I have to address them from my point of view. (p. 1: i. 3)

She returned to this theme later in our conversation with growing confidence and a wry comment.

I've got it working for me. And I could use this (TGT writing process) without a problem. But maybe someone else couldn't. But having to write that TGT task was not easy. That's weeks. You want to see my drafts? (p. 10: i. 3)

A continuing dilemma was the creation of a satisfactory criteria sheet. Naomi admitted she was still struggling to master the writing of standards descriptors. She

showed me what she called a 'slight criteria sheet', explaining that 'this is what I would normally do' (p. 3: i. 3). Naomi's continuing difficulties with criteria sheet writing was a source of immense frustration for her. She decided that she needed to consult others for assistance. Naomi borrowed an exemplar from another teacher who had, by this time attended Teacher Generated Task training. But examining it created further doubts for Naomi. 'To get that type of sheet, you know – (you have to) chuck a lot out. This is what I am stru-ggling with… I don't feel successful with it… I think it's in the wording. (p. 10: i. 3) Later in our conversation Naomi returned to honestly admit that she was 'stuck' (p. 20: i. 3).

> *It's (criteria sheet writing) something I haven't mastered competently or confidently. I mean I keep going back to it. I keep having a look at it. I keep changing it. I type something different in. But I haven't mastered (it). That's probably an area where I need to sit down and be taught by somebody. …It's a huge gap. I can't fill it on my own. OK I can do the other bits on my own (p19:i3)…(I have a) feeling of frustration that I can't do it on my own. That I actually need to ask somebody. (laughs together) That really probably annoys me. And it probably annoys me that someone's left me in that position. (laughs) They haven't taught me everything I need to know. (p. 20: i. 3)*

Professional relationships continued to be complex for Naomi. Because others at her school site had attended Teacher Generated Task training, Naomi began professional conversations with one of these teachers. They agreed to provide critical advice to one another. Part of the Immersion Training was intended to up-skill leaders and teachers for this critical role.

> *From my point of view, (using) that immersion (training) - I was able to look at someone else's piece of work and do that (provide advice). Which was quite good. (p. 10: i. 3)*

Further feedback was subsequently given to Naomi about her own written efforts. She reported that, despite these early, tentative steps she did not really feel supported (p10:i3). Naomi commented about the lack of collegiality at the Focus Group Session. She recognised that, whilst attending professional development met a deep need for her, her school's policy of sending minimal numbers to professional

development had an overall negative effect. She now understood that this also impacted upon her ability to locate knowledgeable peers on staff.

> *Over the last 2 years there's been this outcomes focus (by the curriculum team). And the curriculum team is probably as woolly and as fuzzy as the rest of the teachers. And (this is) the biggest weakness in the school. And I think this is plural, as one person from the school or 2 at the most is sent to learn. And the rest of the school is left out. So any assessment program that you have..(is) lacking professional discussion in this area. 'Cause there was no one to discuss it with (p. 8: FG).*

Naomi maintained strong views about how the leaders at her school should act and the knowledge they should have. Naomi reflected upon the need for leaders to prioritise reforms and implications when leaders 'picking up a bit of (knowledge) second hand' (p. 18: i. 3). Naomi believed that leaders commanded more respect than classroom teachers to manage and implement reforms and change.

> *(You) have to have people that other people respect. Or value (what you) take back to a school body. And if you don't have that; (if) people don't value you. Even though you've got it. I'ts no good. Whereas they would listen to (a leader). Where they wouldn't listen to me (p17:i3). I said (to a leader) 'You needed to be the guru. And passing it on down.' And she said 'No. We've got to share the knowledge.' But she's got gaps. I've got gaps. Whereas if one person had… (the knowledge), maybe (we) wouldn't have those gaps…It's just a huge gap in our school and I think it's going to get bigger.' (p. 18: i. 3)*

5.4.7   *Personal Reflections and Realistic Understandings*

Naomi wistfully spoke of a larger vision. She expressed concern that there was 'not cohesion between schools or between teachers' (p. 17: i. 3). She posed various reasons why this may be so: 'because people have an attitude' or 'it's not happening between 9 – 3' or they misunderstand the reform. She noted the bonuses she had personally experienced. 'You've got to give a little to get a little bit back. And sometimes, you know, you might be blessed with a little bit extra. If you actually go an extra mile' (p17:i3). By this time Naomi had come to a realistic view about how

her knowledge was acquired. She continued to stress the importance of personalising her new knowledge.

> *There's no real guru out there that'll come and say, "this is how it's done."*
> *So (I'm) getting a really eclectic approach. I get a little bit from (the*
> *researcher). I get a little bit from another teacher. (I) get a little bit from*
> *whatever I've seen…and (I) put it together (so it's) what best works for (me)*
> *(p. 5: FG).*

Towards the end of our conversation, Naomi captured what was the balance for her. She recognised her inability to successfully complete a criteria sheet and called it 'an annoying gap' (p. 20: i. 3). She acknowledged that 'next time around' she would begin with syllabi outcomes for planning. Then she expressed a sense of personal satisfaction and pride in the progress that she has made to date.

> *I'm cohesively putting together what I know and I think I'm building for me…*
> *I'm a satisfied customer. With what I've done. With what I've been taught. I*
> *think I've got the goods for what I've been shown at this point in time*
> *(p19:i3)…I think I've done a great job personally. Because I know I've had to*
> *really work at it… I have to work in restraints. But I have (had) to find my*
> *wings in that. And I think I have. I think I have. You know. I'm quite happy (p.*
> *20: i. 3)…I've always done the rich task. I've always wanted something beefy*
> *so it melds with me. (p. 21: i. 3)*

Naomi also highlighted her growth and satisfaction by focussing on the development of the students in her class.

> *So I've just slowly grown and probably I have a lot more here (points to*
> *head) than I'm aware of. Do you know what I mean? Because I don't*
> *professionally have these conversations to tell everybody what I know. I do it*
> *through my classroom. I let my classroom talk. Because that's… the only*
> *place I've had the outlet. Are my kids showing good outcomes? …I'm*
> *interested that my kids are learners. Good learners, you know sort of thing.*
> *So. And I want them to be creative. You know that they want to be in your*
> *classroom. So the more creative that you do it, the better off you are. And*
> *that's always been my…Element. (p. 16: i. 3)*

Figure 5.3 presents a summary of the changes Naomi had made to her assessment over the period of this research project.

Existing Assessment Practices (March 2005)	Planned Assessment Practices	New Assessment Practices (October 2005)
At the beginning Naomi:	Naomi planned to:	Nine months later, Naomi:

1. used a mark book to provide a summary of student learning
 	
2. collected students' written work for assessment
 	
3. referred to using 'open' and 'closed' assessment techniques
 	
4. recorded anecdotal notes about student learning
 	
5. referred to a 100 point matrix using Blooms Taxonomy and Gardner's 7 Intelligences. (Students who earn 100 points get to McDonalds for breakfast.)
	1. create a quality assessment task that captures learning and that can be linked to several outcomes
	
	2. create an accompanying criteria sheet with standards descriptors.
		1. developed an effective Task sheet (ASSESSMENT TASK)
		
		2. developed a criteria sheet to accompany the task sheet (CRITERIA SHEET)
		
		3. shared student learning with parents and others more effectively
		
		4. worked to create real-life and lifelike assessment task scenarios
		
		5. developed a Student Learning Log so students could:
		  a. collect significant work samples
		  b. create a summary of learning
		
		6. developed a Teacher Tracking Folder to track Key Learning Area outcomes and align with assessment tasks
		
		7. changed the style of her report card comments about student learning so as to reflect new learning.

Figure 5.3 Summary of Naomi's assessment reforms

In brief, Naomi enhanced her skills to creatively develop effective assessment tasks. She explored innovative ways to track Key Learning Area outcomes when designing assessment tasks. Her new style of report card comments indicated a growing understanding of students' learning.

All three participants extended their knowledge of assessment and applied their new knowledge in various practical ways in the classroom. In Chapter Six, the case studies of three reformer-teachers will be analysed to explore these individual narratives in a relational manner.

Chapter 6:   *Cross Case Analysis*

6.1   INTRODUCTION

The purpose of this research was to understand how individual teachers perceived and interpreted educational reform against the backdrop of multiple systemic reforms and mixed reform messages. While acknowledging the importance of pre-existing views and practices, the central objective was to focus upon the experiences of three teachers who attempted to make changes to their practices during a reform process.

An image was sought that would capture the colour and diversity of three complex stories and provide a unifying theme. I chose a journey metaphor to frame the analysis and amplify the teachers' voices. One participant teacher had used this image to remind me that we had previously been fellow travellers. The use of journey language enabled me to explore the significance of individual responses holistically, while the use of journey symbols contributed to the image of change and movement over time. This was a journey of reform, on which there would be four travellers. I would be a fellow traveller with the three participant teachers, learning and changing as I travelled.

This chapter consists of several sections based on major themes found in the literature and data, reflecting the research journey. The chapter sections include participants' readiness to begin (6.2), participants' existing assessment views and practices (6.3), obstacles or catalysts encountered by participants and (6.4), the inner journey or emotions of change (6.5). The changes made by individuals are documented (6.6) before teachers' differing personal approaches to change are recorded (6.7). Finally, in section 6.8, I reflect upon the significance of our time spent journeying together.

6.2   JOURNEY READINESS

Usually journeys have a beginning and an ending. However, the starting point of this journey was not clear. Before commencing the research, individual participant teachers had already begun experimenting with different elements of Education Queensland's assessment reform. Existing assessment practices were not static and

locating beginnings was complex. From the outset I wanted to understand why my fellow travellers chose to travel this particular journey. The answers they gave reflected a range of personal and professional reasons for considering change.

Between them, the participants named three personal qualities in their first interview that indicated they were prepared for change - creativity, motivation and persistence. They saw themselves as equipped to begin and capable of succeeding because they demonstrated these attributes. Joan and Naomi both referred to the personal quality of creativity (J. p. 6: i. 1; N. p. 14: i. 1). Joan was motivated and excited by the road ahead (p. 9: i. 1). Naomi linked the creation of authentic tasks with creativity. Mid-journey she indicated that choosing to be a mature age student demonstrated creativity together with persistence and motivation (p. 8: i. 1). Again, persistence was implied when she mentioned the length of time required to implement new syllabi and accompanying assessment (p. 2:1.1).

There were several, additional professional motives for beginning this journey. The first was related to dissatisfaction with current assessment practices. Naomi and Betty both acknowledged the need for changes to their record keeping. At the commencement of the journey Naomi's assessment practice was the use of a 'mark book' (p. 2: i. 1) that recorded student achievement. Betty was actively seeking a revitalisation of her reporting practices and she pondered the possibilities of three-way reporting (p. 2: i. 1). Although Joan began with assessment when she planned units of work, a process she called 'starting at the other end', she was not happy with the results. She had also experienced feelings of being 'bogged down' (p. 9: i. 1) and was excited about joining this research journey.

The opportunity to be at the forefront of a systemic innovation was another professional indicator of journey readiness. This project was seen as an opportunity to explore Education Queensland's new assessment initiative in greater depth. Naomi was keen to know that she was 'going modern with the outcomes' (p. 3: i. 1). She wanted to explore the relationship between outcomes and assessment. Joan recognised her curriculum knowledge was growing but she encountered difficulties with assessment (p. 1: i. 1) and she wished to overcome these.

The promise of positive collegial experiences was a motivating factor. For Naomi, this was a particularly powerful reason for joining the journey (p. 12: i. 1). Naomi

was a member of her school's curriculum team and yet she felt powerless to challenge those who appeared uninterested in innovation. She wanted to make a difference at her workplace as well as gain the respect of her peers. Betty also expressed a desire for 'more professional sharing' (p. 6: i. 1) as she wanted to understand three-way reporting practices. For her, the best way to develop her knowledge was to observe three-way reporting when it occurred and conduct conversations with expert fellow teachers.

Finally, all participant teachers nominated benefits for students in their classrooms as a reason for being ready to begin. Betty had a child-centred approach and negotiated elements of her existing integrated units of work with children. Her focus on peer and self-assessment was so that students could identify their own learning strengths and weaknesses (p. 1,2: . i1). Joan had already implemented some changes and saw them as beneficial and valuable for her students. She recognised that her next step was to enhance student motivation and engagement (p. 9: i. 1). Naomi's journey was also undertaken with students in mind. She wanted to provide opportunities for her students to reach their potential (Questionnaire: 21.03.05; p. 5: i. 1).

Hence, the teachers' major professional reasons for undertaking this reform journey focussed upon dissatisfaction with current practices, a desire to be innovative, and collegial and predicted advantages for students. They also recognised that they possessed particular, personal qualities that ensured they were ready for change. Table 6.1 provides a summary of these personal attributes and professional motives mentioned by the participant teachers.

Table 6.1 Personal and Professional Attributes Indicating Journey Readiness

SUMMARY: Reasons for joining the assessment reform journey	
Personal attributes	Teachers saw themselves as capable of succeeding because they were: ▪ creative ▪ resilient ▪ persistent ▪ motivated
Professional motives	Teachers were motivated to begin because they: ▪ were dissatisfied with their current practice ▪ desired to be innovative, reform leaders ▪ anticipated positive collegial experiences ▪ sought benefits for their students

6.3 STARTING POINTS: TEACHERS' EXISTING ASSESSMENT PRACTICES AND UNDERSTANDINGS

Data from this project suggested that each participant brought different understandings of assessment to the commencement of the journey. All participants' beginning assessment practices satisfied their schools' assessment and reporting requirements, and all were recognised by their school leaders as dedicated and energetic professionals. Local schools had agreed to a district-wide project that would trial task-based assessment. Additional systemic support was provided for this endeavour. The three participating teachers' existing assessment practices and intended reforms are summarised in Table 6.2. Italicised information within the table indicates early experimentation together with each participant's nominated assessment innovation.

Table 6.2 Teachers' Existing Assessment Practices and Intended Reforms

	Existing Assessment Practices	Nominated Assessment Practices
BETTY	Betty's existing assessment practices included student portfolios that provided data for report cards, student-selected samples for inclusion in a portfolio , peer assessment associated with oral language described as a pedagogic strategy and data collection processes that focused upon school-based report card requirements	Betty nominated to: ▪ explore and implement 3-way reporting involving teacher, parent/ carers and student ▪ develop peer assessment practices ▪ develop self assessment practices.

	Existing Assessment Practices	Nominated Assessment Practices
JOAN	Joan's existing practices included a numeric marking system, tests to check students' knowledge and marking practices that selected the 'best student's work' as the benchmark for excellence	Joan nominated to: ▪ continue to develop quality task sheets. Develop task sheets ready for the commencement of term.
NAOMI	Naomi's existing practices included her teacher's mark book that provided a summary of learning, 'assesses(ing) with a bit of written work', some 'open' and 'closed' assessment, the collection of anecdotal notes about her students and a 100 point matrix using Blooms Taxonomy and Gardner's 7 Intelligences. Students who earn 100 points get to McDonalds for breakfast.	Naomi nominated to: ▪ create quality assessment tasks that capture learning and that can be linked to several outcomes ▪ create accompanying criteria sheets with standards descriptors.

As I examined teachers' current practices, four features became apparent. First, teachers' existing assessment practices were very diverse. These practices included portfolios, numeric marking systems, tests, tasks and anecdotal note taking. Second, particular assessment practices were viewed positively. For example, Naomi reflected positively upon the development of her assessment matrix where students accumulated marks (N. p. 17: i. 1). Third, there appeared to be a strong focus on written modes of assessment including portfolios and paper and pen work. Fourth, students were provided with minimal information beyond the receiving of their results. Finally, current assessment practices appeared to be substantially summative in nature. Examples of summative assessment practices included Joan's and Naomi's use of mark books as records of students' demonstrated achievement and Betty's use of her school report card as a summary of student learning. In addition, Betty was struggling to align an older school reporting framework with existing practices. She considered this alignment as 'a juggling act' (p. 5: i. 1).

Early experimentation brought to light particular tensions. These were created by a mismatch between teachers' numeric, summative approach and Education Queensland's formatively focussed assessment reform. Naomi had previously developed a matrix to assess student work and she was keen to understand the links between syllabi outcomes and assessment tasks. She struggled to find the connections (J. p. 2: i. 1). She worried that her knowledge was incomplete and her picture of new assessment information was 'not whole' (p. 1: i. 1). Joan stated that her earlier views about teaching and assessment meant that her image was that of a

teacher 'out the front' and assessment was both summative and numeric (p. 9: i. 1) and her early experimentation with formative assessment practices challenged this view.

In addition to philosophic tensions there were also numerous, practical classroom dilemmas. Teachers' existing summative understanding about assessment continued to strongly influence practice. Naomi and Joan struggled with assessing group work (J. p. 5: i. 1; N. p. 3: i. 1) because group work created difficulties when identifying individuals' contributions (p. 5: i. 1). Joan pursued the issue of assessment and understanding. She particularly focused upon deep understanding (p. 5: i. 1) and wondered if enthusiasm equated with understanding (p. 6: i. 1). Naomi focused upon how to make accurate 'on balance' judgements (N. p. 2,3: i. 1).

Further, a summative view of assessment limited teachers' understanding of the diverse purposes of assessment and narrowed their assessment choices. Betty's assessment focus was report card driven. Accountability was important to Betty and, from her perspective, she was already meeting her school's requirements. However, she saw three-way reporting as a child-centred 'next step' or 'the next stage' (p. 3: i. 1). It aligned with her child-centred approach and her summative view of assessment. She appeared to have initially viewed peer and self-assessment from within this frame, so the purpose of Education Queensland's formative assessment reform with its complex new language was not immediately apparent (p. 5: i. 1).

From the time when I joined my fellow travellers, it became clear that this journey was already a complex and challenging undertaking for all. Yet the teachers began with a positive spirit, motivated by what they hoped to achieve, namely, exemplary products, innovative practices and engaged students. The overlap between existing summative assessment practices and the introduction of new formative assessment caused confusion and tensions between reality and aspirations. During this time, teachers tended to explain their dilemmas in terms of not having enough information rather than recognising that the two types of assessment had different purposes and classroom applications. Table 6.3 provides a summary about common aspects of teachers' existing assessment practices and a further summary of the different complexities they encountered at the commencement of our assessment journey.

Table 6.3 Common aspects of early assessment practices

SUMMARY: Common aspects of early assessment practices and the complexities encountered	
Current practices	Features of teachers' existing assessment practices: ▪ were diverse ▪ prominently featured written modes ▪ were substantially summative ▪ limited explanations given to students about results ▪ contained positive elements that were self-identified
Current Complexities	Teachers experienced initial difficulties associated with: ▪ lack of knowledge when experimented with new forms of assessment ▪ the challenge of a non-numeric assessment system ▪ assessing group work (and individuals individual contributions) ▪ defining and assessing deep understanding ▪ making on-balance judgements ▪ the point of formative assessment practices when existing reporting practices met accountability requirements

6.4   CHANGE JOURNEYS

As we moved forward on this journey, I was keen to capture the magnitude and spirit of our undertaking. My task was to use words like colours on a palate to capture the richness and vibrancy of the journey's landscapes. My travelling companions were aware of a significant number of journey obstacles; some were within their power to control and some lay beyond their control. Both obstacles and catalysts associated with change had been identified in the literature and this helped to frame the questions for this research project and became an overarching framework for summarising each aspect of change.

As the research data were analysed, many obstacles described by the participant teachers were differing aspects of the one phenomenon - intensification. Features of intensification were demonstrated as teachers spoke passionately about the poverty of time, the difficulties associated with the simultaneous implementation of multiple overlapping reforms, and the frustration of mixed systemic messages.

6.4.1   *Intensification –Time*

The issue of 'not having enough time' to implement reforms was highlighted by both Naomi and Betty. Betty called it the 'time factor' (p. 7: i. 1). She recognised it was important to have sufficient time to consider new ideas. For her personal and

professional wellbeing and survival (p. 12: i. 1), she was not prepared to consider particular key aspects of the assessment reform as they appeared to have little relevance to her existing summative understanding. She perceived that she did not have any time to invest in gaining assessment knowledge that was not relevant to her current needs (p. 7: i. 1). Naomi was prepared for a long period of dislocation and she had already experienced difficulties associated with lack of time when the new outcomes-based syllabi were introduced (p. 1: i. 1). She spent much time using the new syllabi to develop trans-disciplinary units of work for her students.

Time management during reform transitions added to the complexity of life in the classroom. Joan had already lamented her need for more time to refine new assessment tools such as a task sheet and a criteria sheet yet her difficulties were more complex. Whilst she was trying to create these new assessment tools, she was simultaneously trying to teach effectively without these tools. Her design of an innovative task sheet occurred early in the term but she attempted to produce an accompanying criteria sheet. This led to feelings of 'marking time' in-class whilst she crafted this necessary assessment item. Joan was aware of the repercussions this had for her students (p. 3: i. 1). She wanted her students to see the criteria sheet early in the term but struggled with articulating appropriate language for standard descriptors. There was an added personal frustration because she was unable to identify adequate descriptive language (p. 2: i. 1). The criteria sheet was not completed until the final weeks of the term.

A time-related catalyst that would enhance the reform process was proposed independently by Joan and Naomi. They both proposed a period of time of 'non-judgemental practice' whilst undertaking reform. For them it was important to be able to trial new initiatives free from critical judgement by either their immediate supervisors or peers (Np. 15:i. 2; Jp. 8:i. 3). A supportive and trusting climate, where mistakes were acknowledged without blame, was seen as an opportunity for professional growth.

In summary, the most significant obstacle associated with time and reform was the participant teachers' lack of time. A further examination of the data revealed another nuanced, time-related obstacle; time management. Teachers struggled to manage ongoing classroom practices whilst simultaneously learning and introducing new

practices. In addition, two teachers suggested the need for time to practice the new reform so as to implement and master new practices. This suggestion included a plea for the suspension of judgement of a teacher's performance during the designated practice period. Table 6.4 summaries the key issues relating to time and the implementation of assessment reform.

Table 6.4 Intensification - Time

SUMMARY: Intensification - Time		
Topic	*Obstacles included*	*(Proposed) Catalyst included:*
Time Poverty	Lack of time	A non-judgmental period of time to practice new reforms. Knowledgeable leaders
Pace of new knowledge	The pace of expanding new knowledge increasingly accelerated	
Time Management	Complex time management required during transition to new practices	

6.4.2   *Intensification – Multiple, overlapping reform complexities*

Another characteristic of intensification was the complexity created by the simultaneous implementation of multiple, overlapping reforms. The teachers in this project agreed to implement their chosen assessment reform towards the end of a systemic curriculum change involving the introduction of eight outcomes-based syllabi. During this time period teachers were also in the process of adopting a major state-wide pedagogical reform called productive pedagogies, creating a further series of hurdles for teachers to negotiate.

Participants believed that their existing curriculum knowledge was still incomplete and, as additional reforms were introduced, this incomplete knowledge created difficulties. Negative feelings and attitudes surfaced. The magnitude of change and reform at times appeared overwhelming. Joan commented that planning and writing assessment tasks and criteria sheets were 'bigger than Ben Hur' (p. 9: i. 1). Naomi also spoke of overload. She commented upon the size and scope of current reforms she was expected to understand. She referred to the growing number of outcomes ('gazillions') and expressed feelings of being overloaded and 'bogged down' as new syllabi were published (p. 2: i. 1). She used images to convey her feelings associated with her incomplete knowledge. She spoke of a 'picture not complete' (p. 1: i. 1) and

later she suggested that her knowledge was woven like hessian (rough and full of holes) rather than 'like linen' (p. 7: i. 1). Naomi referred to this overload as the 'content challenge' (p6:i1). Disengagement was another outcome. Betty explained that she was 'stumped' by the new assessment language adding that it doesn't have a lot of meaning for her (p. 9: i. 1). She could see no place where it was applicable (p. 9: i. 1). Hence, for Betty, key elements of the assessment reform were initially dismissed.

Participants felt that mastery of new assessment knowledge was continually beyond their reach. Their inability to fully comprehend new ideas coloured teachers' perceptions even whilst experiencing some success. By mid journey, Joan was successfully introducing some formative practices, yet she was frustrated that she was still unable to capture the appropriate words to use as standard descriptors (p. 2: i. 2). At one stage it appeared as if knowledge of the new assessment reform was increasing at a pace that would place it forever beyond her grasp. Mid-journey she commented, 'I don't think I ever feel like I'm ever on top of it…I think it's always, ever growing' (p. 16: i. 2). However, she demonstrated her resilience by inventing an interim, detailed marking system she called 'ticks and flicks' (p. 5: i. 2) to indicate students' knowledge and deep understanding; an interesting snapshot of one very busy teachers' coping strategy.

Naomi experienced similar frustrations. She was concerned that she had invested time to become familiar with the outcomes-based curriculum. Naomi was concerned that new assessment knowledge would make her recent curriculum knowledge redundant (p. 1: i. 1). She commented wryly, 'it's almost like…well what's the point of learning this (new assessment knowledge)' (p. 1: i. 1). In fact, the magnitude of assessment change and reform at times appeared overwhelming for both Naomi and Joan.

Recognising underlying philosophic tensions did little to ease Joan's difficulties. During our last interview, she revealed the real stumbling block that lay behind her search for appropriate language for a criteria sheet. Writing descriptors prior to viewing student work was actually a completely new concept for her. Joan had been concerned that she would set the benchmark too high (p. 4: i. 3) and none of her students would be able to demonstrate learning at the highest level. However, once

she began a new unit of work that included a student task and criteria sheet, she was able to see how students began to take control of their own learning (p. 5, 6: i. 3) and how this was beneficial for them (p. 7: i. 3). Yet, by journey's end there continued to be a lingering concern associated with this shift that made Joan feel insecure (p. 7: i. 3).

Finally, new assessment reforms linked particular classroom practices such as group work, performance tasks with assessment and this created problems for teachers who were inexperienced in linking these pedagogical practices with assessment. Both Joan and Naomi expressed concerns with regard to the valid judgements of performance-oriented assessment tasks (J. p. 8:i. 1; N. p2, 3:i. 1). Joan pondered the relationship between the quality and quantity of student work required to make an effective judgement about student learning. Upon further discussion of this issue, she conceded that her students could effectively demonstrate learning during their current unit of work (p. 10: i. 1). Joan also recognised that her usual assessment practices of responding to the standard of work students submitted would be impossible to sustain when enacting new assessment reforms (p. 9: i. 1).

In summary, teachers in a primary setting were simultaneously implementing new curricula as well as pedagogic and assessment reforms. Teachers' incomplete knowledge of these reforms created a variety of ongoing personal, perceptual, philosophic and practical difficulties that are outlined in Table 6.5.

Table 6.5 Multiple and Overlapping Reform Complexities

SUMMARY: Identification and Impact of Multiple Systemic Reforms		
Topic	*Obstacles (for teachers) included :*	*No Catalysts identified*
Reform overload	▪ Simultaneously attempting to implement multiple systemic reforms including curriculum reform (eight new outcomes based sylabi), Pedagogic reform and assessment reform	
Incomplete reform knowledge	▪ Feelings of being overwhelmed, overloaded or disengaged ▪ Inability to recognise magnitude of reform success (perceptions of reform progress altered) ▪ Struggles with complexity of reform knowledge and language ▪ Wrestles with philosophic issues such as establishment of benchmarks prior to marking ▪ Uncertainty about making fair, on-balance judgments	

6.4.3   *Intensification – Confusing systemic messages*

From the beginning of our journey together it was apparent that there were problems with information from the education system and the way that it was communicated to teachers. Betty was dismissive about the processes used to communicate. She displayed a degree of cynicism, implying that the system did not understand the practical classroom application or the reform implementation processes. In addition, the system did not appreciate the time required for teachers to develop an understanding of and engagement with new reforms (p. 12: i. 1).

Problems had begun prior to this particular reform with the rollout of new syllabi as writing styles and structure of different syllabi varied as each new document was produced. When this research was undertaken the English syllabus was not yet published. Naomi expressed surprise at the diverse styles of the different syllabi (p. 9: i. 1) and wanted to make sure that she could 'cover…everything with her conscience' (p. 3: i. 1). Yet, despite the burden of these diverse styles, Naomi could still say she was 'like a sponge that's yet to be filled' (p. 9: i. 1) as she awaited the yet-to-be-published English syllabus.

Messages about the new assessment reform changed over time. To make the situation worse, conflicting advice emanated from the statutory body that authored the

outcomes-based syllabi (Queensland Studies Authority). Betty explained her frustration as she searched documentation for the philosophy that underpinned Education Queensland's assessment reforms and endeavoured to align this philosophy with her own child-centred understanding. She wondered why she was not given an explicit explanation when she attended Teacher Generated Task training. She felt she had to try and sort it out in her own mind on her own (p. 3: i. 2). By Interview Three she was still experiencing difficulty in understanding all the issues associated with the assessment reform.

In the hope of gaining clarity, Betty was eager to discuss details of a new and 'to be mandated' curriculum and assessment framework (QCAR) described in an article in the fortnightly educational newspaper, *Educational Views.* (p. 13: i. 2). Her concerns were related to apparently differing philosophical stances embedded within this reform, (p. 14: i. 2), the hidden political agenda (p. 15: i. 2) and the reform's degree of child-centeredness (p. 15: i. 2).

At different times both Joan and Naomi also found the lack of alignment between curriculum and assessment reforms disconcerting. Further difficulties arose when these teachers tried to examine the reforms in relation to their own schools' reporting practices. Naomi's perception of Education Queensland's assessment reform was inextricably linked to the Outcomes Based Education curriculum initiative. For her, student learning was tied directly to the syllabi outcomes. She sought to understand the relationship between assessment and outcomes (p. 16: i. 1) and between tasks and outcomes (p. 15: i. 1). As new assessment knowledge became available, she decided that some of her existing practices might be wrong. Mid-journey, Naomi spoke of her previous lack of understanding of Key Learning Area outcomes and her need to streamline busy units. She began to speak of tethering similar outcomes together. Yet, letting go of the old knowledge proved to be a personal struggle (p. 1: i. 2). The confusion of assessment messages made the creation of new tools more complex too. Naomi worked hard to develop effective task sheets as this was her nominated reform (p. 11: i. 2). However, finding the words to capture what she had developed so the students could clearly understand the task was a 'stumbling block' at this time. She spoke about this with feelings of despair and frustration.

For all three teachers there was a lack of clarity between the new assessment reform and existing reporting practices. Both Naomi and Betty wondered when their schools' reporting systems would reflect outcomes-based education (B. p. 4: i. 1; questionnaire; N. p. 7: i. 1). Betty also noted that her school showed no indication of changing its report card to align with new systemic assessment language (p. 4: i. 1). Joan was disconcerted by the criteria sheets she had collected as exemplars because the exemplars contained a higher number of levels of achievement than her school's existing report card (p. 2: i. 3).

In summary, the systemic processes used to disseminate reform messages to teachers and the differing and conflicting information contained in these messages proved problematic. It is interesting that one teacher, Betty, was a particularly tenacious seeker of clarity and was a keen observer of information dissemination. Previous reforms and changing assessment messages during this reform had a significant impact upon what teachers heard and how they processed new, assessment reform information. Table 6.6 summarises teachers' perceptions about systemic communication and the reform messages they heard.

Table 6.6 Intensification Obstacles - Systemic Messages

SUMMARY: Intensification –Systemic Messages		
Topic	**Obstacles included:**	*No Catalysts identified*
Reform Planning	▪ Lack of information about practical elements of reform available to teachers ▪ Limited explanation of implementation processes Miscalculation of the time necessary for teachers to understand and engage	
Reform Messages	▪ A change of outcomes-based syllabi writing styles ▪ A lack of alignment between assessment messages sent by the employing authority (Education Queensland) and the statutory body (QSA) ▪ A series of inconsistent messages from employing authority (Education Queensland) over time ▪ Unclear articulation of underlying philosophy of the assessment reform ▪ Lack of alignment between curriculum and assessment ▪ Lack of alignment between assessment and reporting	

6.4.4   *Broader intensification issues*

Intensification was also apparent at a school level. Schools not only had staff at different stages of developing one reform, but also they were likely to have staff endeavouring to implement multiple reforms at a given time. Thus, lack of site-based cohesion was real and problematic. Naomi's school had been working on implementing pedagogical reform (Productive Pedagogies) in a comprehensive manner. Naomi's enthusiasm for assessment reform set her apart from her peers. On the one hand she was keen to ensure that her enthusiastic and motivated attitude towards change was not misinterpreted as rebelliousness by her peers (p. 7: i. 1). On the other, she felt that her early keenness for assessment change and her new assessment knowledge was, in part, unrecognised by her peers (p. 7,8: i. 1). She actively sought colleagues who were enthusiastic about innovation and change (p. 8: i. 1).

The frankness of the teachers' perceptions about the different elements of intensification, together with the strong negative emotions they expressed indicated the significance of intensification. Life was difficult for teachers in the classroom as they expressed concern about the lack of time, and the rapid and simultaneous implementation of different reforms and messages that were contradictory or incomplete. The dilemmas associated with continual, overwhelming reform waves produced a substantial list of obstacles. These are summarised in Tables 6.4, 6.5, 6.6 and 6.7.

Table 6.7 Broader Intensification Issues

SUMMARY: Broader Intensification issues		
Topic	**Obstacles included**	*No Catalysts identified*
Managing multiple reforms on-site	▪ Difficulties with site-based cohesion ▪ Disconnected teachers who are 'out of sync' with peers	

6.4.5   *The social aspects of enacting new reforms*

All teachers spoke about relational aspects of their local school culture. Both positive and negative dimensions of the culture were shared on our journey together. Leadership deficiencies were noted as obstacles. Two teachers perceived that administrators and leaders lacked knowledge of the reforms. They saw this as an obstacle to change. Betty hinted that she thought the amount of training provided for leaders was insufficient because they were expected to lead change at school sites (p. 13: i. 1).

Naomi also pondered the level of understanding of school leaders (p. 6: i. 1). She suggested that her administration team might have difficulty formulating curriculum questions (p. 2: i. 1). She struggled to reassure herself that the whole curriculum initiative was 'owned from the top to the bottom' (p. 4: i. 1) because she could see the wide variation of teachers' knowledge of and attitudes towards outcomes-based education initiatives at her school site (p. 4,5: i. 1). Mid-journey she wondered why curriculum leaders still had not attended professional development to enhance their knowledge about systemic assessment reform (p. 8: i. 2).

The perceived lack of leaders' knowledge and understanding of the assessment reforms meant that Naomi felt even more isolated. She was her school's only representative at the Teacher Generated Task (Immersion Program), and she trialled aspects of this assessment reform initiative on her own. For Naomi, leaders' knowledge was important. She had asked a leader to 'be a guru' (p. 18: i. 3) and her leader spoke about an alternative model where many staff gain and share new knowledge. This reply compounded Naomi's frustration about personal and site-based knowledge 'gaps'.

Later in the project both Betty and Joan mentioned school leaders in a positive manner. Betty spoke positively about the knowledge of her curriculum leader and the support that person provided (p. 9,10: i. 3). Joan commented on the importance of a supportive and non-competitive culture at her school (p. 16: i. 3), indicating that she enjoyed support from both her leaders and her peers.

The role that professional peers played was significant. Naomi named an early lack of peer support as a major obstacle she needed to overcome. She shared various

negative responses of her peers towards curriculum and assessment innovation that bewildered and frustrated her (p. 5: i. 1). These responses ranged from disinterest to hostility as their existing practices appeared threatened (p. 1:i. 1). As a result, Naomi felt she was working on reform in isolation which made it 'very difficult to know if you are on the right track or not (p. 1:i. 1).

Over time, I was able to observe the powerful and corrosive impact that lack of collegiality had. For Naomi, a feeling of isolation was strong from the start (p. 8: i. 1). Mid-journey this feeling of loneliness and isolation re-emerged (p. 14: i. 2) because she was the only staff member with assessment training (p. 8: i. 2). By the end of the research project this loneliness was again reflected in a variety of ways. It appeared to be related to Naomi's inability to find others with whom she could converse professionally (p. 16: i. 3) as well as to others' lack of respect for and recognition of her growing knowledge and new practices (p. 17: i. 3). Her sense of loneliness was perhaps most revealing when she indicated that the only way she could express herself was 'through my classroom' (p. 16: i. 3).

Where it occurred, informal collegiality was seen as a catalyst that enhanced teacher change. Joan spoke enthusiastically of working with a fellow teacher and the camaraderie they enjoyed as they trialled aspects of curriculum reform. Informal collegiality was best demonstrated through professional conversations initiated for different purposes and all three teachers referred to these professional conversations in a positive manner.

Betty commented positively about the support of her peers as she worked to create her Teacher Generated Task. The professional conversations she appreciated included the notion of peer critiquing, demonstrated by voluntarily seeking fellow professionals to provide feedback about her Teacher Generated Task (p. 9,10: i. 3). Naomi had also mentioned her desire for professional conversations when questioned about the type of support she required to assist her to effectively undertake reform. Her professional conversations were with a different group of educators. She sought out newly graduated staff members, university 'prac' students and others beyond her school because they were gaining the new knowledge that she was keen to understand (p. 6: i. 1).

Thus, two teachers experienced positive relationships with like-minded peers who were fellow staff members. By contrast, Naomi's positive experiences were with those who were new or guests at the school. An interesting insight arose when I questioned Betty about the success of the use of peer and self-assessment in her classroom. She was reluctant to share what she had learnt about the implementation of successful peer and self-assessment practices. She expressed the desire to establish the practices in her own classroom first, although she did say that she wanted to share her experiences at a later date (p. 10: i. 3). I concluded that teachers' lack of confidence in their practice rather than disinterest or distrust, may inhibit or delay collegial sharing when new practices are being introduced.

Whilst two teachers referred to positive collegial experiences, no one referred to a positive, whole-of-school culture. This larger, more complex idea of a professional learning community seemed absent throughout our time together. Perhaps a professional learning community existed to some extent at individual school sites and was not acknowledged or perhaps these innovative teachers operated in a more individualistic manner within their school environment. One school was involved in introducing pedagogic reform at the same time as this project was occurring. Perhaps with the intensification of curriculum, pedagogic and assessment reform played a role in preventing the development of a truly cohesive professional community. The positive and negative aspects of collegiality and school climate are presented in Table 6.8.

Table 6.8 The Social Elements associated with Reform Change

SUMMARY: Social Obstacles and Catalysts of Change		
Topic	*Obstacles included*	*Catalysts included:*
Leadership	Leadership deficiencies such as lack of reform knowledge, level of leaders' understanding of and engagement with reform	Knowledgeable leaders
Peer relationships	Teachers' inability to locate like-minded peers	Like minded peers (fellow teachers, graduates and undergraduates gaining on site experience) for professional conversations and peer critique
Social dynamic	Teachers' strong feelings of loneliness	Sense of peer support and collegiality

6.4.6   *Professional learning to understand new reforms*

Education Queensland and the participant teachers valued professional development as a primary method of understanding the new assessment reforms. The results of this research highlighted aspects of professional development that enhanced reform and identified a number of inherent obstacles associated with professional development delivery. The timing of professional development was important, as were linkages to teachers' workplaces and their classrooms. Maintaining reform momentum was also significant. Finally, individual teachers used other modes of learning to enhance reform implementation. These included reform practice, participation in research projects and professional readings.

When teachers were asked directly about supports for the journey, professional development was nominated by two participants as a significant catalyst for change. Participant teachers had the opportunity to attend professional development associated with assessment prior to and during the data collection period. In fact, all teachers were expected to undertake Education Queensland's assessment workshops (Assessment Workshop One and Assessment Workshop Two). In addition, extra professional development was actively sought by the participant teachers themselves. Along the journey, teachers were asked to nominate all supports that enhanced their

ability to make assessment changes. Table 6.9 summarises participant teachers' responses.

Table 6.9 Teacher-Nominated - Change Accelerants

	Professional Development	*Research Project Participation*	*Other Professional Learning experiences*
BETTY	Teacher Generated Task Training (2 days) Multi-Age Conference (2 days)	Participation in the research project Professional Readings	Classroom application of components of reforms (e.g. negotiating and adapted a criteria sheet, student-set test) Work with site-based peers subsequent to professional development
JOAN	Dr. Christine Harrison's ½ day workshop	Work with the curriculum leader on site at school (researcher) Conversations with site-based peers	Repeated practice of assessment reform Support of site-based peers
NAOMI	Teacher Generated Task Training (Immersion 4 days)	Researcher-Provided Readings Research-project initiated collegial conversations	Adaptation and application of ideas from professional development

Whilst professional development was nominated as a catalyst that enhanced change, there were several problems associated with its organisation. Teachers were not consulted about their current learning needs and school administrators often decided professional development foci on teachers' behalf. Priorities were determined according to different factors including the size of the professional development budget or competing systemic initiatives. Professional development for the new assessment reform was organised systemically and ignored the prior learning of participating teachers. My field notes indicated that Betty had attended two systemic assessment workshops but she made no reference to this content at all in our initial conversations. In fact, her comments indicated that she did not recognise how formative assessment was relevant in her situation and, as a result, she chose to ignore the reform messages. However, later when the reform messages connected with Betty's knowledge of assessment, she re-evaluated the usefulness of the handouts she had received (p. 8: i. 2).

The timing of professional development was also significant and had the potential to be either an obstacle to change or an aid to facilitate change. In regional Queensland, a complicating factor was the long distances teachers had to travel to hear educational experts. This was further exacerbated by the limited availability of expert presenters. Betty indicated that timing was an obstacle when the only time available for professional development was at the end of a busy day in the classroom (p. 8,9: i. 2). Naomi's experience is a good example of the difficulties associated with the timing of professional development. She mentioned that she had already completed a systemic assessment workshop in another city and yet she was asked to attend the same workshop again when her whole school planned to attend. She said however, that she had not fully understood the professional development the first time she attended, and she hoped to gain a better understanding when she attended the second time.

In some instances, the timing of professional development was a demonstrated change catalyst. This happened when significant professional development events occurred in a short timeframe. Betty attended a two-day Multi Age Conference in the state capital. She spoke in very positive terms about this conference. Within a matter of weeks, Betty also participated in two days of Education Queensland-led professional development that featured Teacher Generated Task writing. Initially, she had not been fully convinced about the philosophical perspective of the systemic assessment reforms (p. 4: i. 2). Yet together, these two professional learning experiences impacted upon Betty in a significant manner and changed her understanding of formative assessment practices. At the same time she was reading professional literature about peer and self-assessment. When asked to identify significant catalysts that shifted her from survivor to an enthusiastic teacher exploring formative assessment practices, Betty nominated the professional readings and the overlapping professional development that allowed her to make connections between the reforms and her own views of teaching (p. 11,12: i. 2).

Attending professional development had both positive and negative implications for participants back at the work place and in the classroom. Attending the Teacher Generated Task (Immersion Program) had a significant impact upon Naomi's practice. She recognised that some of her existing practices had to be discarded (p. 11: i. 2) and she mentioned the intensity of the four days of hard work. She spoke of

early panic and expressed concern about the expectation of producing a quality task (p. 16: i. 2). Yet, she was also enthusiastic about implementing her new knowledge back in the classroom and was very effusive about the results (p. 4,5:i. 2).

Applying new knowledge back in the classroom was an important catalyst for change. For two teachers this meant practicing what they had learnt back in the classroom. For Joan, practicing and using new knowledge was in itself a change catalyst (p. 8: i. 3). She admitted that reading was not as important for her and so practice was particularly significant. Only when prompted did she mention professional development as an original springboard for new practices. For Naomi and Betty, practice was a logical extension of professional development, and for Betty it also meant she could explore the practical suggestions contained in the readings. Naomi commented that no matter how many seminars she attended she needed to 'go and do' to see if the ideas worked (p. 1: i. 1). Whilst Betty did not specifically nominate the need to practice, she clearly relished the opportunity to trial and refine new assessment practices such as the use of the student reflection journal (p. 5: i. 2) and the We Are Learning To (WALT) strategy mentioned in one of the readings (p. 3,4: i. 3).

Maintaining momentum after attending professional development was another issue. Indirect comments by participant teachers implied that motivation could easily dissipate. For example, Betty gained her idea about three-way reporting at a school-organised professional development presentation. She grew less and less certain about this idea as she recognised she would be the only one testing this system at her school (p. 7: i. 1). Naomi also spoke of curriculum-focussed professional development that I had presented when I was an Education Adviser, two years prior to data collection and emphasised the need for personal consolidation (p. 16: i. 1). The provision of adequate followup after teachers attended significant professional development appeared to vary widely. Betty spoke positively of site-based followup visits and the additional release time after her attendance at Teacher Generated Task Training. This support provided her with the opportunity to further refine her teacher-generated task and accompanying criteria sheet.

Teachers participating in this study actively sought professional development opportunities for themselves. Two participants had the opportunity to actively

participate in additional assessment reform professional development organised by Education Queensland. This substantial professional development (undertaken during school time) made a significant impact upon Betty and Naomi's existing knowledge and classroom practice. Yet, even for these motivated teachers, there appeared to be limited opportunities to become responsible for a long-term, personal learning plan, a learning plan that reflected their existing knowledge, personal strengths and educational philosophy. No participant identified a personal, over-arching plan for professional growth or referred to a whole-of-school professional development plan.

Teachers viewed their participation in this research project as a positive experience and even considered their involvement as a form of professional development. They noted that it enhanced their ability to enact assessment reform and change. Betty stated that the readings I supplied for her were helpful (p. 1: i. 2). These readings, on the topics of peer and self-assessment, were supplied just prior to her attendance at two important professional development opportunities. Joan also spoke about the significance of our professional conversations at our school site as part of this research project (p. 15: i. 3).

In summary, professional development featured as the most significant way teachers engaged intellectually with reforms. Teachers' comments about professional development focused upon its relevance, timing, and practical trialling and application of the assessment innovations when returning to the classroom. For one participant it compounded already complex professional relationships with peers. The time allowed for professional development was significant, as were competing organisational restraints. Table 6.10 highlights the significance of professional development as well as indicating the catalysts and obstacles associated with providing an array of professional support for teachers during times of change.

Table 6.10 Professional Supports to Enhance Reform Change

SUMMARY: Professional Learning Obstacles and Catalysts of Change		
Topic	*Obstacles*	*Catalysts*
Organization of professional development	Organisational obstacles for teachers included: ▪ a lack of consultation processes to determine learning needs ▪ decisions about professional development made by school administrators on teachers' behalf ▪ priorities determined according to the size of the professional development budget or competing systemic initiatives ▪ prior learning of teachers ignored.	
Timing of professional development	Timing obstacles included: ▪ dependence on availability of external experts when deciding times for PD in regional locations ▪ distance and time spent travelling to hear experts ▪ after-school time period not optimal ▪ individualised, early learning could not be easily accommodated.	Timing catalysts included: ▪ attendance at different significant professional development events within a short period of time.
Workplace and classroom implications	Negative implications included: ▪ lost momentum when time lapse between PD and implementation was too great.	Positive implications included: ▪ assistance in identifying practices that needed to be changed ▪ provision of a broader view of assessment practices.
Other positive and/or negative aspects of professional learning	Other general, negative aspects of professional learning included: ▪ no overall professional learning plan evident.	Other general, supportive aspects of professional learning included: ▪ participation in research ▪ provision of professional readings ▪ seeking additional professional development opportunities.

6.4.7 *Resourcing to support new reforms*

Substantial resources were provided by Education Queensland at the time of this project. The assessment resource package included a video, newsletters and publications that were handouts provided at the assessment workshops (see

Appendices 1 and 2). A small team of presenters of the assessment workshops travelled extensively throughout the state.

Naomi was the only teacher to acknowledge the need for resourcing at the commencement of this project. She commented on the need for appropriate resourcing to support teachers' acquisition of new knowledge (p. 4: i. 1). She emphasised the need for greater financial support from Education Queensland for the implementation of new assessment reforms (p. 4: i. 1).

In fact, additional funding for all Teacher Generated Task training that Betty and Naomi attended were a direct result of being a trial district. Both teachers were released from the classroom so they could attend training during school time. Naomi was provided with additional leadership training. Betty received additional in-class time to refine her task and criteria sheet. Whilst Betty acknowledged and appreciated this support, she recognised that the extra site-based release time required to write her Teacher Generated Task was not financially sustainable without being part of a trial. Table 6.11 summarises the teachers' perceived obstacles and catalysts. Education Queensland's assessment trial resources are included in the figure.

Table 6.11 Resourcing to support reform

SUMMARY: Resourcing to Support new reforms		
Topic	**Obstacles included**	**Catalysts included**
Physical Resources	▪ lack of physical resources to support change in the classroom.	▪ the spending of Government monies to overcome resource deficiencies. ▪ an array of Education Queensland publications and handouts (see Chapter 2, Appendix A & B)
Financial Resources	▪ current Government spending on the trial unsustainable for the whole system.	▪ additional, follow-up teacher release time.

6.5   THE EMOTION OF CHANGE: JOURNEYS OF THE HEART

Only hints of the climate and tone of the journey had been provided up to this point. As I re-read the interview transcripts it became apparent that there were hidden, affective processes facilitating our movement forward, like the oil in the engine of a vehicle. As we travelled, the colour and vibrancy of our journey was enriched

through a continual use of emotional words and phrases to express both tension and celebration.

It was clear that emotions were an automatic and central part of teachers' narratives. Emotions were expressed frequently and powerfully by the participating teachers. Gestures, varied voice tones and feelings breathed life into the stories told. At first, teachers' emotions appeared to mirror the external obstacles and catalysts already documented. However, a closer examination revealed that the positive and negative emotions experienced by the teachers were a much more complex part of the ebb and flow of our journey together. Expressing negative emotions was not only a way of identifying the size of the obstacle and one's feelings towards it, but at times, was also a way of navigating around a particular obstacle.

6.5.1 *Types of emotions*

An array of emotions was expressed by the teachers throughout the journey. Joan and Naomi made early, tentative steps towards our negotiated destination and these two teachers spoke articulately about the emotional impact of early assessment changes. They expressed negative emotions that reflected times of stress and tension. Joan used emotive words as she spoke of her struggles (p. 8,9,10: i. 1) - confusion (p. 7: i. 1) blockages (p7:i1) and difficulties (p6:i1). Naomi's 'big issues' (p. 2: i. 1) led to feelings of being 'bogged down' (p. 2: i. 1) when attempting to implement new assessment practices.

High points of tension appeared as an indicator of significant obstacles. Deeper issues, such as when the reforms challenged teachers' own views of assessment or when attempting new practices appeared to be challenging their existing capabilities. For Joan, a cause of angst was her attempt to shift from a numeric, summative system to writing text for standard descriptors (p. 3: i. 1). Naomi struggled with the additional dilemma associated with 'letting go' of old beliefs and practices. At these times, emotions were raw and overwhelming and self-confidence appeared threatened. During the middle phases of the research, Joan exemplified this lack of self-confidence. Whilst she was introducing a quality, life-like task (and students were responding well), she continued to fret about the wording of standard descriptors in her unwritten criteria sheet (p. 2: i. 2). Again and again, she returned to explain how new, engaging practices could be even better. She spoke of feeling

'under a lot of pressure' (p. 10: i. 2). Positive emotions were expressed when there was movement along on the road or when the teachers recounted student progress or student engagement. All three teachers were most animated when speaking of their students. Betty warmly referred to her students and expressed excitement about the possibilities associated with her chosen assessment reform (p. 2: i. 1). Naomi was able to express personal satisfaction with what she had done and how she had used her new assessment knowledge (p. 19: i. 3). Joan found the changes she had made 'exciting' (p. 1: i. 2) and professionally satisfying (p. 20: i. 3).

Interestingly, for both Naomi and Joan, positive emotions often occurred at the same time as negative emotions surfaced, as a kind of 'emotional duality'. Alternatively, these conflicting emotions were associated with the same practice. For example, Joan, as well as worrying and feeling confused, and blocked, was positive and excited (p. 9: i. 1). She took the long view (p. 8: i. 1) and spoke about a 'journey already travelled'. In this way, she was able to focus upon the steps she had already taken towards achieving her goal. She felt that her whole idea of assessment had changed and provided her with a new purpose for planning (p. 9: i. 1). Naomi felt bogged down and yet she too was positive and enthusiastic. She explained that her new assessment knowledge was like 'building blocks' in place (p. 16: i. 1). This gave her a sense of increasing control.

I wondered if this duality was another strategy to overcome negative or fearful emotions. Recognising another, more positive aspect somehow diminished the size of the negative or fearful emotion. Naomi captured this quite clearly when she explained how she was adjusting tasks to accommodate her new knowledge about outcomes at the end of Immersion Training. She said, 'it's exciting, but it's scary.' (p. 1: i. 2) Joan commented that not having a criteria sheet at the beginning of the unit was a mistake and then tried to retract that idea as if she didn't want to admit this to me or even to herself (p. 2: i. 2). And yet, during this period she also said that it was important 'not to be scared to have a go…or find that it's going to be wrong…you've got to have a few failures' (p. 16: i. 2). Teachers worked particularly hard during the middle phases of this project to reassure themselves and maintain a positive and yet realistic perspective.

6.5.2   *Emotions and relationships*

Participant teachers' relationships with others created emotional tensions. By mid-way, Naomi expressed her loneliness and isolation which were compounded by her acquisition of new knowledge (p. 8: i. 2). By journey's end these feelings of loneliness had increased for her. Naomi acknowledged that despite her self-management strategies to try to overcome professional loneliness she actually could not manage by herself and this was a source of annoyance and frustration (p. 20: i. 3). Joan and Naomi's request for non-judgmental practice time implied that they recognised their vulnerability and wished to ensure that, when transitioning to new practices, they could minimise any sense of failure by knowing that judgment had been suspended for a time. Whilst Betty enjoyed collegial relationships with her peers, she chose to wait before sharing her assessment innovation with staff members. Despite her overall confidence and assurance, this was evidence of vulnerability. Perhaps she wanted to wait until she had some concrete success to report and demonstrate.

6.5.3   *Internal strategies: Maintaining emotional equilibrium*

Over time I observed numerous strategies used by each participant teacher to re-establish emotional equilibrium. The emotional journeys of the participant teachers revealed inner tensions and struggles, so I needed to listen carefully to identify how these were overcome. These self-management strategies occurred at times of heightened emotionality.

Joan and Betty used the strategy of 'self-talk'. Joan encouraged herself to focus on criteria sheets. Her self-talk was like a script helping her to negotiate the obstacle she was encountering (p. 9: i. 1). Mid-journey she continued to use 'verbal asides' like footnotes in her script that were spoken quickly and quietly. As she experienced increasing frustration with the development of standard descriptors on her criteria sheet, she muttered, 'it would be good if someone just gave me those words' (p. 2: i. 2). Betty's self-talk reflected her excitement as she made discoveries about formative assessment practices. She laughed and gesticulated as she said to herself "Sit down – this is what it is all about!" (p. 3: i. 2)

Over time teachers displayed a number of different reflective strategies. Betty chose reflection with a particular focus. Whilst attending two conferences she explained she was 'thinking all the time' (p. 11,12: i. 2). She also commented that the idea of peer and self-assessment was sitting in her head and she was 'mulling it over' and 'gathering' and 'adding' while she was gathering (p. 11,12: i. 2). Reflection was helpful when considering differing philosophical perspectives. When she subsequently attended the Teacher Generated Task training that appeared to have juxtaposed philosophical positions (p. 6,7: i. 2) she spoke of 'working it through (in her mind)' (p. 3: i. 2). Again this was reflection with a particular focus.

Reflective processes were used to imagine the concrete which often led to action. Naomi provided an example of this. Following her Teacher Generated Task (Immersion Program) Training, she spoke of 'walking things through' in her brain and asking 'what would that look like' (p. 10: i. 2). Betty also referred to this link between thoughts and actions. She spoke enthusiastically of the impact of the Multi-Age conference and how she was inspired to 'go and do' (p. 3,4: i. 1). Finally, teachers also used inner thought processes to self-correct. Joan demonstrated this when she considered different students' achievement capabilities. She spoke of getting previous perceptions 'out of her mind'. By implication, this process assisted her to let go of former, more limiting perceptions.

Naomi exemplified her ability to draw on inner strength (p. 14: 1. 2) as she attempted to develop a buffer for her feelings of isolation and professional loneliness. She acknowledged that the 'inner me' was very important (p. 15: i. 2) and again referred to her creativity which was a personal quality from which she drew strength.

In summary, the centrality of emotions was evident. The teachers expressed a number of both positive and negative emotions and at times displayed emotional duality, illustrated when they expressed both positive and negative emotions at the same time. Whilst emotions were linked to the change process, they also featured when teachers mentioned their peers. The inner, hidden processes such as self-talk and reflection were vital strategies to synthesise divergent messages, clarify and justify new strategies and re-establish emotional equilibrium. Teachers' individual reflective processes were particularly rich and diverse. Interestingly the strategies to establish equilibrium were also used to affirm and celebrate progress, making our

journey much richer and filled with insight. This emotional journey is summarised in Table 6.12.

Table 6.12 The Emotions of Change

SUMMARY: Journeys of the heart	
Topics:	**Evidenced by:**
Emotional Centrality	▪ use of emotive language frequently and powerfully in narratives (unsolicited by researcher) ▪ use of gestures, varied voice tones, general use of emotional language ▪ use of emotional language when negotiating difficulties.
Diverse, expressed emotions	▪ expression of negative emotions at 'high points of tension' ▪ expression of positive emotions (such as confidence, self-satisfaction – linked to journey travelled acknowledged, student engagement & student progress) ▪ expression of emotional duality where both positive and negative emotions were expressed simultaneously
Peer Relationships and Vulnerability	▪ professional loneliness as a pervasive and challenging emotion ▪ feeling of vulnerability during reform transition
Maintenance of emotional equilibrium and wellbeing	▪ self-talk/emotional script ▪ reflection drawing upon inner strength and reaffirmation of personal qualities

6.6 THE RESULTS OF CHANGE

We spent eight and a half months together on the road. As teachers described the changing landscape, it became apparent that students were their central focus. In this section I examined the changes that teachers made.

6.6.1 *Changed classroom practices*

All teachers made significant changes to their classroom practices and increased their pedagogic repertoire. Betty developed six new formatively focused practices that provided students with the opportunity to consider their learning in a variety of ways. Students developed skills to design criteria. Betty called them 'success criteria' and negotiated the standard descriptors with her students. She also refined her existing practice of peer assessment. Prior to data collections, students commented upon their peers' oral presentations. Now students designed success criteria for a range of classroom projects. She even encouraged her students to help write a test to be used at the end of their unit of work. Betty commented that, whilst she was unable to use

the students' suggestions, she learnt some important lessons about the conceptual level students had reached and the knowledge of the subject area they required to undertake this activity in the future (p. 18: FG).

Joan's new assessment practices reflected her shift from giving marks to providing rich learning experiences so students could demonstrate learning in authentic situations. Joan's journey-goal to develop an effective criteria sheet that was distributed at the commencement of a unit of work was achieved by journey end. Providing opportunities for students to share their learning with diverse audiences was an additional feature of Joan's journey which was achieved as part of the assessment task.

Naomi expanded her repertoire of classroom assessment practices. She felt that her existing practices of sharing learning experiences and focusing on real life and life like scenarios were affirmed. Her goal was to develop an effective task sheet and criteria sheet for her students. Throughout the data collection period she continued to develop appropriate language for standard descriptors. Her focus ensured that the standard descriptors aligned to her selected Key Learning Area outcomes. This had been a feature of training she had undertaken during the journey.

Betty and Naomi created two innovative tools other than criteria sheets. Each assembled a teachers' folder and a resource that allowed students to monitor their learning. The teachers' folder that they created was designed to be a professional aid to help them make sense of their new learning. For Betty, this folder focused on her learning. Naomi used her folder to track Key Learning Area Outcomes so that she was confident that she was still 'covering everything' whilst enacting her new assessment knowledge. The student resource developed by both teachers took the form of a writing book for students that had one purpose in common - the collection of student assessment data. Other purposes for these student books differed. For Betty, the book was chiefly a reflective tool so students could focus upon their learning. For Naomi the student book was a tool she used to track student progress and enhance her ability to make accurate judgements. Table 6.13 lists the teacher-nominated practices chosen at the commencement of the journey together with the changes that were made during our journey together. New practices are listed vertically and similar practices are aligned horizontally. The practices in italics

indicate existing assessment practices that were refined throughout the journey. Of all the changes, there was only one that was common to all three teachers; the development of criterion-based assessment practices.

Table 6.13 Teachers' New Assessment Practices

BETTY	JOAN	NAOMI
SELECTED ASSESSMENT REFORM: The teachers nominated to:		
Explore and implement 3-way reporting involving teacher, carers and student.		
Develop peer assessment practices		
Develop self-assessment practice		
	Develop quality task sheets. Design an accompanying criteria sheet with standards descriptors	Create quality assessment tasks to capture learning and link to multiple learning outcomes Design an accompanying criteria sheet with standards descriptors.
⇓	⇓	⇓
NEW ASSESSMENT PRACTICES: The teachers currently:		
	Develop an effective Task sheet	Develop an effective Task sheet
Start lessons with WALT (We Are Learning To) - and recording what an HA looks like		
Develop a criteria sheet to accompany the task sheet and design success criteria with the students	Develop a criteria sheet to accompany the task sheet	Develop a criteria sheet to accompany the task sheet
	Share learning with parents and peers	*Share learning with parents and others more effectively*
	Create Real-life and lifelike assessment task scenarios to enhance learning	*Create Real life and lifelike assessment task scenarios to enhance learning*
Produce a student Reflection Journal allowing students to: reflect upon their learning summarise learning success		Produce a Student Learning Log so the teacher and students can: collect (and review) student work summarise learning

Develop a Professional Learning Folder to collect readings and professional development handouts		Develop a Tracking Folder to track Key Learning Area Outcomes and align with assessment tasks.
Develops Oral Reflection & Self-Questioning strategies for students		
Trialling Student designed tests		
Refining Peer Assessment processes		
	Greater participation in the local Science Network	
		Report card comments reflect teachers' new learning
Focussed Observation comments that relate to learning		
PERSONAL, PROFESSIONAL RESOURCE		
Teacher Folder that focussed upon her own professional learning and growth		Teachers' Folder to track core learning outcomes whilst undertaking assessment reforms.

6.6.2   *Change for Students*

All three teachers recognised the importance of the changes they had made for their students. I was able to document a number of changes that specifically catered for student learning. First, there were concrete, physical changes. Betty's students had a new book - their reflective journal that included summative and formative assessment so they could track their own learning journey. Naomi's students had a similar learning log. Second, there were subtle changes in class dynamics. In Betty's class, students had substantive conversations with one another and with their teacher as they focused on the learning intent of lessons and activities. This process significantly enhanced student motivation. Likewise, in Joan's class, student engagement and motivation improved (p. 10: i. 2), providing Joan with particular satisfaction. She explained that student absenteeism was no longer an issue in her class (p. 1: i. 3).

In two classrooms there was an increased focus on sharing learning with others. In Joan's and Naomi's classes, students continued to work on realistic activities and

give presentations to parents to celebrate learning. For both Joan and Betty the new assessment was about giving students ownership of the learning process (B. p. 7: i. 2; J. p. 6: i. 2). This in turn provided additional gains, including clarity of direction, (p25:FG) focussed discussion (p. 2,3: i. 3) and improvement in learning standards (p. 2: i. 3). Finally, teachers' perceptions of their students were changed. Joan acknowledged that her perception of particular students had changed as a result of her new assessment knowledge. She referred in particular to one student who exceeded her expectations by demonstrating significant deep understanding (p. 7,8: i. 3).

At journey's end, the magnitude of change was apparent by the greater array of formatively-focused and learner-centred assessment practices utilised at the classroom level. There continued to be a strong emphasis upon written assessment and written reflection. Compared with the teachers' personal goals established at the commencement of this journey (and the numerous obstacles), the increased number of new and refined strategies provided a high level of satisfaction for the participants. Betty recognised the depth of the changes she had made and she commented that she had a 'whole range of strategies…not just little reporting ideas' (p. 2: i. 3). Joan noted that she was now teaching 'for a real purpose' (p. 26: FG).

The importance of the children was a factor, often described in emotional terms by all three teachers. In fact, this was one of the strongest change-themes of all. The student-teacher relationship was a bond that was deep and significant. Betty spoke of being 'very excited' (p. 2: i. 3) about the scope of her assessment changes. She explained she had embraced new assessment knowledge and practices associated with peer and self-assessment so wholeheartedly because it provided students with control of their learning and greater understanding of the learning process (p. 7: i. 2). Betty spoke on a number of occasions of the students' responses with surprise, excitement, wonder and humour. The sense of pride and professionalism that attended successful reform was evident. For Betty it continued to be important to 'keep them (the learners) in the picture'. This was what she called her 'mantra' that she displayed on the front of her folder (p. 12: FG).

Joan referred to student engagement when she exclaimed, 'Oh! Look! I just feel so excited about it…' (p. 10: i. 2) when commenting on the success of the unit's

culminating activity. In fact, Joan gauged her success by her students' performance. She explained, 'when you watched them with their parents, they WERE scientists…which I thought was fantastic' (p. 6: i. 2). Joan expressed growing confidence with new assessment knowledge. She explained, 'I think because it was so successful with the kids, I think it makes you feel, 'Yes. It's working!' (p. 15: i. 2) This enhanced Joan's confidence to be a risk taker (p. 15: i. 2) and motivated her to improve and develop her classroom assessment practices further. (p. 16: i. 2).

At the end of the data collection period, Naomi's satisfaction was framed relationally with her students in mind. She had completed a criteria sheet and was able to note further pedagogic improvements for her students. These included increased student motivation and personal enthusiasm (p. 5,6: i. 3). She stated that she was 'interested that (her) kids were good learners…And I want them to be creative' (p. 16: i. 3). Naomi summed up this notion by stating that others could see her assessment changes because she let her 'classroom talk' (p. 16: i. 3) and her students' work and enthusiasm spoke volumes on her behalf. Table 6.14 summarises the changes in assessment practice for students.

Table 6.14 Changes for Students

SUMMARY: Changes for Students	
Topics	**Evidenced by:**
Physical improvements for students	▪ Better ways to demonstrate and organise learning (student reflective journal, student learning log)
Strengthened Classroom Relationships	▪ Changes in classroom dynamics (substantive conversations increased motivation, increased student engagement)
Enhanced Student learning	▪ An increased focus on sharing learning with others (audience included parents and student peers) ▪ Greater student control of learning
Strong emotional connections	▪ Strengthening of student-teacher bond ▪ Celebration of student engagement ▪ Heightened student motivation and creativity leads to increased teacher satisfaction

6.7   APPROACHES TO CHANGE:

As the individual teacher's journey narratives were examined, it became clear that each teacher developed a unique approach to maintaining or regaining personal

control and making sense of new assessment reforms in their classrooms. They provided information about their individualistic strategies. For example, Naomi admitted to writing 'copiously'. Betty used her pre-existing philosophy of 'child-centred learning' to make judgements about what she would introduce and what she would ignore. However, over time, I was able to build a picture of individual, sustained change processes that gave each teacher greater control of change in their classroom environment. These processes demonstrated how they personally translated reform into classroom practice. I decided that the best way to explain the different processes was through an additional journey metaphor. Travelling a long and difficult journey required transport of some kind. Education Queensland's assessment reform was like a vehicle of change; a vehicle available to all travellers. Everyone needed a vehicle to ensure arrival at the destination. To appreciate how change happened, I identified how these participating teachers managed their new reform vehicles. What they said and did exemplified differing change processes.

6.7.1 *Change Process 1 – Modifying the vehicle*

Naomi received her new vehicle. Straight away she inspected it and decided to modify and adapt her vehicle to make it more personally useful. It needed some additions and changes. She was preparing for a 'long road' (p. 1: i. 1). Her job was to make these changes based on her previous experience on the road. She recognised that she may need to make decisions about discarding some long-cherished accessories of her own. Alternatively, they could even be part of the modifications that she made to this new vehicle.

Along the road she became frustrated and worried. She experienced significant obstacles. As we travelled, Naomi took every opportunity to work on her vehicle. She gathered vehicle-parts, she sorted these parts and 'blended' and 'mixed' them to modify her vehicle inside and out. She recognised what she was working on was a complex and challenging undertaking (p. 1: FG). For Naomi, personalising was important. She decided that, as she 'put it together', her new vehicle needed to be 'what worked' for her (p. 5: FG).

Naomi was an adaptor, re-creating and modifying reforms until she was sure her conscience was satisfied. Old practices were scrutinised, re-adapted and meshed with the new to ensure that nothing that was important was left out. The quality Naomi

mentioned often was her creativity. It was one reason she saw herself as ready to begin reform. The other two qualities that emerged were her conscientiousness and persistence. She needed to reassure herself that, whilst undertaking change she was still conscientiously covering everything (p. 3: i. 1). It provided impetus for the development of the teacher resource book and created burdens and dilemmas during the journey. These qualities, particularly her value of creativity, supported Naomi's adaptive approach to reform and change.

6.7.2   *Change Process 2 - Learning to handle the vehicle*

Joan received her vehicle; a sturdy, practical one. She did not question the style or make of her vehicle. She did not modify it in any way. Her job, as she saw it, was to become an effective driver of this vehicle. She needed to get to know its individual features, one by one, over time. In her mind, she was already a driver. Her strategy was to gain competence and 'to keep building' (p. 15,16: i. 2) upon the skills she already had.

For Joan, managing this new vehicle on rough terrain was 'a work in progress' for a substantial length of time (p. 15: i. 2). She appreciated multiple opportunities to practise and develop her skills. She needed all her skills to negotiate a road with a substantial number of obstacles and hazards. At times she paused to celebrate the journey travelled thus far. Other times she became anxious and frustrated with her vehicle and even the journey itself. As time passed Joan gained confidence with particular features of her vehicle. Some features appeared more useful than others but she did not question their place on the vehicle. Towards the end of the journey, Joan could recognise that she had undertaken a significant journey. To her, there was still more road to travel and additional skills she wanted to develop. She was going to keep practicing those skills and persist with the journey.

Joan was a person who practiced (p. 14: i. 3), repeated, evaluated and then prepared to improve next time. She saw herself as a persistent person; as someone who wanted to implement a reform accurately. She explained, 'The more often you do it, you've got to end up…a much better teacher…This is early days and I'm learning every time I go' (p. 8: i. 3).

However, changing from a numeric marking system to criterion-based assessment provided undercurrents of uncertainty for Joan. This was reflected by her heightened negative emotions (p. 6, 7: i. 1). Perhaps there were two clues that illuminated Joan's approach to change. First was her demonstrated persistence. Whilst she found the language of standard descriptors difficult to master, she practiced and sought exemplars and by journey's end she was able to report that she had completed a criteria sheet to her own satisfaction. The second clue lay in her request for a period of non-judgmental practice for it was this request that also revealed her primary approach to change. In the end she was able to acknowledge that her whole thinking (about assessment) had changed (p. 16,17: i. 3), thus affirming that practice was an appropriate approach to personally manage change and reform.

6.7.3 *Change Process 3 – Vehicle brands – settling for no less than the best*

Betty received her vehicle, parked it and walked away. She could not see any reason for a new vehicle when she already had a vehicle that was ready for the road. She was a 'Holden' girl and she did not recognise this new vehicle brand so she chose to ignore it at the start. She was becoming increasingly dissatisfied with her current model but it met the basic requirements.

However, Betty received information about this new vehicle's worth from a variety of sources. She attended a couple of events that made her reconsider. She read literature that also highlighted some key features of the vehicle. She decided it was worth a second look. Betty returned to inspect her new vehicle carefully. She discovered that perhaps it had value after all. However, she did try to 'second guess' the manufacturer as she examined a couple of features. She decided to modify these on the road if necessary.

Betty took the new vehicle for a road test. She discovered she was in control of a very powerful vehicle; it was a new brand and in every way it drove like a V8 Holden. With her previous experience and her new knowledge, she realised this vehicle was superior to her existing model. Instinctively she could predict how it would handle in different situations. It certainly was a good vehicle to negotiate serious obstacles on a rough road. It also had potential as a vehicle for others as they learnt to drive too. She quickly made use of its many features.

Betty's approach was to be a values analyst. She consistently explained that she was a child-centred teacher. This impacted upon her outlook as she experienced a shift from director to facilitator of learning (p. 12: FG) and provided an explanation for her transformation from reform survivor to reform advocate. Certainly, Betty's previous uncertainty and wariness associated with aspects of formative assessment had changed completely. She became enthusiastic about peer and self-assessment and the possibilities this new perspective offered. Betty recognised a broadened approach to assessment provided by her new knowledge. She demonstrated this when she referred to her 'whole range of strategies', not just 'little reporting ideas' (p. 2: i. 3). Once she understood that her assessment innovation aligned and was congruent with a student-learning orientation, Betty blossomed. For her a child-centred approach was the yard-stick used to evaluate reforms. Until she was certain there was alignment, she had appeared resistant, unwilling to begin aspects of the reform. When she thought that aspects of the reform were not child-related she was even prepared to be subversive. Her approach to change was analytic but once she understood the changes their impact upon her practice was significant.

All three teachers adopted very differing approaches to change and reform. The most important strategies for coping with change, used by the teachers, were modification, practise and analysis. For Naomi, the focus was to adapt the reform to suit her practice. For Joan, the focus of practice was to get the reform right by adapting her own practice and, for Betty, the focus of analysis meant scrutinising the change's underlying philosophy and comparing it with her own personal beliefs before embracing the reform fully.

6.8 CULMINATING AND CONTINUING: JOURNEY REFLECTIONS TO SHARE

I reflected upon the time I had spent with the three participating teachers. We began with anticipation and enthusiasm. The teachers shared their reasons for joining the journey. They hoped for change and camaraderie. As I prepared to leave the journey, it became clear that there was no definite ending; merely a fork in the road. The participant teachers would continue with assessment innovation. The assessment tools the teachers developed had already been included in each school's curriculum plans. Betty intended to share her innovation with her staff. The camaraderie and tone of the final focus group interview provided encouragement to individual

teachers to continue their journey of assessment reform. I now travelled in a different direction, continuing to learn but moving aside to reflect and reassess our journey. In the next chapter, Chapter Seven, the literature collated in Chapter Three would provide me with an opportunity to compare the experiences of my fellow travellers with those of others who had also travelled this road.

Chapter 7:   *Conclusion*

7.1   INTRODUCTION

The purpose of this chapter is three-fold; to discuss the cross-case analysis in light of existing research literature, to demonstrate how this research project has contributed to the growth of knowledge in the field of teacher change as well as to summarise the key findings. The research problem is revisited (7.2) and the research questions that were outlined in Chapter Three are used as a framework for comparing my research findings with the literature. In summary, my overarching research question was: *How do teachers respond and change over time as they implement an educational reform?* As the importance of teachers' inner worlds of their beliefs, values and emotions became apparent, an additional reflective question was added: *How do beliefs, values and emotions impact on the implementation of reform?*

Hence, the first section is framed by the overarching research question that asks how teachers respond and change over time as they implement an educational reform (7.3). The second section features teachers' internal, affective change journey (7.4) and the third section enquires about teachers' existing understanding and use of assessment in the classroom (7.5) to provide a juxtaposition when returning to the overarching question about teachers responding and changing at the end of the journey (7.6). Finally, I summarise my personal learning (7.7). Each section includes reference to the key literature documented in Chapter Three to identify alignment with existing research and highlight additional, illuminating elements of this research project. This is followed by a summary of the key findings drawn from this research project.

In the previous chapter the metaphor of a journey was used. When a memorable journey is completed, collecting and collating the images and the stories is a pleasurable task. It provides an opportunity to relive and reflect upon the significant aspects of the journey. The road-maps or research literature, used to provide original direction and information for this project, are revisited. Stories gathered from Betty, Joan and Naomi infuse additional understanding into existing maps and provide new insights for future travellers.

7.2 THE PROBLEM REVISITED - JOURNEY REFLECTIONS TO SHARE

The problem that underpins this research is the complexity brought about by multiple, overlapping reforms and mixed messages as teachers began implementing trial components of Education Queensland's assessment reform agenda (The Assessment and Reporting Framework, [Education Queensland, 2003]).

The purpose of this research was to understand how individual teachers perceived and managed assessment reform against the backdrop of multiple systemic reforms and mixed messages about assessment. While acknowledging the importance of pre-existing views and practices, the central objective was to focus upon how individual teachers responded and changed during a period of educational reform.

Therefore, I chose to study how particular teachers made changes to their assessment practices at a time when the employing authority, Education Queensland, was implementing a trial assessment reform. During the same period, teachers were simultaneously implementing ongoing pedagogic and curriculum reforms. All teachers in this project volunteered to participate. One teacher explained her views about the status and significance of a teacher's role when implementing change. Naomi said, "Teachers are the last in line to get information but the first to have to make changes" (Questionnaire; Naomi:p. 2). In this research project, the methodology of narrative case study provided a voice for each teacher so they could share their journey of reform and change. Hence, my overarching research question was: *How do teachers respond and change over time as they implement an educational reform?*

7.3 TEACHER CHANGE - TEACHERS' CHANGING PRACTICES

To examine how teachers respond and change over time, literature in this broad field had been sorted and clustered into themes.

7.3.1 *Intensification – Time*

The implementation of new reforms required substantial time (Guskey 2002; Jones & Moreland, 2005) and this was particularly important if teachers were implementing policy (Black & William, 2003; Cohen & Hill, 2001) or if the reform was a complex one that focused on assessment (McCallum, 2001; Neesom, 2000; Shepard, 1995). At the beginning of this project, all teachers were concerned about the lack of time.

In addition, the pace of change increased teachers' concerns. The optimal pace for effective change had been described as slow and deliberate (Black, et al., 1998; Conca, et al., 2004). For two teachers, the assessment reform pace was neither slow nor deliberate as they struggled to manage the complex and unexpected issues that arose during early experimentation. The problem associated with a lack of time continued throughout the journey for both teachers. Emotional language and varied voice tones were used when discussing time-related concerns indicating heightened stress levels (Valli & Buese, 2007). The comment was made that information about new reforms was expanding at a rate faster than the teacher could comprehend.

Time management was a related issue for the same teachers. One explained about the need for pedagogic continuity, whilst at the same time mastering new assessment practices. As a result, the teacher was concerned that students' progress may have been impeded and the research project goals were not easily attained. In addition, both teachers were concerned about professional judgments being made by others about their classroom practices. These were all indicators of teacher overload as described by Fullan (1993).

Whilst teachers at times were distressed and overloaded, they also demonstrated an ability to celebrate the distance they had travelled. This suggested that they did not experience a loss of wellbeing (Valli & Buese, 2007) but instead demonstrated the personal quality of resilience (Leithwood & Betty, 2008). An interim 'tick and flick' assessment process demonstrated one practical, coping mechanism until mastery of criteria sheet writing was achieved. Two participants independently suggested the need for a period of non-judgemental reform-practice time when they could trial innovations in a climate of support and encouragement. This proposal provides a positive alternative to the compounding effects of intensification when increased scrutiny is demanded (Ballet & Kelchtermans, 2009). A non-judgemental, reform-practice time would allow teachers' to openly acknowledge difficulties and even mistakes as a way of developing improved practice.

A third teacher's narrative reflected a different, time-related perspective. At first, this teacher did not acknowledge new systemic reforms. She decided to explore peer and self-assessment as part of this research project. Other aspects of systemic assessment reform did not interest her as she did not have time and stated that she needed to be a

survivor. Within a short period, this teacher attended two conferences that assisted her understanding of the reforms. Immediately she began enthusiastically enacting both her nominated reform of peer and self-assessment, as well as developing tasks and criteria sheets as an integral aspect of her innovative practices. This teacher received more time to reflect and understand the reforms, and yet there appeared to be additional reasons for such rapid transformation from resistor to successful implementer. Particular researchers (Fullan, 1991; Guskey, 1995; Southwest Educational Developmental Laboratory, 1997) indicated that time was only important when considered alongside other factors such as collegiality or professional development. The experience of this participant will be reconsidered in a subsequent section of this chapter.

FINDING 1: TIME

A. *Teachers' shortage of time to implement reforms was compounded by a lack of understanding of or a misunderstanding about the reforms.*

B. *Time shortage caused considerable distress for teachers. Extra time to understand the reforms facilitated implementation.*

C. *Attempting to implement reforms, whilst at the same time continuing to provide effective classroom instruction, was problematic. Teachers requested a moratorium during reforms so that practice of new strategies could occur without judgment.*

7.3.2 *Intensification – Reform complexity*

This section examines the consequences of simultaneous, overlapping reforms and mixed messages about the reforms. Three main problems were identified in studies related to reform implementation; a lack of reform consistency, policy ambiguity and reform distortion when the reform is finally implemented (David & Cuban, 2006; Spillane, et al., 2002; Clandinin & Connelly, 1998; Hargraves, et al., 2002). All three problems occurred in this research. I chose to examine ambiguity and lack of consistency together because, in this research project, they are linked. Distortion appears as a consequence of these and became apparent in resulting practices.

The lack of reform consistency, together with policy ambiguity, was exemplified in a number of ways. First, messages about assessment that came from the employing authority were difficult to interpret and changed over time. This was discussed in Chapter Two and led to confusion and frustration for the teachers. Confusion was compounded because the participant teachers' current reporting practices were not even effectively linked to the outcomes-based syllabi. Such inconsistencies contributed to teachers' difficulties as they worked hard to implement the assessment reform. As the research project progressed, the local education district supported teachers as they developed their task-based assessment understanding. Two teachers had access to district resources which proved helpful, particularly when school-based followup was provided. The journey was much more difficult if there was little collegial support and no on-site followup.

Teachers' narratives made it clear that the systemic assessment workshops and accompanying tools that were meant to introduce teachers to the assessment reform were not understood. In addition, there were pre-existing issues associated with curriculum reform implementation and with teacher engagement. One teacher questioned the assumptions made by the system about rapid and easy acquisition of new curriculum and assessment knowledge and practice. She identified and challenged words and phrases in a systemically published broadsheet that appeared to adopt opposing perspectives about students and assessment within the one article. The other teachers who were early experimenters did not appear to recognise or question any of the system's assessment messages, but instead were keen to implement the reform, unaware that the messages might not remain consistent.

This research project highlighted various ways that new practices became distorted as multiple overlapping reforms were attempted by the participants. Two teachers were acutely aware that they had not yet implemented the new outcomes-based syllabi effectively. The new assessment reform presented an additional and compounding challenge which created waves of negative emotions such as nervousness, worry and frustration. Hence, the ways in which the new assessment reform was implemented were initially less likely to 'mirror' the reform ideal as new knowledge was added to prior knowledge that was not yet fully understood or embedded in classroom practice.

Distortions occurred because explanations of underpinning philosophies were not given and therefore teachers lacked real understanding. This prevented them from responding easily or consistently to new and challenging reform situations (Hargreaves, et al., 2001). There were wide variations in coping strategies as each sought different solutions to emerging problems. Two teachers did not recognise that their issues with the reforms were philosophical ones, yet the problems they encountered had direct philosophic origins. These included difficulty in recognising deep understanding, concerns about shifting from a numeric system to criterion-based approach and setting benchmarks prior to viewing student work. The third teacher was much more determined. She struggled to locate the philosophy that underpinned the reform and was disappointed when appropriate explanations were not forthcoming.

Teachers' inability to locate models of the criteria sheets with standard descriptors created both frustration and distortion. These assessment tools were relatively new for teachers in a primary setting. Whilst the systemic assessment workshops explained tasks and criteria sheets in detail, there was no opportunity for these teachers to actually produce and critique their own products until the regional systemic assessment trial began. One participant teacher, who wanted to create a product to match an ideal model, searched diligently to find an exemplar criteria sheet but was frustrated by her inability to locate one.

The impact of multiple reforms and their inconsistent and ambiguous messages led to school-wide distortions of the reform (David & Cuban, 2006; Spillane, et al., 2002). A participant teacher from one school, who was working to implement assessment reform, mentioned she was ahead of her time. She was speaking the truth because many of her peers and her school leaders were developing a different school-wide reform, Productive Pedagogies. This demonstrates an additional intensification issue, namely that systemic reforms can occur at a pace that is too fast for schools to embed effectively. Hence, a dilemma for schools is whether to insist upon particular site-based, systemic reforms for all staff or to allow teachers with particular interests to attempt other reforms in a more individualistic manner.

In summary, research literature had identified a lack of reform consistency, policy ambiguity and reform distortion by the time it is implemented (David & Cuban,

2006; Spillane, et al., 2002; Hargraves, et al., 2002) and my research highlighted the impact of these obstacles upon teachers. As they shifted to formative assessment practices, they were not only struggling to make assessment changes, but were experiencing the successive, waves of systemic reform. They were expected to instinctively understand the assessment reform's philosophy and recognise its relationship to a variety of other concurrent, systemic reforms. Presumptions were made about teachers' understanding and implementation of previous complex curriculum and pedagogic reforms. In addition, changes to the systemic assessment message were not adequately explained to teachers. Thus, the assessment reform the participant teachers agreed to implement as part of this project was not a simple relocation from one point (summative assessment practices) to another (formative assessment practices) but a complex journey over rugged terrain with many potholes and hazards.

FINDING 2: INTENSIFICATION

A.   *Reform distortions occurred when teachers had not fully implemented the previous curriculum and pedagogic reforms. Reporting practices that did not match either the current curriculum reforms or the assessment reforms compounded this distortion.*

B.   *Multiple curriculum and pedagogic reforms were introduced in an unrelated manner during the same time period.*

C.   *When teachers had access to district resources and received additional class-release time, understanding of the assessment reforms was enhanced.*

D.   *Teachers' assumptions about the consistency of systemic messages impacted on their ability to implement reforms. A questioning approach proved more successful than assuming ongoing message consistency. Assuming that the message remained consistent meant being unaware of policy adjustments.*

E.   *Intensification is not only experienced by individual teachers but may be experienced by school communities, creating added dilemmas for both teachers and school leaders.*

7.3.3 *Professional growth - School communities and collegiality*

A positive collegial school climate is important for teachers when they are implementing change (Borko, 2004; Earl, et al., 2002; Fullan, 2000b). Each teacher who volunteered to participate in my project came from a different school and each described an array of diverse collegial experiences.

A number of aspects of collegiality documented in research literature were also experienced by teachers in this research project (Gallucci, 2003; Stoll, Fink & Earl, 2003; Richardson, 2003). Two aspects of collegiality that featured were the importance of sharing of values and the de-privatization of practice (Louis, Marks and Kruse, 1996). This created opportunities for critical dialogue whilst maintaining a climate of trust and respect (Borko, 2004; Guskey, 1995). One participant teacher recognised that she was now able to admit failures without fear of judgement, thus providing an example of de-privatized practice. Another teacher planned collaboratively with peers at a professional development session and, back at her school site, subsequently appreciated critical dialogue about her planning. By the end of this project she had implemented a range of elements of the systemic reform. Another teacher found informal professional conversations and peer critique helpful, but, for her, a prerequisite was an empathetic and trusting climate. This affirms the findings that when collective expertise and collegial support are provided, the possibility of reform success is enhanced (Putnam & Borko, 2000; Senge, 2000; Southwest Educational Developmental Laboratory, 1997).

Much of the collegiality documented in this project was informal. My analysis identified that these collegial connections enhanced reform progress, concurring with De Lange and Romberg (2003) who linked reform success to frequent, informal contact. Evidence has shown that better results are obtained if there is a whole-of-school focus emphasising collaboration, visioning and building upon existing strengths (Black, et al., 2003; De Lange & Romberg, 2003; Wiliam, 2007). Identifying this broader, formal professional learning community was not a focus in my research project, yet I had hoped that teachers might identify an over-arching, whole-of-school, collegial experience that would indicate a vibrant professional learning community. One teacher mentioned that she experienced an improved climate that was more empathetic towards teachers. Another, who was initially

resistant to trying a systemic assessment reform, found that working with peers in school time was very helpful.

Where there were elements of staff fractiousness, undertaking change exacerbated this. From the perspectives of some participants, peers failed to recognise expertise and appeared unwilling to support reforms. This contributed to a real sense of isolation (Guskey, 1995). One teacher's negative experiences remained unresolved throughout this project. However, this same teacher proposed her own strategy for overcoming professional loneliness by forming professional friendships with pre-service and newly graduated teachers.

School-based leadership is an important element of reform implementation (Spillane, Reiser & Reimer, 2002). Similarly, in this research project, participating teachers placed high expectations upon leaders to be implementers of change. Teachers' understanding of the pressures experienced by leaders varied. Embedded in participant teachers' comments were differing perspectives about leadership and leadership styles and, in one case, frustration about a leader's inability to articulate the philosophy behind the change. All recognised that a leader's knowledge and engagement with the reform was vital. Two teachers spoke highly of supportive peers and leaders.

The teacher who struggled with collegiality at a site-based level, saw this research project as an opportunity to expand her professional relationships. This raises an interesting possibility of inviting teachers to participate in research projects as an integral component of any reform. Such participation would enable teachers to experience a wider array of collegial interactions as well as provide an opportunity for their voices to be heard during the process of reform (Craig, 2009). Research reports would provide an overview of what has been achieved and give teachers a further chance to synthesise and reflect upon their learning. Research has a contribution to make to the lived experience of teachers. Projects can be vehicles for effective collegiality and opportunities for deeper reflection.

FINDING 3: SCHOOL COMMUNITIES & COLLEGIALITY

A.   *Where an informal collegial climate occurred in schools, it appeared to assist the reform process and was acknowledged and appreciated by teachers.*

B.   *When the school climate lacked collegiality, there was an overwhelming sense of disconnection resulting in feelings of loneliness and of being undervalued.*

C.   *Professional friendships and mentoring roles with pre-service and graduate teachers provide collegial opportunities.*

D.   *Leaders' knowledge and understanding of the reform was important. Teachers carefully watched their leaders to ascertain the leaders' personal engagement with the reform. Supportive leaders made a significant difference to teachers enacting change.*

E.   *Research projects based around educational reforms have the potential to provide a voice for participants as well as increased opportunities for collegiality and reflection during change.*

7.3.4   *Professional growth - Professional development events*

Two participant teachers in this research project stated that professional development made a substantial difference to their practice (Borko, 2004; Boyle, et al., 2003; Carless, 2005; Darling-Hammond & McLaughlin, 1995). Research findings about the characteristics of successful professional development emphasised four main features - specificity of training and follow-up, a practical aspect of professional development, availability of expertise and teacher reflection. This research project confirmed the importance of all these features while providing additional insights about each one.

Two teachers experienced substantive professional development off the school site. Together with teachers from other schools, they worked for two days to create teacher-generated tasks and criteria sheets ready for use in the classroom. After attending training, both teachers explained helpful features of the training highlighting the significance of specificity and scaffolding (Cohen & Hill, 2001; Hargraves, Earl & Schmidt, 2002).

One teacher expressed appreciation for subsequent collegial experiences with peers and the support of the curriculum leader aligning with Guskey's findings (1995) about the importance of followup. This was further substantiated when one teacher returned to school and found her new learning had an isolating effect that made her decisions about implementing the assessment reform more difficult. Cohen and Hill, (2001) mentioned difficulties experienced by teachers who did not have peers who

shared their professional learning and claimed that these teachers tended to revert to their previous practices. The teacher in this research project did not revert to previous practices. Instead she provided insights about professional loneliness, uncertainty associated with her decision-making and her anxiety because she received no reassurance that her new practices were aligned to the reform ideal.

Two teachers explained that they appreciated the practical component of professional development. One commented that the Teacher Generated Task (Immersion Program) produced results that were both 'splendiferous' and 'looking really good' (p. 5: i. 2). However, this teacher expressed a need to trial this new learning back in the classroom (Black, et al., 2003; Hawley & Valli, 2000).

Other researchers emphasised the importance of ready access to expertise (Carless, 2005; Newmann, et al., 2001). In this project, the impact of experts upon teachers was minimal because professional development was organised to suit the timetable of the visiting experts and the experts had no time to gain insight into teachers' existing assessment understanding. One teacher travelled to a neighbouring city to attend a systemic assessment workshop. The teacher later said that she needed to attend this workshop for a second time to understand the content. In one situation, experts were only available after school which was not an optimal time for effective teacher learning. Another teacher explained that when experts were only available for a given period, momentum was lost if changes to practice did not embed during that period. A third teacher attended one external professional development session with a well-known, international assessment expert and yet, attendance at this significant district event did not feature in her narrative. For her, both practice (Black, et al., 2003) and experimentation (Hawley & Valli, 2000) were the hallmarks of the change journey. The problem with experts leading the Queensland assessment reform project was the teachers' lack of access to them at a critical period when reforms were first being implemented in classrooms.

Finally, teachers' attitudes (Guskey, 2002; Van den Berg, 2002) and their ability to re-imagine their knowledge (Darling-Hammond & McLaughlin, 1995) were also found to be significant. One teacher attended two two-day conferences within a short space of time and spoke very enthusiastically of her attendance at one of these where she was able to synthesise the reform messages she was hearing. Her current

professional reading that included reading about formative assessment was also of great importance. This time of reflection was a turning point for the teacher who became a proficient implementer of the new assessment reforms. Thus, when significant professional development opportunities sent the same messages and where synthesising reflection occurred, the pressure for change was high and pedagogic reforms were adopted in classrooms.

In summary, the type of professional development was important. The most successful appeared to include an extensive, practical component or a practical application that connected with teachers' existing knowledge. Attendance at systemic assessment workshops was compulsory and experts were employed to present new assessment knowledge, regardless of teachers' existing knowledge and level of understanding. Thus, this type of expert advice had minimal impact. When professional development was more philosophically explicit, personally relevant and collegial, teachers' practices changed in significant ways.

FINDING 4: PROFESSIONAL GROWTH

A.   *The timing and the type of professional development undertaken by teachers was important if change was to occur. Practical elements of professional development were effective as was collegiality. On-site follow-up was a powerful catalyst for change.*

B.   *Professional learning was enhanced when teachers' existing knowledge was taken into account and presenters were explicit about the philosophy underlying the reform.*

C.   *The impact of expertise was minimal when no reference was made to local context and no links were made to the participant teachers' existing knowledge.*

D.   *Change was enhanced by reflection and professional reading.*

7.4   TEACHERS' INNER JOURNEYS - Enacting change

As analysis began, it became apparent that there were additional elements that influenced the way teachers responded and changed their assessment practices. Teachers' inner journeys (Clandinin & Connelly, 1998; Fullan, 2003; Neesom, 2000; Van Den Berg 2002) to enact change became apparent. Hence, a reflective question

provided impetus for further analysis: *How do beliefs, values and emotions impact on the implementation of reform?*

I had not asked any research questions about emotions, yet the varied voice tone and gestures of the teachers, their specific references to their feelings (both positive and negative) and their recounting of internal thought processes could not be ignored. It was a frequent and powerful part of teachers' narratives and highlighted the importance of the affective domain (Nias, 1996; Hattie, 2003; Hargreaves, 1998; Sutton & Wheatley, 2003). In addition, teachers' values and beliefs were often hidden, and yet they are inextricably linked to and influence teachers' actions (Vartuli, 2005; Fang, 1996; Spillane, Reiser and Reimer, 2002).

7.4.1   *Teachers' inner journeys to enact change – Experiencing and expressing emotions*

The literature indicated that there would be a diversity of emotional responses during times of change (Ballet, Kelchtermans & Loughran, 2006, Reio, 2005, Van den Berg, 20002) and this proved to be accurate for all three participants. At high points of tension along the journey, two teachers expressed a range of negative emotions including worry, confusion and fear. For these teachers, emotional expression was linked to change and they expressed strong negative feelings at the beginning of the data collection phase. Perhaps, as they struggled with unexpected difficulties associated with new knowledge, their sense of identity was challenged (Nias, 2000; Day, Stobart, Sammons & Kingston, 2006; Zembylas, 2005).

However, this does not explain the 'emotional duality' when teachers in this project expressed both positive and negative emotions simultaneously. Although the beginning of the project was a time when frustration and tension were expressed, at the same time there was the emotion of excitement. At other times on the research journey, positive emotions were predominant. These emotions included confidence and satisfaction that were linked to successful parts of the journey and featured student achievement. During times of change, teachers' self-perceptions and risk-taking altered (Ballet & Kelchtermans, 2005; Lasky,2005; Reio, 2005; Van Veen, Sleegers & Van de Ven, 2005;). Emotional scripts were used by teachers as they viewed change through an emotional lens (Schmidt & Datnow, 2005; Van Veen &

Lasky, 2005). Emotional scripts provided insights into teachers' self perceptions and how they self-managed change processes internally and affectively.

In this research project, it was difficult to clearly monitor changes to risk-taking behaviour for two reasons. I considered each participant teacher as a risk-taker in some way as each had voluntarily agreed to undertake reform as part of this project. Two teachers had already begun experimenting with the reform prior to data collection, making it hard to track variations to their risk-taking behaviour. However, one teacher did provide some insight at the end of the data collection phase. Whilst she had achieved her goals of creating a task sheet and a criteria sheet, she said she still felt nervous about not assigning numbers to demonstrate student success. This indicated that, despite affirmation from peers and students, changing from numeric assessment to criterion-based assessment was a professional risk.

The use of emotional scripts by teachers was clearly evident in this research project, providing insights into their self-perceptions. I was able to add to this body of literature by documenting details of emotional scripts and include other, personal strategies for coping with complex change. Emotional scripts were demonstrated in three ways. The first featured emotional self-talk. For example, one teacher laughed, gesticulated and spoke of talking to herself. Another spoke of viewing failure as an opportunity to re-focus and mentally examine what went wrong.

The second type of script I labelled personal reminders. This type of script was employed by two teachers. These reminders were self-identified, personal qualities such as motivation and creativity and these qualities re-affirmed their positive self-perception when situations were difficult or complex. If I returned to the image of the journey, then personal reminders were like signposts marking the way forward to ensure a clear path along the rough roads of change. One teacher demonstrated a very deep, inward aspect of personal reminding. She spoke of the 'inner me' as a core part of her being that required satisfying when undertaking change. She also referred to drawing on inner strength as an additional source of energy and personal affirmation. Interestingly, these same strategies of self talk and personal reminders were used by teachers to celebrate progress.

Finally, a range of metacognitive processes were connected to an array of emotions. All three teachers clearly outlined features of personal reflection time that assisted

them through change. They spoke of 'thinking all the time', 'mulling it over', 'working it through', 'focusing in and think(ing)' and 'walking things through' in their minds. They explained that they were sorting and sifting particular information, imagining the concrete, linking thoughts and actions, reconciling philosophical differences, examining failure and self-correcting previous assumptions. Accompanying emotions included greater confidence, excitement and sometimes panic. Given this significant number of meta-cognitive tasks, the case for space and time for teachers' professional reflection during reform is further strengthened (Zembylas & Baker, 2007).

FINDING 5: EMOTIONS

A. *Teachers' emotions were an integral part of work and life in the classroom and were heightened during change. At times, both positive and negative emotions were present simultaneously.*

B. *Teachers instinctively employed various emotional scripts to re-establish positive self perceptions and well-being. These included:*

   i   *Self-talk*
   ii   *Personal reminders*
   iii *Metacognitive reflection*

C. *Teachers need time for reflection to understand their own heightened emotions and internal sensemaking processes during times of change. Teachers need to tap into their own array of metacognitive coping strategies.*

7.4.2 *Teachers' inner journeys to enact change – Beliefs, values and the importance of student success*

New learning about reforms may be impeded because reformers interpret the changes through their own philosophic lens (Spillane, Reiser & Reimer, 2002). This was exemplified when, initially, two participants struggled with an array of new formatively oriented practices such as assessing group work and creating suitable standard descriptors.

When the underlying philosophical values of reform are not clearly articulated, misunderstanding of the reform may occur (Spillane, Reiser & Reimer, 2002). One

participant teacher vainly sought a connection between the reform she was asked to undertake and her own child-centred stance. Her child-centred view meant that she was keen to be a facilitator of student learning and she spent considerable time analysing the messages she was hearing whilst she attended professional development. Whilst she appeared to be disengaged, in fact she was probing, exploring and examining the reform critically.

By journey's end this teacher recognised that changes occurred once she understood that formative assessment practices aligned with her stated child-centred philosophy. Her professional values provided a framework to examine the philosophical perspectives of Education Queensland's assessment reforms. Awareness of these values also provided a level of dissatisfaction when the philosophic perspectives were not immediately apparent or explicitly expressed. She made changes only when she was convinced change aligned with her child-centred educational philosophy. Then she implemented a significant number of changes rapidly and was no longer troubled by the time factor, or by jargon. The teacher who was self-aware needed alignment between her own beliefs and values and the philosophical underpinning of the reforms. This affirms research that emphasised the importance of professional values and beliefs to enable change in the classroom to occur (Fang, 1996; Pajares, 1992; Rigano & Ritchie, 2003; Van den Berg, 2002).

The importance of students during change was emphasised in the literature (Fullan, 2003b; Guskey, 2002; Richardson, 1998; Simao, Caetano, O'Meeara & Flores, 2003) and was also evident in this project. I observed strong links between student engagement and teachers' willingness to undertake change. The literature has established a relationship between teachers' engagement with reform and student responses to these reforms (Fullan, 2003b; Guskey, 2002). If reforms engage students and align with teachers' beliefs (Richardson, 1998; Simao, Caetano, O'Meeara & Flores, 2003), then teachers' will work willingly to enact reforms. A teacher in this research project exemplified the need to align the reform's philosophy with her own professional philosophy. Her attention to her students and the need to keep them at the centre of her practice was an overriding professional value that was used to explain her own willingness to participate in reform.

Guskey (2002) proposes an alternative model stating that teachers' values and beliefs change only after they observe a reform's success (Guskey, 1986, 2002). Two of my participants followed this pattern as they began by experimenting with the assessment reforms and later made some adjustments to their beliefs. For these teachers, initial philosophic alignment was not a prerequisite. In fact, alignment was a result of increased student observations during the change process. At first the teachers appeared unaware of the philosophical shift they were undertaking and they subsequently encountered a range of practical difficulties. But they watched their students closely. One commented upon student engagement and attendance and another commented upon student creativity. Both were willing to experience substantial levels of discomfort and a significantly increased workload because their students reacted positively to the changes they implemented. As these teachers were uncertain about aspects of the reform, the responses of their students had a significant impact upon what happened next. Student engagement and individual students' progress played a significant part in each teacher's persistence. They used student response as a gauge of reform success. Student improvement provided both strength and encouragement for these teachers and further enhanced their confidence (Black, et al., 2003; De Lange & Romberg 2003; Le Metais, 2003; Neesom, 2000).

Researchers indicated that when formative assessment reforms were understood, a diverse group of learners and schools benefited (Black, et al., 2003; LeMatais, 2003; Clarke, 2001a). There were many examples in this project. Students experienced concrete changes in the form of either a student reflective journal or a student learning log and a change in classroom dynamics including greater substantive conversations. In addition, there was an increased focus on showcasing and sharing learning with others, such as parents and peers. For some students, there was a greater awareness of their own learning. One teacher commented on the need to change her perception about a student whom she had misjudged in the past. She spoke with amazement about the student's newfound abilities and persistence when working with a task sheet and criteria sheet that explicitly stated what was required for a good product and performance.

Initially, I was concerned that my findings appeared contradictory. Very diverse responses to change had been documented. For one teacher, change occurred as a result of her explicitly stated values. For the other two, a shift began occurring only

after they had watched their students engage with new practices. This presents an interesting conundrum for professional developers and school leaders. When introducing a reform or implementing change of any kind, there will be teachers who wish to commence reforms early by experimenting, practicing and contextualising before confirming the reform a success. There will be those who appear to resist until they have understood exactly why this particular change is necessary and helpful for students' learning. Over time, engagement with a variety of reforms will also be a modifier of teachers' attitude towards change (Edwards, 2005). A skeptical view of systemic rollout and a statement about teachers being the last to know and first to implement reforms are both telling points of view.

At this point I considered the concept of cognitive dissonance to explain aspects of my research findings (Festinger, 1957). The theory was helpful to understand the depth of discomfort experienced and the array of emotions present (Harmon-Jones & Mills, 1999). The early reaction of all three teachers at the commencement of this project indicated that some teachers had already begun to manage inconsistent views. The emotional response of two teachers who struggled with old summative practices indicated a response that typified individuals experiencing cognitive dissonance. The response of early avoidance was also a documented response of individuals experiencing tension about opinions, beliefs or ideas (Festinger, 1957). However, teachers' journeys towards successful implementation were more than a journey towards cognitive consonance and an establishment of personal, psychological equilibrium. Teachers' concern for students was even more important. They were motivated to enhance learning for children and they were prepared to endure a state of discomfort for longer because of positive student feedback. Students' positive responses encouraged their persistence while two teachers indicated an early willingness to participate even knowing that they were likely to experience difficulties.

FINDING 6: VALUES ORIENTED & STUDENT CENTRED

A. *Teachers' self-awareness of professional beliefs and values led to exploration of assessment innovations and pedagogic practices. Rapid and deep change occurred after alignment was identified between professional beliefs and the reform's philosophy.*

B.   *Students lie at the heart of teaching and good teachers remain in touch with this heart. Student engagement and student progress were motivators for teacher persistence with reform.*

C.   *Students' learning needs were the central aspect of teachers' change journeys as teachers used the changes to creatively enhance learning.*

D.   *Teachers' observations about student performance were heightened when undertaking reform.*

E.   *Student progress, increased independent learning capabilities, and creativity validated reform success and led to a realignment of beliefs about the reform.*

7.5   ASSESSMENT - TEACHERS' EXISTING ASSESSMENT UNDERSTANDING AND PRACTICES

Teachers' existing practices and understandings about assessment were documented and valued. It was intended that teachers' early assessment practices would provide a way of measuring movement forward. This would mark the beginning of their assessment reform journey.

7.5.1   *Beginnings*

The Queensland reforms focussed upon formative assessment practices, thus literature about formative assessment was selected for review (Black & Wiliam, 1998; Clarke, 2001a; Earl, 2005; Stiggins, 2002; Stiggins & Chappuis, 2006; Wiggins & McTighe, 2005). Features of formative assessment taken from this literature provided a framework for analysing the particiapnt teachers' existing practices. In this project, there was an early emphasis upon marks and teachers' mark books which indicated a formal, summative approach (Black & William, 1998). In addition, one teacher had a singular, report-card-driven understanding of assessment that highlighted a summative perspective and mismatch between curriculum and pedagogy (Lingard et al., 2001; Black & William, 1998).

At the beginning of this project, teachers' words and actions indicated that formative assessment was not clearly understood (Cormack, et al., 1998). Yet this lack of understanding did not hinder two teachers who had already begun to experiment with some formative assessment practices. As a result, there was no clear demarcation between the old and new practices.

Thus, merely listing teachers' existing practices and labelling the practices either formative or summative on the basis of the literature was not possible because teachers were working with some formative practices while still having an overall summative view of assessment. Teachers were able to identify restrictive aspects of their existing summative approaches (for example their mark books) and teachers nominated these practices as ones they wished to change (Bailey as cited in Richards, Gallo & Renanday, 1998). In addition, successful aspects of their current assessment methods were recounted with a sense of pride. Researchers, Clandinin and Connelly (2000) suggest that conducting research is like joining an ongoing parade for a short time and this analogy resonated with my experiences. I was joining an existing assessment reform journey with three teachers who would share their view of the terrain for a period of time and then continue without me.

FINDING 7: BEGINNINGS:

A.   *Locating the beginnings of teachers' change processes was difficult. There was no clear demarcation between the old and the new practices.*

B.   *Teachers' aspirations were a significant part of the early change process. Teachers were perceptive and honest about inadequate current practices and they identified with pride other successful assessment practices that had been affirmed by peers.*

7.5.2   *Teacher readiness for change*

Teachers were able to identify a range of personal and professional factors to indicate their readiness to undertake assessment change. Researchers proposed that a mix of both personal and professional factors such as motivation, self-confidence and setting achievable goals were important for change (Brown, 2003; Liethwood, Jantzi & Mascall, 2002). Other researchers commented upon the necessity of particular capabilities and personal dispositions of self-efficacy and self-belief (Brown, 2003; Liethwood, et al., 2002; Spillane, et al., 2002). The teachers in this project each set achievable assessment goals and all saw themselves as capable of succeeding. In addition, they demonstrated their motivation and persistence despite an early lack of understanding about formative assessment (Leithwood & Beatty, 2008). In addition, this project's participating teachers were in Hargreaves' (2005) optimal category for

change success - early to mid- career with a number of years teaching experience. They were also volunteers who felt ready to make changes.

My research contributed to this field by clarifying an array of particular professional and personal reasons for undertaking change. Participant teachers provided professional reasons to explain their willingness to change. Their dissatisfaction with current practices aligned with work cited by Richards, et al. (1998). Another reason, benefits for students in their classrooms, also featured in a variety of other studies (Leithwood & Beatty, 2008; Lewthwaite, 2006; Hargreaves, et al., 2001). The remaining reasons including the opportunity to be at the forefront of a systemic innovation, the desire for positive collegial experiences and peer recognition were unexpected findings of this project.

As well as the professional reasons for attempting change there were self-identified, personal attributes. One teacher demonstrated motivation and persistence (Leithwood & Beatty, 2008; Lewthwaite, 2006) as she voiced a realistic expectation that the change process was likely to be 'long' and challenging. Yet she was ready to implement her selected reform. All participant teachers recognised that they demonstrated resilience (Leithwood & Beatty, 2008; Lewthwaite, 2006). Finally, creativity was an attribute that featured in this project. The importance of teachers' creativity was emphasised on more than one occasion by two participants and was viewed as a significant personal attribute when contemplating change.

FINDING 8: TEACHER READINESS

A. *Teachers' readiness was linked to a number of professional needs and aspirations. Whilst they were dissatisfied with their current practices, professional readiness factors include:*

   i   *An opportunity to be at the forefront of a systemic innovation*
   ii   *The desire for positive collegial experiences*
   iii *The desire for peer recognition*
   iv   *Benefits for students in their classrooms*

B. *Teachers' readiness for change was also linked to perceptions of their own capabilities and self-identified personal qualities including:*

i   *Resilience*

ii   *Motivation*

iii   *Persistence*

iv   *Creativity*

7.5.3   *Initial understanding of the reforms*

Research literature highlighted three major findings about teachers' formative assessment practices. First, teachers struggled to comprehend formative practices (Hargreaves, et al., 2001; Shepard, 2000). This led to misunderstanding, confusion, a lack of a coherent approach and general uncertainty (Freebody, 2005; Lingard et al., 2001; Neesom, 2000; Shepard, 2000). Second, teachers' confusion was compounded by an existing culture that promoted summative testing (Cormack, Johnson, Peters & Williams, 1998; Edwards, 2005; Shepard, 2000), making a shift to implement formative assessment reforms more difficult (Earl, 2005; Shepard, 2000; Stiggins, 2002). Finally, assessment tasks were generally not intellectually challenging (Lingard et al., 2001) and were often mismatched with curriculum (Cormack, et al., 1998; Lingard et al., 2001). Students were not provided with information on how they might improve and teachers focussed on 'marks', presentation and quantity (Black & Wiliam, 1998).

Many of the problems listed in the literature could be used to describe the participant teachers as they began to implement formative reforms in their classroom. For example, the lack of a coherent approach (Lingard et al., 2001) could be a label applied to the teachers who were early experimenters with formative assessment practices. However, incoherence is a negative label that does not capture the participants' willingness or their struggle to achieve change. Teachers experienced inner tensions and multifaceted emotions as they sought to understand formative assessment. However, existing summative practices continued to be a strong influence as they experimented with proposed reforms and this summative perspective limited a comprehensive understanding of other assessment possibilities. One teacher's report-card-driven assessment practices illustrated this limited perspective. Uncertainty (Freebody, 2005) was also evident as teachers attempted to implement different assessment practices. Assessing group work appeared impossible and identifying deep understanding was problematic. Teachers asked

questions anxiously, expressed doubt about key aspects of the reform and observed their students keenly whilst watching for engagement and success.

My findings suggest a more empathetic picture was required as innovative teachers encountered initial hazards that were unexpected and unexplained. At the beginning of the reform process, the participants had a limited introduction to formative assessment. They wanted to change and so they began the change process without appreciating the consequences for their classroom practices. Teachers' mismatched curriculum and assessment practices (Cormack, et al., 1998; Lingard et al., 2001) need to be considered in the light of their intent and early attempts to implement change. Whilst apparent mismatch was occurring, teachers were, in fact striving to achieve coherence and understanding. The notions of uncertainty (Freebody, 2005), mismatched beliefs and practices (Black & Wiliam, 1998; Lingard, et al., 2001) were easy words to describe tentative steps along a very personal and complex journey that was fraught with anxiety, struggle and some celebration. The teachers' willingness to step forward and consider new assessment possibilities should be acknowledged and affirmed. I appreciated the necessity for striving to be non-judgmental during the early stages of the change process.

FINDING 9: EARLY UNDERSTANDING OF REFORMS

C.   *Teachers understood assessment summatively. This understanding limited their initial vision of the change they agreed to undertake because the changes they were attempting were philosophically aligned to a formative, constructivist approach to learning and assessment.*

D.   *Listening to teachers' goals and aspirations provides an alternative, empathetic lens for viewing first attempts at change. Judgments are tempered when mismatch, uncertainty and incoherence occur during the time of transition to new practices.*

7.6   CHANGE AT THE END OF THE JOURNEY – CHANGE PROCESSES

After examining the wide and complex field of literature that formed my research project, this section was shaped by returning to the overarching research question: *How do teachers respond and change over time as they implement an educational reform?* A number of changes had occurred for teachers in this project. First, their

view of change was either affirmed of transformed. One teacher was disappointed that there was no guru who could provide a clear direction to follow whilst another continued to consider systemic reforms inflexible. Second, teachers' roles changed. One was excited that her role had shifted to that of facilitator and another recognised that being out the front was not as important as she first imagined. Finally, change brought high levels of teacher satisfaction and confidence as students demonstrated their independence, responsibility and creativity. Yet, as I analysed individual change processes, each teacher managed change in very individual ways, despite receiving similar professional development. Therefore I returned to the literature to locate additional research to determine whether change occurs in identifiable stages and if there are some common features for all innovators and change agents.

7.6.1   *Documenting change at the end of the journey - Approaches to change*

In this project, all three teachers approached change in a logical yet dissimilar way. One teacher's approach was to personalise. She blended and mixed the new and the old ideas about assessment so that they would work for her. She was one who asked for a moratorium on judgment so she could shape and reshape the reform. She recognised her personal attributes of conscientiousness, persistence and creativity and so, whilst she did not question the reforms, she demonstrated the importance of ownership as she recreated them to suit her teaching style and her context. This creative teacher adapted the reform ideas so she could change and make the reforms more relevant to her personal context.

Another teacher's approach to change was to succeed by practice. She also asked for a moratorium on judgment so she could keep practicing and building. Above all she valued persistence and accuracy. She wanted to adopt the reform correctly and she trusted the system to design a reform that was beneficial for her students so she assumed that with enough practice and persistence she would be able to implement it perfectly. This highlights the importance of valuing teachers existing attributes so that these attributes can be harnessed for change. The teacher who was persistent practiced to achieve reform success.

The final teacher was aware of her personal philosophy of teaching. Her attribute was self-awareness. She stated that her overarching philosophical perspective was a child -centred one and this meant that everything about assessment reform was seen

through this lens. Initially she was very uncertain about particular elements of systemic assessment reform and she used her lack of time and difficult jargon in official documents as excuses for not engaging and yet she was persistently and critically examining the reform. Her child-centred view meant that she was keen to be a facilitator of student learning and she spent considerable time analysing the messages she was hearing whilst she attended professional development. Whilst she appeared to be disengaged, in fact she was probing, exploring and examining the reform critically. Once convinced, her change processes were relatively smooth.

FINDING 10: - CHANGE APPROACHES

A.   *Change involves a time period that may be characterised by uncertainty, challenge and complication. This may be lessened by preparation.*

B.   *Teachers' personal attributes provided indicators about their approaches to change. Approaches to change included:*

C.   *Practicing to implement change correctly,*

D.   *Adapting to make the change work in a particular context*

E.   *Delaying until the beliefs and values underpinning the change were fully understood and aligned with personal beliefs about teaching.*

F.   *Teachers' varied approaches towards change exhibited an individualistic, internal logic that linked to their self-identified professional attributes and values.*

7.6.2   *Documenting change at the end of the journey - The process of change*

As the research documents were scrutinised to identify research about change processes, two models, the innovation diffusion model (Rogers, 1995) and the Health Care Model (Day & Norris, 2007), were drawn from fields beyond education. The ICT Apple Model (Dwyer, et al.*,* 1990) and the Concerns-Based Adoption Model (Hall & Loucks, 1978) are change models based upon research in the field of education. These different models provided a framework to identify common change processes and to compare with my findings.

The first model, the innovation diffusion model (Rogers, 1995), combines two distinct understandings about the concept of diffusion. The first associates diffusion with spontaneity and the unprompted emergence of an idea or innovation. The

second understanding suggests a carefully considered and planned approach to implementing an innovation. Rogers (1995) explains that he uses "the word 'diffusion' to include both the planned and the spontaneous spread of new ideas" (p. 7). Five clear stages to the process of diffusion have been identified (Rogers, 1995). The first is the knowledge stage and this is when any individual or group acquires knowledge about the innovation. The second is the persuasion stage when individuals begin to be persuaded by others and interact together to form opinions and personal attitudes about the innovation. The third stage, the stage of decision, is where a personal choice is made about the innovation. Additional, clarifying information may be sought. The fourth stage is the implementation stage where the innovation is attempted and tested. Further information may be required at this stage and use of the innovation may become regularised during this stage. Finally, the stage of confirmation is where the innovation is either affirmed or dismissed based upon personal knowledge and use of the innovation.

Rogers (1995) acknowledged that if an innovation displayed particular characteristics, then time to adopt the innovation could be shortened. Rogers (1995) explained how these characteristics or factors improved the rate of adoption. The first factor is described as the relative advantage factor which is 'the degree to which an innovation is perceived as being better than the idea it supersedes' (Rogers, 1995, p. 212). The next factor is the compatibility factor which when an innovation aligns to the existing experiences and values of the innovator (Rogers, 1995). The complexity factor considers levels of difficulty associated with understanding and usage of an innovation (Rogers, 1995). The trialability factor is associated with limited experimentation of the innovation (Rogers, 1995) whilst the observability factor is when 'the results of (implementing) an innovation are visible to others' (Rogers, 1995, p. 244). The first factor, relative advantage, was deemed by Rogers (1995) to be the most significant factor when determining the pace of adoption.

Rogers (1995) also recognised that the process of change was more readily undertaken by particular types of people because individuals within a particular social system displayed personal traits that hindered or enhanced the process of change. Rogers (1995) provided names for each category beginning with those who adopted change readily including innovators, early adopters, the early majority, the late majority and the laggards. He described innovators as the people who were early

risk takers and who were keen to try new initiatives. The next category of people were the early adopters who were not high risk-takers but were often leaders who managed change effectively and speedily. This was followed by a larger representative group, the early majority, who were also people who were positively disposed to change and yet were more cautious and careful individuals. The late majority were a group of people who were much more resistant to change and the laggards were insistent that change was not appropriate for them (Marsh, 2005; Bates, Manuel & Oppenheim, 2007).

Day and Norris (2007) provide another useful model of change. These researchers explain that, for health care workers, there is a trough between commencing change and its adoption. During the low period, both confidence and capability dip. This is because the implementers of change are maintaining existing practices whilst simultaneously learning and introducing the new. During this low period, change agents experience a 'capability crisis' (Day & Norris, 2007, p. 1211). This is a point where those undertaking change suffer from overload, tension and uncertainty and even inadequacy as they endeavour to manage both existing practices and the new reform practices. Day and Norris (2007) proposed the depth of the trough is determined by the amount of change undertaken without preliminary preparation.

The next two models are drawn from education research. The first educational model came to the fore with the advent of Information Communication Technology (ICT). This change process was proposed by researchers who were associated with the implementation of (ICT) in schools by teachers. Five stages to change adoption were proposed (Dwyer, Ringstaff, Haymore Sandholtz, & *Apple Computer, Inc.,* 1990) and these included entry point where ICT technology was introduced to teachers, the stage of adoption where the ICT technology was used increasingly effectively. The next stage, the stage of adaptation, was where teachers began making small personal changes until the final two stages where ICT usage was appropriated or fully utilised in a familiar and easy manner through until the final stage where teachers invented and creatively proposed new ideas.

The final model that features in change literature is Hall and Louck's (1979) Concerns-based Adoption Model. This model identifies change by the differing stages of concerns that are expressed by teachers as change is undertaken (Hord,

1990). Several stages of concern associated with reform have been described (Hord, 1990), beginning with the awareness stage when teachers become aware of the innovation but no engagement occurs. This is followed by the informational stage where, once teachers' interest is aroused, they become focussed upon gaining necessary knowledge about the innovation. Next is a personal stage where teachers seek to understand the personal implications associated with the innovation. These three early stages of awareness, knowledge and personal interest are when teachers think more of themselves as they develop their own understanding of the innovation. This is exemplified by the use of 'I' statements such as 'I don't understand this aspect of the innovation" or "I think this could work." (Hall & Loucks, 1978)

Subsequently a management stage focuses upon how teachers will manage the new innovation. At this stage teachers are mastering new tasks so that these can become routine. It is during this stage that their levels of concern are heightened (Hall & Louck, 1979) because they are coping with new program demands and new program practices. Not only are new skills required, but also a high degree of management skills are needed to master the new innovation effectively (Hall & Louck, 1979). The final two stages focus upon the consequences of adaptation and the impact of the innovation, particularly upon students. In these stages, teachers may work collaboratively to implement the change and they may also begin adapting and refining the innovation (Hall & Loucks, 1978). Table 7.1 below compares the differing models of change to show commonalities in the stages proposed. I have chosen names for the numbered stages in the change process that allowed for the inclusion of all stages from each of four models described above. Particular terms used in each model appear under the model name.

Table 7.1 Four models of change and adoption of new practices

Stages in the change process	The Process of Diffusion of Innovations (Rogers, 1995)	Health care (Day & Norris, 2007)	Apple ICT (1990)	Concerns Based (Hall & Louck, 1979)
1. Innovation Arrival				Awareness
2. Change Preparation	Knowledge	Preliminary Preparation		Knowledge
	Persuasion			
3. Decisions and beginnings	Decision	Commencing change	Entry Point	Decision
4. Transitions & Implementation	Implementation	Capability crisis as both new and old practices coexist (confidence and capability dip)	Adoption	Mastery and management with high levels of concern
			Adaptation	
5. Establishment, Adaptation and refinement	Confirmation	Adoption	Appropriation	Consequences of adaptation
				Refinement & Impact awareness
6. Invention			Creation and invention	

This figure was helpful when examining the change processes of the teachers who participated in this research project because different aspects of each model aided my understanding of change processes. However, my project also highlighted particular gaps and underlying assumptions associated with these models. First, whilst acknowledging change is a process, the teachers of this project demonstrated that the process need not necessarily appear neat or linear. Two teachers in this project appeared to enter the change process at Stage Four and began transitions to group work and assessing of deep understanding, then as opportunities arose, returned towards the early stages to extend their knowledge and understanding.

Second, particular stages of change may be internal ones and may even be misunderstood by peers and leaders. For example, one teacher's apparent resistance early in the process could instead be re-conceptualised as preparation as she completed Stages Two and Three by herself. Inner reflective preparation is an

important yet unmentioned element in any of the models that highlight preparation (Day & Norris, 2007; Rogers, 1995; Hall & Loucks, 1978). Finally, in all models, the decisions and entry-point stages seemed based on the assumption that the reforms were clearly and concisely articulated. Instead, in this project, when initial systemic communication about assessment had not been clear, teachers experienced heightened emotions and increased complications during the transition phase.

Features that were highlighted by particular researchers were important in my project. Two models highlighted complications during transitions (Hall & Loucks, 1978; Day & Norris, 2007). Both referred to notions of management and heightened concerns which were prominent aspects of participant teachers' journeys. Day and Norris's (2007) model best aligns with the experiences of the teachers on this journey. These researchers explain that there is a trough between commencing change and its complete adoption. During the low period, where confidence and capability dip, teachers' existing practices need to be maintained. However, at the same time, reformers are simultaneously learning and implementing the new. Two participating teachers were overwhelmed, particularly in the early stages of the reform and thus experienced a 'capability crisis' (p.1211). This is a point where those undertaking change suffer from overload, tension and uncertainty and even inadequacy (Day & Norris, 2007) as they endeavour to manage both existing practices and new practices. Day and Norris (2007) proposed the depth of the trough is determined by the amount of change undertaken without preliminary preparation. This may explain two teachers' early angst and the third teacher's hesitancy to place herself in that position.

The final stages of implementing reform (Dwyer, Ringstaff, Haymore Sandholtz, & *Apple Computer, Inc.,* 1990; Hall & Louck, 1979) featured adapting and innovating in two models. By the end of this research project, all teachers had begun to demonstrate particular innovations and were able to articulate how they had adapted their professional learning and applied it in a practical manner in their individual classrooms. For one teacher, adaption was a hallmark at every stage of her change process.

FINDING 11: - STAGES OF CHANGE

A.   *Some stages of change may not be immediately apparent because they are being undertaken by teachers in an internal, thoughtful manner.*

B.   *When a decision to undertake reform is made by an educational system or an educational district, the preparation and decisions are not made by teachers. However, preparation and decision making are vital components of a change process and some teachers go back and attempt to undertake the preparation and persuasion stages alone.*

C.   *Late adopters may be teachers who reclaim the decision-making process and move through the initial phases of preparation and decision making before implementing systemic reform.*

D.   *The capability crisis is not understood clearly by professional development providers and researchers. What has been described as mismatch is likely to be the change-over phase when old and new practices occur together. During this capability crisis, teachers need support and not just an absence of criticism as this phase is a valid part of a change process*

E.   *As a result of these findings and recommendations, I propose a model of teacher change that captures key elements emerging from this project and proposes teacher-centred, future directions for understanding and leading change. Features of this new teacher change model include a recognition of teachers' personal capabilities and emotions, the importance of thorough preparation and the need for teacher support during the capability dip in teachers' confidence when they are managing both the old and the new practices simultaneously. Whilst these stages of change are presented in a linear form, I recognise that teachers may need to return to the preparation phase, or review particular decisions once implementation of the reform is in progress. The model, together with directions for teachers, is drawn from the findings of this project and is detailed in Table 7.2. The table represents the recommendations derived from this study and informs my own current practice as a provider of professional development for teachers.*

Table 7.2 Successful Transitions: a teacher-centred model of change

STAGES OF CHANGE	RECOMMENDATIONS
Change Preparation: Reform awareness and personal preparation	To raise awareness and prepare, teachers need to: ▪ Become aware of their professional capabilities ▪ Recognise the philosophical underpinning of the incoming reform (as well as their own professional values) ▪ Identify their own approaches to change as well as strategies for maintaining emotional equilibrium
Beginnings: Decision making, and early acquisition of reform knowledge	To make decisions and commence change teachers need to: ▪ Reflect upon and even challenge the reform so as to be personally persuaded of its worth and value ▪ Examine the reform with their students in mind ▪ Plan in advance for transitions and implementation
Transitions & Implementation:	To implement the reform successfully, teachers need to: ▪ Be given a suitable period for implementation that is scaffolded in ways requested by the teachers themselves (e.g. collegial support, professional learning opportunities, additional time including meta-cognitive reflection time) ▪ Recognise that, during the transition period when old and new practices co-exist, support is available (as this is the most likely period of concern and emotion) ▪ Recognise that each teacher is likely to approach the capability dip in very individualistic ways ▪ Continually monitor their students and refine their student-oriented analysis of the reform ▪ Return to reconsider aspects of the decision making and knowledge acquisition stage (if the change decision has been made by others)
Establishment: Adaptation, refinement & re-creation	To establish the reform effectively, teachers need to: ▪ Affirm their professional capabilities that enhanced success ▪ Reflect, evaluate and refine the reform in ways that are student-focused and suit their context ▪ Recognise, explain and celebrate successes with others ▪ Review professional values and articulate successful change processes

7.7   PERSONAL REFLECTIONS AND LEARNINGS

In conclusion, I considered my own personal journey of assessment reform to identify what I had learnt. There were several over-arching themes that were personally significant for me as a provider of curriculum leadership and professional development for teachers. First, I came to realise that teachers' ability to recognise and articulate a philosophical perspective was significant. A philosophical perspective can provide teachers with strength to question reforms and identify reform messages that do not align with personal beliefs. A philosophical

understanding gives teachers a framework to evaluate the relative worth of any proposed reform. In addition, even though some teachers might initially appear to resist change, they can change rapidly and successfully once they can detect an alignment with personal beliefs. Second, I understood the importance of teachers' sharpened observation of their students when introducing reforms. Careful monitoring of students' progress during successful reforms was powerful enough to change teachers' professional philosophy and assist them to adopt change. Third, it became apparent that teachers needed to be aware of their own personal and professional attributes that enhanced their ability to undertake change. The importance of working together was apparent although the possibilities for collaborative professional growth were not fully demonstrated in schools in this study.

Fourth, whilst acknowledging the power of a constructivist approach for learners, I came to recognise that there was an inherent hazard for teachers. If prior knowledge is to be taken seriously (in this instance it was prior knowledge about formative, task-based assessment) then expect very diverse ways of exploring and using new ideas to create personal meaning. All participant teachers listened to the same three assessment workshops. All worked as keen innovators. However, all synthesised Education Queensland's assessment reform in very different ways and interpreted and implemented assessment changes according to personal, individualistic and internal logic.

Finally, I now recognise how the passage of time and newly acquired knowledge has provided me with a new perspective for working with teachers. For example, emotional aspects associated with teacher change became very evident during this study. Once the participant teachers had spoken, I re-read and researched this aspect of change with new eyes awakened to the importance of tone as well as voice.

It was time to reflect upon my own heart journey. I had become emotionally engaged in the process of assessment reform, in accurate documentation of classroom teachers' stories and in understanding how change occurs. I now acknowledge the importance of listening and asking questions, rather than assuming understanding. An additional personal learning was that re-telling another's story is a complex undertaking if one is seeking accuracy and authenticity. My respect had grown for

these teachers who so willingly shared their stories with me. I appreciated and celebrated their professional adaptability and honesty. I continue to celebrate their heart-centred, child-focused approach to teaching as I share their story with others. The power of narrative is one way we can all gain strength for the continuing journey of educational change.

7.7.1   *Epilogue*

I currently work in a different role in a new location. A significant aspect of my present job is that of in-service provider who designs suites of professional development opportunities for and with teachers. The research project has significantly influenced many facets of this role. I readily acknowledge that teachers who attend my professional learning opportunities come with an array of understandings and different ways of working and therefore I plan accordingly.

My findings have influenced the pedagogical practices embedded in the professional learning I design and present. Significant professional learning opportunities for teachers contain elements first trialled with teachers in this research project. Activities are included to develop a collegial atmosphere and build cross-school-site collaborative networks. I make change processes explicit and I am able to support a range of approaches to reform. Relevant key readings are available for teachers. Where possible, teachers are invited to craft innovations that are both practical and suited to their classrooms. A recent, significant in-service I conducted included collaboration, teacher reflection time and multiple opportunities for teachers to share their new learning with others who had been participating. Teachers are invited to provide feedback that is both formal and informal so I can continue to improve and refine the professional learning offered.

In addition, I have worked hard to continue to develop my listening skills, being aware of emotive tone and watching for non-verbal cues when teachers are discussing aspects of change. It is an ongoing personal struggle to ensure planned professional learning opportunities include enough time and space for teachers' reflection and collegial conversation. When conversations occur, I am still enthused by the insights and wisdom that are exchanged by both experienced and beginning teachers within these learning groups.

Finally, this research project has provided me with the opportunity to reflect upon the impact of intensification in a more detached manner and consider aspects of reform from a different angle. In my current role, I am aware of looming intensification of teachers' work as a new era of curriculum, assessment and reporting reforms are foreshadowed nationally. These impending reforms ensure that findings from this research continue to remain relevant. As a result, features of professional development, planned in readiness for the Australian Curriculum rollout, have been heavily influenced by this research project. Two tools have already been prepared as school site-based conversation starters, *The 5P Challenge* for school leaders and *The Australian Curriculum Preparation Tool-kit* (Appendix F). These resources are designed to empower local leaders to facilitate professional site-based conversations. *The Australian Curriculum Preparation Tool-Kit* features a range of activities that provide teachers with the opportunity to explore their own beliefs about learners and learning, together with other activities that encourage discussion about emotions during times of change. Initial feedback, received anecdotally from different parts of Queensland and Australia, suggest that the tool-kit has been a helpful resource. Thus, understanding of the importance of empowering teachers to make changes and the need for careful reform preparation has been enhanced.

The journey of teachers in transition continues.

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APPENDIX A: ASSESSMENT WORKSHOP TWO RESOURCE

The Place Mat (Education Queensland, 2004)

DESIGN DECISIONS FOR QUALITY TASKS

AUTHENTICITY

Is the task authentic?

Is the context of the task appropriate for the cognitive demands? Is the context appropriate for the students?

Does the context and mode of the task entice and engage students and target realistic audiences?

Does the task have a genuine and valued purpose?

Do students have opportunities to negotiate the assessment?

Students must recognise and be motivated by the purpose and relevance of the task.

ACCESSIBILITY

Does the task support all students in the production of a performance of best quality?

Does the task have a complete set of guidelines (including models) that allow students to reflect on, rehearse and review their responses?

Do your choices relating to the layout, cues, visual design, format and choice of words (including 'technical' language or jargon) facilitate engagement with the task and reinforce student understanding of what is valued in their responses?

Does the task have examples and resources that are helpful to students?

All students must be confident that they understand the intent and specific requirements of the task.

COGNITIVE & AFFECTIVE EXPECTATIONS

Is the task intellectually challenging?

Does the task draw in sufficient depth & breadth upon the targeted knowledges, concepts and skills of the domains?

Does the task require students to engage in a range of thinking skills and to demonstrate critical analysis?

Does the task allow students to demonstrate their thinking and understanding?

Does the task offer opportunities for students to demonstrate valued attributes and attitudes?

The intended cognitive expectations of the task must be clear to students.

CREDIBILITY

How trustworthy is the task for generating sound evidence about student performances?

Does the task require performances that are relevant and adequate for the targeted intentions?

Does the task have clear and explicit criteria for the types of evidence students will be required to provide?

Have sufficient and clear standards been developed to provide advice to students (and other assessors) on the bases for making judgments?

Does the task provide sufficient opportunity for students of all races, ethnicity, gender or socio-economic background to demonstrate their achievement?

Does the task contribute to students experiencing a balanced and varied collection of tasks as part of the school assessment plan?

The connections to the educational intentions must be clear to all audiences.
The consequences of assessment for students and institutions must be considered.

Source: Assessment & Reporting Unit

Queensland Government
Education Queensland

Teachers in Transition – A Journey of Educational Reform
Meg Noack
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APPENDIX B: ASSESSMENT WORKSHOP THREE RESOURCE:

The Green Card (Education Queensland, 2004)

Determining criteria and writing standards descriptors

key messages

1. Informed teacher judgment is at the heart of assessment.

2. Judgments about students' achievements should be based on explicit assessment criteria and established standards.

3. Criteria (criterion, *sing*.) are fundamental to appraising student work.

4. Standards underlie judgments about the quality of performance: not only what students know and can do but also how well they know it and can do it. The highest standard represents a goal that students aim for.

5. Three constructs will provide a common frame of reference for reporting on student achievement:
   - Knowledges (factual, conceptual, procedural)
   - Processing
   - Self & Others.

6. Criteria for assessment should complement the constructs for reporting.

7. Reported judgments of student achievement should be defensible, comparable, and based on sound evidence and a shared understanding of standards.

Criteria

Function

- To declare broad performance dimensions on which a range of student performances can be represented

In determining the criteria (for a particular assessment task), ensure that they

- Embody curriculum intent
- Reflect what is valued by the assessment task
- Complement the three constructs for reporting

In determining the criteria (for a particular assessment task), ensure that they are

- Identifiable/observable in student work
- Manageable/workable in number and grain size
- Sufficiently different from, and independent of, each other
- Easily interpretable for use by teacher-assessor

Standards Descriptors

- Cover a range of performances on a particular criterion

- Clearly describe the qualities of each of the performances in the range

- Involve two variables—element and degree—applied together or separately

- Are sufficient in number to enable differentiation of performances

- Are coarse- rather than fine-grained

- Can be instantiated in student work

- Are written in positive terms

- Are written in language that is suitable for the audience(s)

- Are capable of being represented in a variety of formats

definitions

Criteria - Those properties, dimensions or characteristics by which student performance is appraised.

Standards - Fixed points along the criteria representing qualitative differences in performance.

Standards descriptor - Statement or list of statements that succinctly conveys the required quality of, or features in, student work in order to be awarded the corresponding grade on a particular task.

Source: Assessment & New Basics Branch   © The State of Queensland (Department of Education) 2004

Queensland Government Education

APPENDIX C: EDUCATION QUEENSLAND REFORMS & INITIATIVES

TIMELINES & RESOURCE LIST 1999 - 2005

Education Queensland Reforms & Initiatives -

Timelines & Resource List 1999 - 2005

Date	Document	Publisher of initiative	Materials published & received at schools & accompanying Systemic professional development	Additional information
1999	Outcomes-Based Health and Physical Education Syllabus	Queensland School Curriculum Council	1X 31p Syllabus 1X 86p Book of Elaborations Modules/Unit samples 1XCD	Strands of the syllabus include: Promoting the Health of Individuals and Communities Developing Concepts and Skills for Physical Activity Enhancing Personal Development
1999	Outcomes-Based Science Syllabus	Queensland School Curriculum Council	1X 44p Syllabus 1X Book of Elaborations Modules/Unit samples CD	Strands of the syllabus include: Science and Society, Energy and Change, Life and Living, Natural and Processed Materials, Earth and Beyond
2000	Outcomes-Based Study of Society and Environment Syllabus	Queensland School Curriculum Council	1X 47p Syllabus 1X Book of Elaborations Modules/Unit samples CD	Strands of the syllabus include: Time, Continuity and Change, Culture and Identity, Systems, Resources and power, Place and Space
2000	Literacy Benchmarks Years 3,5,7	Curriculum Corporation	1X 82p Book Titled: Literacy Benchmarks Years 3,5,7 (Writing Spelling and Reading with professional elaboration)	National publication developing teacher understanding of the national Year 3,5,7 tests
2000	Numeracy Benchmarks Years 3,5,7	Curriculum Corporation	1X 76p Book Titled: Numeracy Benchmarks Years 3,5,7 (with professional elaboration)	National publication developing teacher understanding of the national Year 3,5,7 tests
2001 (July)	Position and Guidelines on Assessment and Reporting for Years 1 - 10	Queensland School Curriculum Council	1 X 8p Document	Early summary of Queensland School Curriculum Council's position linking Assessment to Core Learning Outcomes
2001	Queensland State Education - 2010	Education Queensland	1X15p draft document released 1 x31p Final Draft document	Focus on understanding New Times Learning.
2001	The Queensland School Reform Longitudinal Study	Education Queensland	2X 229p Books 1X 27p Teacher Summary 2XCDs	Outlining findings of local research conducted in 24 schools over a 3 year period (975 lessons observed) 35 Findings and 36 recommendations made.
2001	The Years 1 - 10 Curriculum Framework for Education Queensland Schools	Education Queensland	1X 19p Curriculum Framework 1X Centre spread in *Education Views* (January 2002)	Policy and Guidelines for implementing OBE syllabi documents. 4 elements for schools' to highlight: ▪ Core Learnings, ▪ Pedagogy ▪ Assessment ▪ Reporting
Un-dated	Partners for Success	Education Queensland	1X 23p Booklet	Indigenous Education Initiative
2001	ICT for Learning	Education Queensland	1X p ICT for Learning Booklet	Information Communication Technology Initiative
	Building Success together	Education Queensland	1X Folder with 6 sheets outlining initiatives	Students with Differing Needs Initiative

Date	Document	Publisher of initiative	Materials published & received at schools & accompanying Systemic professional development	Additional information
2001	Literacy Strategy	Education Queensland	1X 130p Report of the Literacy Review – *Literate Futures* 1X Teachers' Version Report – *Literate Futures*	State wide review undertaken prior to release of strategy. Literacy Development Centres established across the state to support the writing and implementing of strategy.
Un-dated	Strategic Plan 2000 - 2004	Education Queensland	1x19p document	Re-aligning systemic managerial operations under the headings: learning, schools, school workforce, school services, portfolio relationships (and linking to 2010 vision)
Un-dated	Department of Education Strategic Plan 2001 - 2005	Education Queensland	1x23p document	A document with similar content to the above mentioned document. A new cabinet minister has written the foreword. The director general remained the same.
2002	Series of Position Papers Explaining Assessment (QSCC's perspective)	Queensland School Curriculum Council	Moderation of Teacher Judgements in Student Assessment Position Paper and Guidelines. An Outcomes Approach to Assessment and Reporting Are core learning outcomes 'standards'?	Consistent suite of documents highlighting Queensland School Curriculum Council's position linking Assessment to Core Learning Outcomes
2002	Outcomes Based Arts Syllabus	Queensland School Curriculum Council	1X 60p Syllabus 1X 86p Elaborations 60 Modules 1XCD	Strands in new syllabus include: Dance, Drama, Media, Visual Arts, Music
2002	Productive Pedagogies	Education Queensland	1X 25p Booklet 6X 2hr Professional Development Workshops	Productive Pedagogies a result of findings & recommendations in the Longitudinal Study 4 dimensions and 20 elements Dimensions include: Intellectual quality, connectedness, Supportive Classroom Environment & recognition of difference
2002, 2003	Literacy Strategy	Education Queensland	1X*Reading* (2002) 1X Reading CD (2002)	Subsequent Literacy publications focus on 'new times' reading.
2002	School Planning and accountability framework kit	Education Queensland	Kit containing a number of A3 and A4 sheets 1x 21p booklet	Listing Annual statement of expectations for schools in 2002 and policy and guidelines
2002	Professional Standards for Teachers	Education Queensland	1x31p document	Guidelines for professional practice 2002 Pilot (overview of 12 standards for teachers)
2002	ICT for Learning	Education Queensland	1X 42 p ICT for Learning Booklet	Information Communication Technology Initiative School information kit (2002 – 2003)
2002	Destination 2010	Education Queensland	1x16o booklet	Action plan to implement Queensland State Education 2010

Date	Document	Publisher of initiative	Materials published & received at schools & accompanying Systemic professional development	Additional information
2002/ 2003 ff	Education Training Reforms for the Future	Education Queensland	1X 28p Education and Training Reforms for the Future - A White Paper 1X double sided brochure 'See the Future – Middle Phase of Learning' 1X 17p Middle Phase of Learning (A report to the Minister – June) 1X 14 p Middle Phase of Learning State School Action Plan 1X 21p Report for Students Analysis of Students' Responses regarding the Middle Phase of Schooling (July)	A snapshot of the reforms include: ▪ All young people in education and training aged 15 – 17 yrs ▪ Early and Middle Phases of Schooling (Introduction of Preparatory Year) ▪ Year 10 completion and transition into the Senior Phase of Learning ▪ Reshaping Senior ▪ More Options and flexible pathways for young people ▪ Working together – building new community partnerships.
2002 (18th September)	Education Matters	Education Queensland	A weekly broadsheet to schools from the Director General	Key Message included: NEWSFLASH Curriculum Planning, Assessment and Reporting One Page Guide… Assessment: Teachers are not required to use syllabus CLOs as assessment criteria or descriptors of standards.
2002	The Assessment and Reporting Task force Report	Education Queensland	1 X Written report Growing An Assessment Culture: Distilling the Essence 1X 60 min Video	Key Message included: 'The Core Learning Outcomes are a device for structuring the syllabus, for planning teaching and for planning assessment. They are not in themselves assessment criteria and may need to be further unpacked to enable consistent judgements to be made (p2 Written Report).
2003,	Growing an Assessment Culture	Education Queensland	4 X A3 News-sheets 'Growing an Assessment Culture 3X 2 hour Assessment Workshops 2 Day Strategic Leaders Program	Various strategies to develop assessment knowledge and practices for all Education Queensland Schools over a 3 year period. Assessment Workshop 1 Handouts include: ▪ resources from the Assessment Reform Group in England Assessment Workshop 2 Handouts include: ▪ Participant's Toolkit of assessment ideas, a booklet *Guidelines for selecting assessment strategies* & 'the place mat'
2003	Outcomes Based Technology Syllabus	Queensland School Curriculum Council	1X 49p Syllabus 1X 86p Elaborations Modules/Unit samples 1XCD	Strands in new syllabus include: ▪ Information, Materials,

Date	Document	Publisher of initiative	Materials published & received at schools & accompanying Systemic professional development	Additional information
2002/ 2003, 2004	Education Training Reforms for the Future ONGOING	Education Queensland	1X 28p Education and Training Reforms for the Future - A White Paper 1X double sided brochure 'See the Future – Middle Phase of Learning' 1X 17p Middle Phase of Learning (A report to the Minister 1X 14 p Middle Phase of Learning State School Action Plan 1X 21p Report for Students Analysis of Students' Responses regarding the Middle Phase of Schooling	A snapshot of the reforms include: ■ - All young people in education and training aged 15 – 17 yrs ■ - Early and Middle Phases of Schooling (Introduction of Preparatory Year) ■ - Year 10 completion and transition into the Senior Phase of Learning ■ - Reshaping Senior ■ - More Options and flexible pathways for young people ■ - Working together – building new community partnerships.
2004	Literacy	Education Queensland	2x reading books 2xCDs	Additional resources and training provided by Literacy Development Centre
2003, 2004	ICTs for Learning	Education Queensland	ICTs for Learning School Information Kit	Information Communication Technology Initiative School information kit (2002 – 2003)
2004	Outcomes Based Maths Syllabus	Queensland Studies Authority (formerly QSCC)	1 X 78p Syllabus Document 1X p Elaborations	Strands in the new syllabus include: Number & Operations, Patterns & Algebra, Measurement, Chance and Data, Space
2004	Schools Reporting Consultation Paper	Department of Education and the Arts	1X Consultation Paper (obtained on-line)	An on-line consultation paper about reporting. Further documentation and subsequent findings was not promoted in the local area where I was located.
2004	Education Laws for the Future	Education Queensland	1x32p document	A consultation paper outlining issues that have arisen with current education act. Feedback sought on proposed changes
2004	Taking Schools to the Next Level	Department of Education Science and Training	1 Kit with including letter from local federal member, questionnaire, 1x 46p booklet detailing 15 proposals	Consultation process focusing on the federal government's education agenda including the development of a national education framework for schools
2004 (June)	The New Basics Research Report	Department of Education and the Arts	New Basics Research Report (1X 170p),	Document focusing the New Basics Trial but also used to justify the structure of the new Queensland Curriculum, Assessment and Reporting Framework.
2004	The Middle phase of Learning and the core curriculum	Education Queensland	1 Single A4 Broadsheet Middle Phase of Learning State School Action Plan	'State Schools are not required to explicitly teach, assess and report against all core learning outcomes in the eight KLA syllabuses'
2005	Rationale	Education Queensland	1x25 page document	Background, rationale and specifications for the Queensland Curriculum, Assessment and Reporting Framework
2005	The Queensland Curriculum Assessment and Reporting Framework (QCAR)	Department of Education and the Arts	1 x 17p Framework Document (published April) 1X Centre spread in *Education Views* (July 2005)	

APPENDIX D: INTRODUCTORY TEACHER QUESTIONNAIRE

(completed by all teachers prior to Interview 1)

PHASE A - TEACHER QUESTIONNAIRE   *PERSONAL ASSESSMENT BELIEFS & PRACTICES*

This questionnaire is part of PHASE 1 of research being undertaken by Meg Noack as part of her doctoral studies that focuses on assessment and teacher change. *"I seek to support you and record your 'assessment journey' as you develop and refine your assessment practices that are required by the system."*

Please complete the following questionnaire by_____ and place in the attached envelope.

PRELIMINARY PHASE OF THIS RESEARCH:
- To identify and document your current assessment beliefs and practices
- To indicate your current understanding of what assessment practices are required systemically
- To identify personal 'assessment directions' for the duration of the study

What is assessment and what is its purpose? _____
_____
_____

How were your perspectives developed?_____
_____
_____

Have you changed your perspective at any stages of your life/career? _____

If you answer yes, when did these views change? What do you believe caused the changes?

YOUR PERSPECTIVE OF ASSESSMENT	CAUSE OF THIS VIEW	TIME OF LIFE/CAREER

How are your current beliefs reflected in your classroom practices? (please answer on the lines or in the table below)
_____
_____
_____

Meg Noack - Research Instruments - Doctoral Research, ACU 2004

OR

ASSESSMENT BELIEFS	ASSESSMENT PRACTICES

What do you know about EQ's current approach to assessment? ....

....

Where do you go to find out? ....

What are your current 'assessment' questions or issues? ....

....

....

What would you like to know next? ....

....

....

What aspects of assessment would you like to 'put into practice' next?

....

....

....

How do you think this is most likely to happen? (e.g. what processes - such as information, people, resources - do you think you will require to make this successful?)

....

....

....

Please comment on what you have noticed about changes to education generally and how this might have influenced your personal views of assessment:

....

....

....

Meg Noack - Research Instruments   - Doctoral Research,   ACU   2004

APPENDIX E: THE SCRAPBOOKING CONCEPT:

TO CAPTURE THINKING AND TO AID DATA ANALYSIS

The Scrapbooking Concept: To capture thinking and as an aid to data analysis

I began scrapbooking as a way of tracking ideas that had been captured, and often scribbled, on random pieces of paper. Times of reflection occurred in varied places and I did not want to lose these ideas and concepts that were often drawn diagrammatically. Therefore, I sorted and pasted these notes together with my more intentional, electronic analytic processes. Highlighter pens, boxes and coloured arrows were used to connect, synthesise or reject thoughts that occurred to me at seemingly random times. This became a visual representation of both my intentional analysis as well as a collection of my 'aha' moments. Scrapbooking became a method of synthesizing concepts and ideas and an important part of analysis. (Chapter 4 summary)
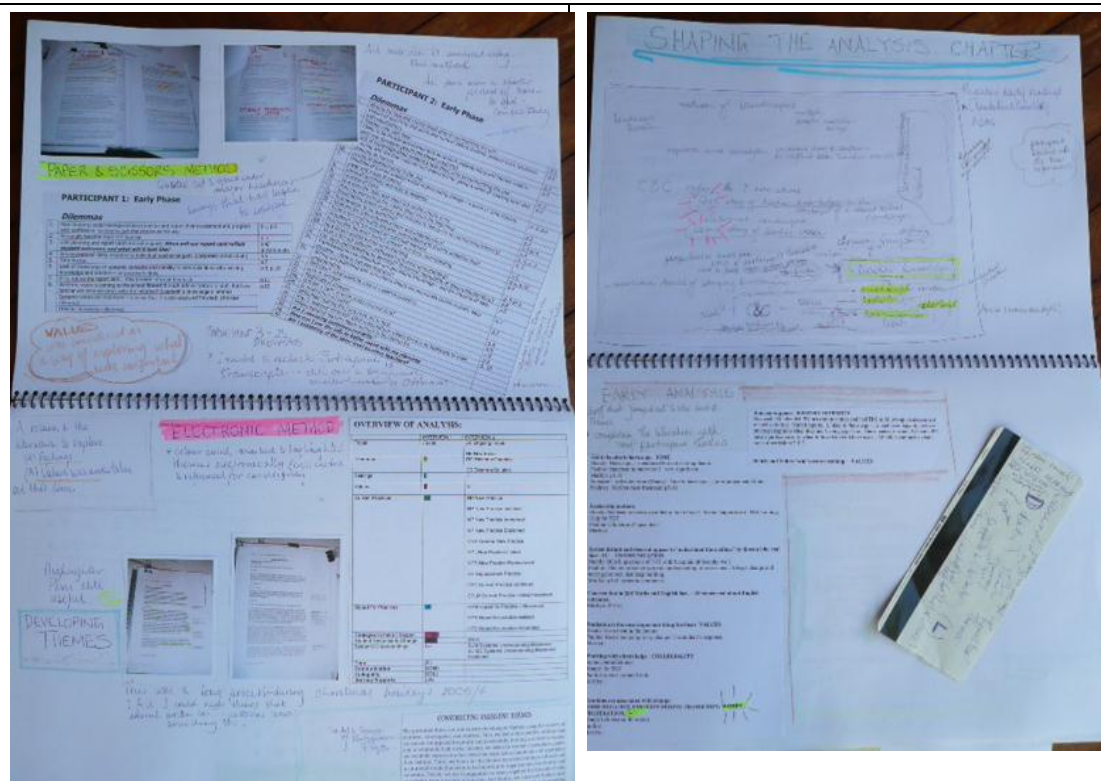
Collecting photographic images to demonstrate differing data analysis methods (above)	Note-taking on airline tickets (above) and on dockets (below)

Images of 3 double pages of an A3 Art book developed as the scrapbook to capture my thinking and aid my data analysis.
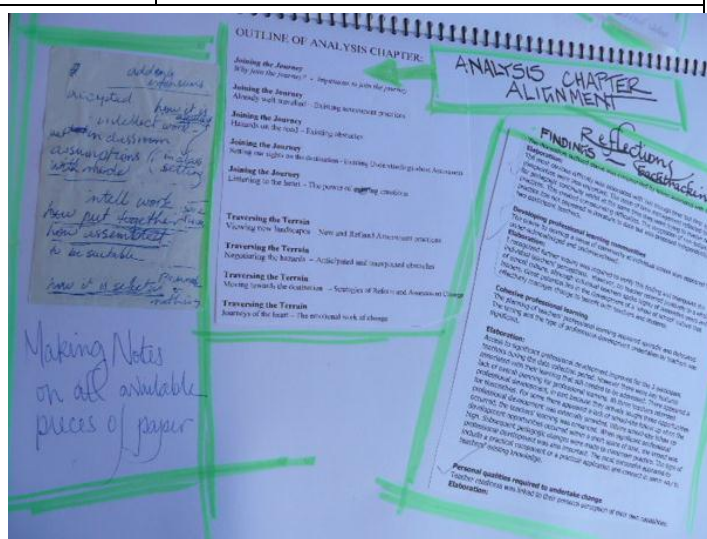
APPENDIX F: PROFESSIONAL LEARNING FRAMEWORK PREPARATION FOR THE AUSTRALIAN CURRICULUM LUTHERAN EDUCATION, QUEENSLAND

The Australian Curriculum (AC)

PREPARATION TOOLKIT

This document (The Australian Curriculum Preparation Toolkit) provides a framework for Lutheran Schools in Queensland to prepare for a new reform, the Australian Curriculum. This resource, together with site visits and ongoing professional development and support for leaders endeavours to model effective support during times of reform.

The research literature chapter (Chapter 4) and this research project, were catalysts to undertake the writing of this document. Key features of this framework include:

- adequate preparation time,
- teachers' active involvement and engagement
- a recognition that teachers values and beliefs about learners and learning need to be explicitly expressed and understood on-site & practical professional learning opportunities

LEQ School-Site Distribution
January, 2010
Deputies and Curriculum Leaders Day
February 15, 2010

MEG Noack
Executive Officer – Curriculum LEQ
Amanda Pentti
Education Officer –Curriculum LEQ

Lutheran Education Queensland is a Department of the Lutheran Church of Australia Queensland District

AUSTRALIAN CURRICULUM - PREPARATION PHASE

LEQ
LUTHERAN EDUCATION QUEENSLAND

In Lutheran Schools, in 2010 we will begin preparing for the coming Australian Curriculum. This toolkit will assist you to manage change and communicate with your staff so that the necessary transitions occur as smoothly as possible. Research indicates that a period of preparation is vital. Therefore this tool-kit assists you to prepare as you:

· Collaboratively reaffirm what is important about your school culture
· Converse and prepare for change before it begins as change always adds complexities for all staff
· Identify and celebrate current excellent, pedagogical practices in English, Maths, Science and History
· Affirm evidence based assessment practices
· Investigate what we know about existing ACARA documents (and listen to what this means for our teachers)

The tables below are like an index. Each underlined heading is hyperlinked to a short activity that can be completed during regular staff meetings or on pupil-free days. These activities will help you build staff collegiality, gain useful feedback for planning and assist you in allocating roles related to curriculum implementation. **They are set out so the most important activities are the first activities in each table (e.g. A1, B1 etc).**

A. RECULTURING/ REAFFIRMING ETHOS AND CULTURE (Whole Staff)

These series of activities are designed to reaffirm your school's broad ethos, so that it remains constant during the curriculum transition period. It examines perceptions of your school's values and the reasons for them.

A1 & **A2** are closely related activities that assist teachers to identify your school's ethos and values. (It is your choice to complete either one or both A1 and A2 activities.)

A3 is designed if your school is renowned for a particular approach to learning

A4 provides teachers with the opportunity to reflect upon their own teaching philosophy

A5 is for those who want to understand philosophical perspectives of key, current, national educational documents.

A1. RE-AFFIRMING SCHOOL CULTURE	A2. REAFFIRMING A LEARNER CENTRED CULTURE	A3. AFFIRMING & REEVALUATING A PARTICULAR, SITE-BASED EDUCATIONAL APPROACH	A4. AFFIRMING &RE-EVALUATING TEACHERS' OWN EDUCATIONAL PHILOSOPHY	A5. EVALUATING KEY STRATEGIC DOCUMENTS TO COMPARE/ CONTRAST APPROACHES TO LEARNERS AND LEARNING
		(e.g. stage based learning, play-based early years, transdisciplinary unit planning)		
A1. Resource: Poem – Child of the 21st Century			A4 Resource: Educational Philosophy Reflection tool	A5 Resource: Retrieval Chart-Comparative Philosophic Data Collection

B. UNDERSTANDING OURSELVES AND CHANGE (Whole staff)

These series of activities are designed to help teachers reflect upon and communicate the support they will require during the change process. This will help school/curriculum leaders use strategies that effectively motivate and practically support teaching staff during the transition period. This should also lead to higher overall morale on the part of all involved.

B1 Teachers identify individual approaches to change and the personal attributes to best manage change
B2 Teachers are provided with the opportunity to reflect upon lessons learnt from previous reforms
B3 Teachers recognize the emotional impact change can have and the collegial supports required to support one another.

B1. APPROACHES TO CHANGE	B2. LEARNING FROM PREVIOUS REFORMS	B3. FEELINGS, EMOTIONS AND CHANGE
B1 Resource: Reflection Tool: How I implement change		

C. EXPLORING THE AUSTRALIAN CURRICULUM (Whole staff)

These activities are designed to introduce all staff to the ideas underpinning the new curriculum. It is important that all staff involved in the changes feel as informed as possible. This will allow effective answering of parent enquiries and raise overall teacher effectiveness when the time comes for practical implementation in the classroom.

C1 Provides teachers with information about the strands (and expected content) in each Phase 1 Syllabus documents (English, Mathematics, Science and History)
C2 Familiarises teachers with the cross curriculum dimensions and maps current practices
C3 Familiarises teachers with the general capabilities and maps current practices

C1. EXAMING THE AUSTRALIAN CURRICULUM FRAMING PAPERS/DRAFT DOCUMENTS	*C2.* MAPPING AUSTRALIAN CURRICULUM CROSS CURRICULUM DIMENSIONS	*C3.* MAPPING AUSTRALIAN CURRICULUM GENERAL CAPABILITIES
C1 Resource: Summarizing PowerPoint (already distributed)	C2 Resource: Cross Curricular Retrieval Chart	C3 Resource: Capabilities Retrieval Chart

D. MAPPING EXISTING GENERAL PRACTICES (Whole staff)

These activities map existing 'whole-of-school' practices associated with Phase 1 subjects (English, Maths, Science and History). It is important that, when change is introduced that all staff have their own excellent, pedagogical practices affirmed.

Year level assessment practices are presented within a larger whole of school context and NAPLAN results are recognized relationally alongside site-based practices. This allows teachers to better answer parent enquiries about NAPLAN results and provides a comprehensive framework to align the coming Australian curriculum achievement standards.

D1 Teachers map current pedagogical practices for English, Mathematics, Science and History
D2 Teachers document personal assessment practices and collates all information to form a whole-of-school assessment map.

D1. SHARING PEDAGOGICAL BEST PRACTICES (SUBJECT SPECIFIC):	*D2.* MAPPING SITE-WIDE ASSESSMENT PRACTICES
	D2. Resource; Year Level Assessment Retrieval Chart

EXISTING LEQ RESOURCE FOR LEADERS (School and Curriculum Leaders Only)

THE 5 P CHALLENGE – PREPARING FOR THE AUSTRALIAN CURRICULUM (already distributed)

The Leader's reflection tool titled ***The 5P Challenge*** is designed to help leaders to prepare change processes and people for the coming new Curriculum. In this resource, a series of questions are clustered around a particular challenge and these questions form the basis for site-based leaders' meetings. As a result, specific roles and responsibilities for each leader will be clarified so that all staff can be duly notified.

This is so that teachers have clear points of reference for any questions/issues they have whilst managing the curriculum changes and a strategic plan for change can be collaboratively implemented.

FURTHER TOOL-KIT RESOURCES TO BE PUBLISHED IN SEMESTER 2 (e.g. comparing existing work programs with the new curriculum year-level requirements, examining Phase 2 framing papers)

*I hope you find this tool-kit a useful resource as you positively prepare for change within your school. Please keep in touch with me if you have additional resource needs. I welcome your feedback as together we make **2010 the Year of Preparation for Australian Curriculum**.*
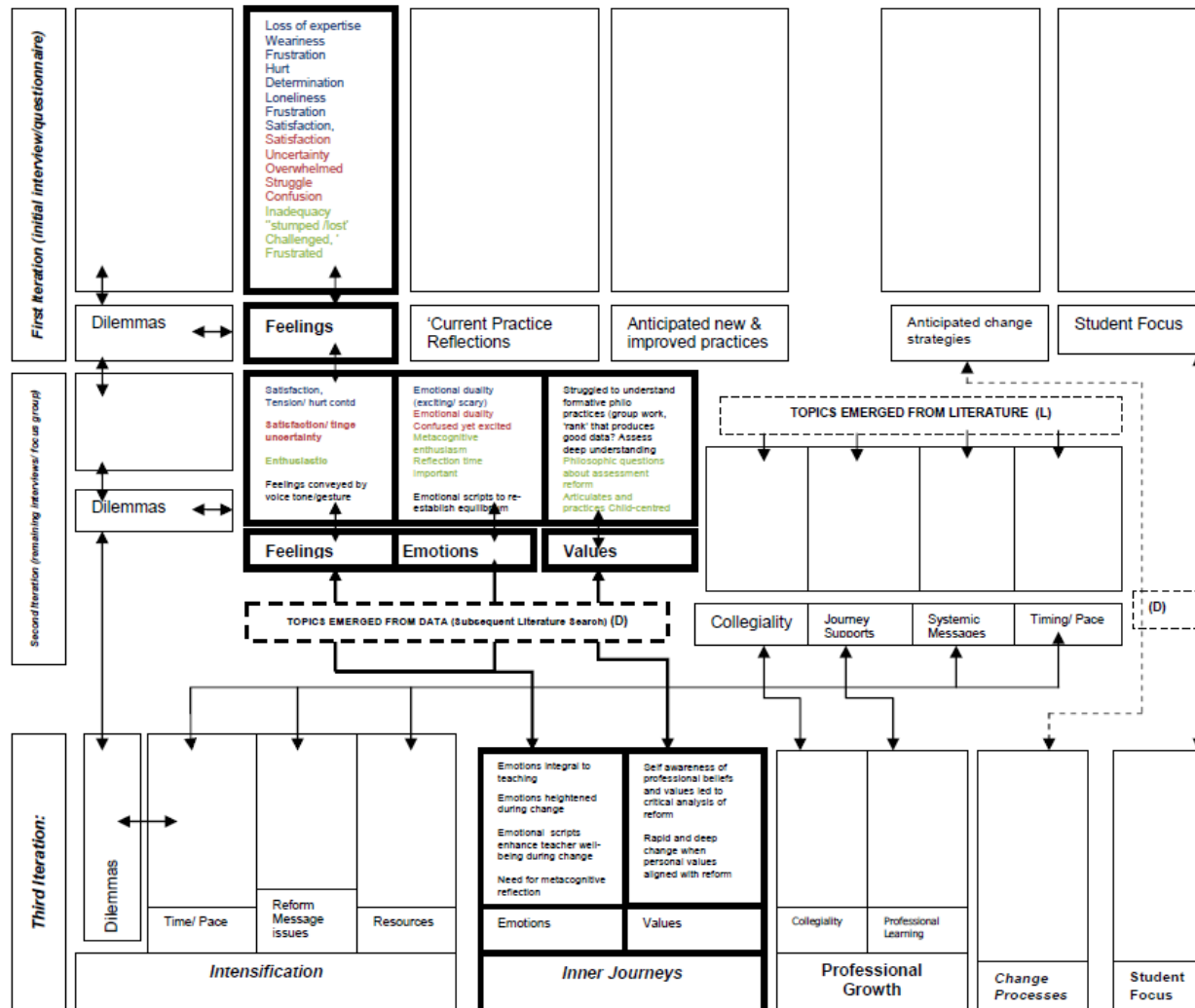*Blessings,*
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APPENDIX G: DATA ANALYSIS – A DIAGRAMATIC MODEL OF BUILDING THEMES

(Building a Chain of Evidence)

Building the Theme – Inner Journeys

Glossary

* **Authentic pedagogy**	The term was coined during a study of the organisation and structure of schools at the University of Wisconsin. It refers to learning which includes intellectual quality, sustained conversation, depth of knowledge and understanding, and connectedness to the world.
*ered**LDC - Learning and Development Centre (Literacy)**	Twenty Learning and Development Centres (LDCs) were established by Education Queensland in 2000 for learning and professional sharing of excellence in literacy teaching and practices to improve student learning outcomes. Goals and key objectives are to: • develop the LDC (Literacy) as a site of excellence in literacy teaching and learning • provide personnel with quality learning and development opportunities and support in the systemic literacy priorities of whole-school planning, community partnerships and the teaching of reading • provide personnel with quality learning and development opportunities and support in those aspects of literacy teaching that are self-identified as strengths and aligned to systemic literacy frameworks. (Learning & Development Centre [Literacy] Resource Agreement)
*****LDC Coordinator**	The teacher position attached to the Learning and Development Centre (Literacy) to coordinate the services provided through the Centre.
ETRF - Education and Training Reforms for the Future	This comprehensive reform was released in 2002. These reforms reshaped "Queensland's education and training systems to cater for students' individual needs, inspire academic achievement, and equip them for the world of work" (Department of Education, 2010). There was a particular focus upon the differing Phases of learning such as senior schooling, Middle Years of Learning and the introduction of a preparatory year of schooling.
EQ – Education Queensland	The employing authority of all state schools in the state of Queensland Australia. Its central office base was located in the state's capital city.
QSCC - Queensland School Curriculum Council	The QSCC has been an independent statutory body, was established by an act of state parliament (Education [School Curriculum P-10] Act, 1996) initially to develop a suite of eight, outcomes based syllabi for Queensland schools (Education [School Curriculum P-10] Act, 1996). Other significant tasks

Education Matters	A newsletter written from the Director General to all staff in Education Queensland
Education Views	A fortnightly published newspaper format broadsheet of for all Education Queensland employees that shares news and views of educational interest from around Queensland
OECD	Organization of Economic Cooperation and Development
TIMSS	Third International Mathematics and Science Study
*Productive pedagogies	A balanced theoretical framework used for critically reflecting upon teacher's work. Productive pedagogies is a tool to engage teachers in substantive conversation about the link between students' outcomes and pedagogy. (*QSRLS*)
*Productive assessment	The alignment of pedagogic and assessment practices, which is achieved when a teacher's understanding of how students learn is expanded through the use of assessment literacy. (*QSRLS*)
***Queensland State Education-2010 (*QSE-2010*)**	A broad description of the future for education in Queensland. Available on web site, viewed 17 May 2002, http://education.qld.gov.au/corporate/qse2010/index.html
* **Queensland School Reform Longitudinal Study (*QSRLS*)**	The most extensive observation study of classroom practices conducted in Australia. Researchers made detailed observations and statistical analyses of 975 classroom lessons offered in 24 EQ schools over three years. Commissioned by Education Queensland, it was conducted by researchers from the School of Education, The University of Queensland, from 1998 to 2000. (*QSRLS*) http://education.qld.gov.au/public_media/reports/curriculum-framework/qsrls/index.html Retrieved 28th April, 2010 http://education.qld.gov.au/curriculum/learning/literate-futures/glossary.html
* **School Improvement and Accountability Framework (SIAF)**	The new School Improvement and Accountability Framework (SIAF), finalised in July 2002, contains the policy and guidelines for Education Queensland's school planning and reporting, based on Destination 2010, the implementation plan for Queensland State Education-2010. The new Framework streamlines the planning processes for schools, is more integrated, decreases paperwork, and has a clear focus on student achievements, quality improvement and enhanced accountability. [Replaces School Planning and Accountability Framework (SPAF).] (* all above from EQ website)

Early Years Developmental Continua & Year Two Net:	A process used during the early phase of learning to monitor children's learning and identify those children requiring additional support in literacy and numeracy. It includes diagnostic materials, moderation of teacher judgments, development and implementation of intervention programs to improve literacy and numeracy, and reporting to parents/carers. QSA website http://www.qsa.qld.edu.au/downloads/approach/qsa_assessment_glossary.pdf